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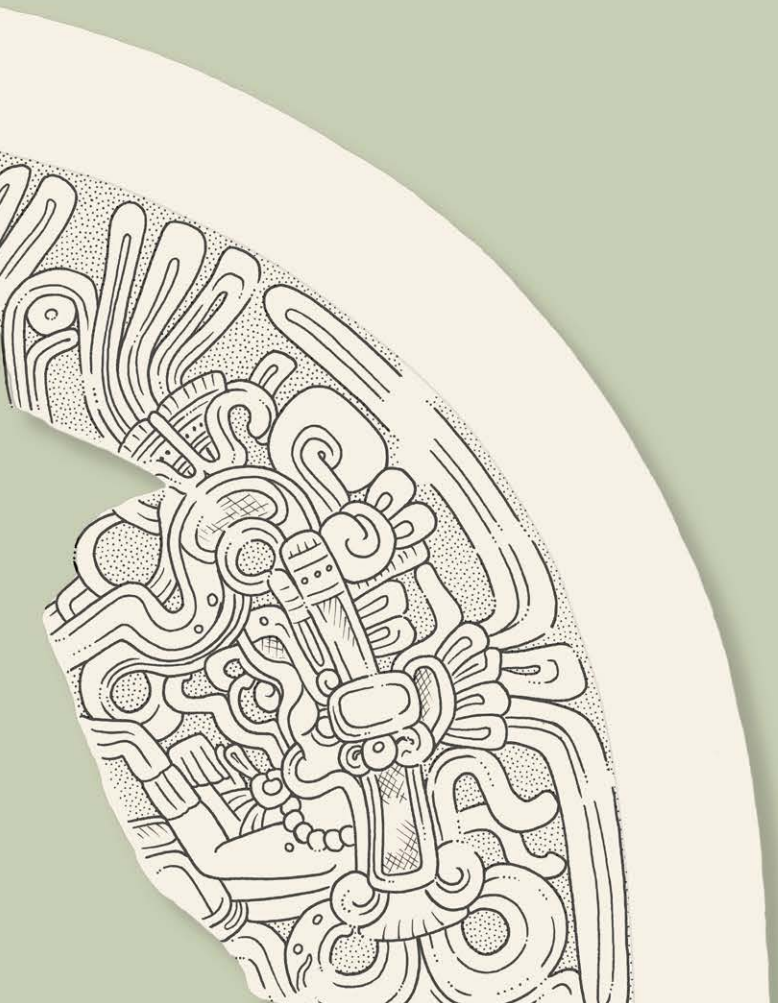
# REDEFINING THE EPICLASSIC PERIOD IN MESOAMERICA

Edited by

Claudia I. Alvarado León
Christophe Helmke



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# Redefining the Epiclassic Period in Mesoamerica

## Proceedings of the Copenhagen Roundtable

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Cover: A mould-made bowl from Xochicalco, depicting the Maya deity *K'awiil* (drawing by C. Helmke).



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To those that have dedicated themselves to the Epiclassic

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# Introducing the Copenhagen Roundtable on the Epiclassic Period in Mesoamerica

Claudia I. Alvarado León and Christophe Helmke

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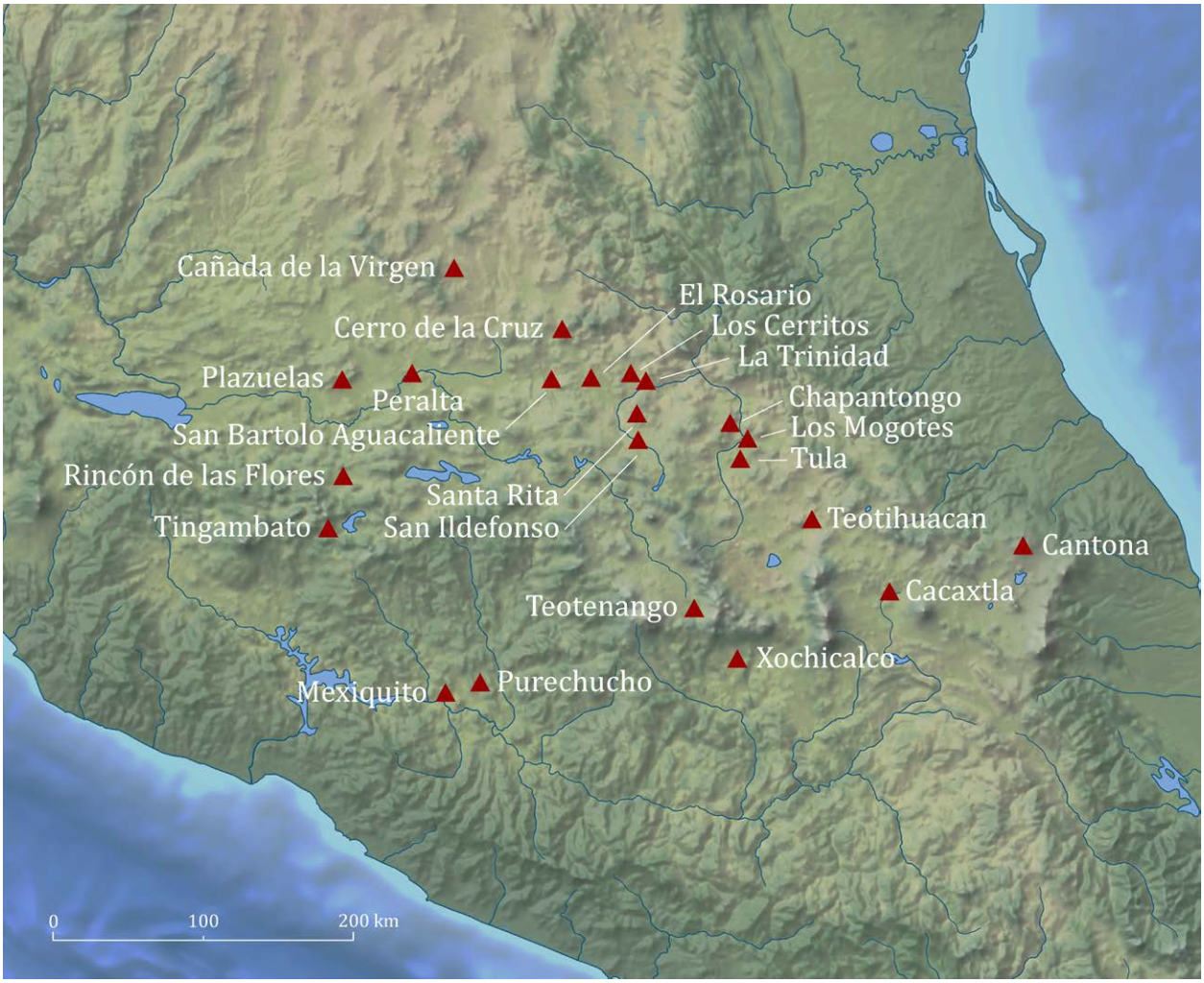
There is a general scholarly consensus that following the decline of the great Classic metropolis Teotihuacan in the sixth century AD, there was a marked transformation in the social order and economic networks for at least the following three centuries (AD 600–900). Since the seminal work of Wigberto Jiménez Moreno in 1959, we have been maintaining, and to some degree preserving, some of the same notions that he used to hypothesize what transpired from the seventh to the tenth centuries, such as the appearance of highly militaristic societies, a notable shift in settlement patterns, the incursion of northern peoples to the central highlands, and heightened contact and exchange with contemporaneous Maya societies in the east. However, six decades on, are those premises still viable and heuristically informative?

Although the Epiclassic has received relatively little scholarly interest in general terms, in recent years, we have witnessed a renewed focus on this important period and cultural horizon of Mesoamerican history. Several publications and dissertations have appeared on the subject, as well as conferences, colloquia, and symposia that have been held—such as the volume *When East Meets West* published by BAR International Series, published in 2023, resulting from a series of papers presented at the Society for American Archaeology in 2018. Most recently, also, the colloquium *Sitios y materiales arqueológicos del Epiclásico*, organised and hosted by the Tlaxcala delegation of the Instituto Nacional de Antropología e Historia, celebrated in 2023. While our interest, along with that of other Mesoamericanists, is in broadening our vision and conceptualisation of the Epiclassic, whether at the site, regional or macro level, some of the original questions remain valid and are waiting to be answered by new research, methods, techniques, discoveries and their integration into revised theoretical models.

Therefore, the main goal of the **Copenhagen Epiclassic Roundtable** was to critically review the basic underlying concepts and inherent assumptions ascribed to this period, as well as to assess and measure the degree of continuity from Classic period Teotihuacan and the impact of Epiclassic city-states on Postclassic imperial cultures. The present volume is thereby the result of a joint effort and a common interest in one of the main periods of Mesoamerican history, not merely a fleeting period of transition, wedged between the greatness of Teotihuacan in the Classic period and the appearance of Toltec-related city-states of the Early Postclassic.

Motivated by these objectives, we considered it necessary to convene a roundtable whose main objective would be to present evidence from a variety of sites and from various disciplinary vantages, to open a coherent dialogue on the Epiclassic period in Mesoamerica. This roundtable was organised as part of *The Origins and Developments of Central Mexican Calendars and Writing Systems* project, whose focus is on tracking the development of the central Mesoamerican writing systems, particularly from Teotihuacan, the Epiclassic and on the writing system of the Aztec in the Postclassic (Helmke and Nielsen 2024). Since 2019, The Velux Foundation (Grant 115078) has generously funded the research project, which is co-directed by Jesper Nielsen and Christophe Helmke. As part of the project, Claudia I. Alvarado León served as a one-year post-doctoral fellow at the University of Copenhagen who, together with Christophe Helmke, dedicated part of her time to organise and coordinate the Copenhagen Epiclassic Roundtable, held on the 3rd and 5th, of April 2024.

The event brought together a group of researchers from Mexico, the United States, France, Spain, and Denmark whose research focuses on the Central Highlands of Mexico and adjoining areas, such as Michoacan (see map). In the interest of stimulating dialogue, the questions that were raised and to which we tried to respond to with the papers presented, included the following: Can we speak of a single culture, or can we detect local variations that signal regional differences? Should the Epiclassic rather be considered a mayor scale event of culture-historical significance, rather than a protracted period of change? How did the independent city-states that characterise the geo-political landscape, maintain their autonomy and interact, both economically and politically? Where these




The distribution of major Epiclassic sites in the central Mexican highlands. Only the most salient sites introduced in the following chapters are plotted (map by C. Helmke).

city-states in unceasing competition and conflict, or were clashes more singular events that punctuated periods of tempered cohesion? Were there networks of allegiances and alliances between the city-states, and if so, were these driven by economic impetuses or other socio-political catalysts? How did the cultural impulses from eastern Mesoamerica, notably those of the Maya city-states of the Late-to-Terminal Classic, shape Epiclassic identities and forms of governance? How did the features that define the Epiclassic in turn integrate, or not, into the social, cultural and political fabric of the ensuing Postclassic?

To that end, each speaker was given ample time for his or her presentation, and each day ended with an open forum, the roundtable proper, to host a meaningful dialogue and exchange of ideas that allowed the speakers to revise their stances in view of the data and hypotheses presented by their colleagues, before coming to a greater consensus. These discussions were highly productive and bore fruit, providing the presenters with collegiate and constructive feedback, and allowing the authors to draw on these discussions to revise the contents of their papers, in the form that these now occupy. Likewise, the discussions form the very basis of the final synthetic chapter in which we thematically draw together the main points of discussion, furthering our understanding of the Epiclassic and provide, a more nuanced redefinition of this important period. We offer this redefinition for the benefit of our colleagues who are working at sites and materials of the Epiclassic, and who like us have been grappling with the defining characteristics of this phase, in hopes that we can stimulate further discussions and together make significant headways in the future.

Rather than a loose collection of papers, these proceedings seek to propose and establish in definitive terms what we understand by Epiclassic, evaluating some of the traits and features that have been raised, time and again, assuming that it is a relatively short period of transition that lies between the two great imperial metropoli of Central Mexico, namely Teotihuacan and Tenochtitlan. The volume consists of 12 chapters, some dealing with general issues and problems related to the Epiclassic (Chapters 1 and 2), others focusing on the archaeology of specific sites located in the cultural area occupied by Epiclassic cultures (Chapters 3 to 8), and finally contributions focusing on specific topics related to linguistics, iconography, and the relationship between the Epiclassic city-states and eastern Mesoamerica (Chapters 9 to 11, respectively). As already mentioned, the closing chapter (Chapter 12) provides a synthesis and a redefinition of the Epiclassic, resulting from the discussions held as part of the roundtable.

In the first chapter of the proceedings, by Claudia I. Alvarado León, introduces the concept of the Epiclassic and challenges its traditional view as a transitional phase between the fall of Teotihuacan and the rise of Tula. The text critically examines the conventional understanding of the Epiclassic by focusing on three key aspects: chronology, militarism, and artistic expression. It advocates for a more precise chronology, highlighting the need for robust chronometric data to understand the complex dynamics of this period. Furthermore, it challenges the pervasive narrative of militarism, pointing out the lack of direct evidence for widespread warfare. Lastly, it explores the rich artistic expressions of the Epiclassic, suggesting that they represent sophisticated strategies of identity formation and political legitimisation rather than mere reflections of ethnic migration. The text concludes by proposing a division of the Epiclassic into three phases: Early, Middle, and Late, each with its own distinct characteristics. This new framework encourages a more nuanced and comprehensive understanding of the Epiclassic period, recognising its significance beyond a mere transitional phase.

It is not possible to talk about the Epiclassic without making reference to the Classic period metropolis of Teotihuacan. Thus, in the second chapter, Natalia Moragas Segura reflects on the impact that archaeology as a discipline has had on our understanding of Teotihuacan, leading us to perceive the Epiclassic as that which follows the collapse, destruction, and partial abandonment of Teotihuacan (dated to between AD 550–650). However, Moragas draws our attention not only to the information gleaned at the monumental and urban centre of the city, but also to the information from the periphery. From this vantage, the author hypothesizes that if peripheral groups were not as well-integrated into the Teotihuacan state, the violent upheavals associated with the downfall of Teotihuacan, may not have affected the populations of these more peripheral settlements in the same way as residents who had lived under this highly stratified system for generations, within the ambit of the urban capital. In this scenario, the new actors would have taken the initiative to generate a new order in the resulting power-vacuum that followed in the wake of collapse. Moragas leads us to understand that rather than collapse and abandonment, Teotihuacan was subject to reorganisation and adapted to a new order that would go on to define the Epiclassic.

Yoko Sugiura and Rubén Nieto Hernández, for their part, focus their attention on sites of the Toluca Valley, a region that, despite its splendour during the Epiclassic period and unlike several of the cases presented in this volume, shows continuity in its rural character in the face of Teotihuacan's declining influence and control. The panorama observed in the Toluca Valley in an early phase of the period, which contrasts with the typical one observed in other regions of central Mexico, such as the location of new settlements in elevated and more readily defensible areas. Teotenango, on the other hand, seems to be founded in a later facet of the Epiclassic, bordering on the ensuing Early Postclassic. In this sense, it is interesting to note that several of the texts collected here present this disposition of dividing the Epiclassic into two or even three phases (see the chapters by Alvarado León; Fenoglio Limón; Sugiura and Nieto Hernández; Morehart), rather than assuming that it should be characterised as a single, more homogenous phase.

Under a World Systems theoretical approach, Patricia Fournier G. and Fermín Sánchez-Aldana present two case studies from the Tula region: Chapantongo and Cerro Magoni. The authors assert that the Epiclassic was not the result of migrations, as is often claimed, forcing the authors to re-evaluate the development of sites in the Tula region through the empirical data obtained as part of their Mezquital Valley project. Thus, throughout the chapter, the authors present, one by one, the data that led them to demonstrate that the local development of the region was attributed to the local Otomian populations and not to groups coming from the Bajío, as had been previously suggested.

Christopher Morehart's chapter focuses on one of the most entrenched features in the definition of the Epiclassic: conflict. Social unrest, decentralisation and conflict have been repeatedly identified as some of the consequences of the collapse of the highly centralised Teotihuacan state. It is often associated with the idea of competition and

violence, prompting a shift in settlement patterns, away from valley floors to occupations in the upper hills and investing resources into defensive architecture, among others. From a geopolitical and economic perspective, the author analyses the possible relationships between Tula Chico and settlements located in elevated areas, such as Los Mogotes, seeking to understand the causes of decentralisation and conflict at large in the region.

Drawing our attention to the northwest of the Basin of Mexico, that is, to the Bajío, Fiorella Fenoglio Limón seeks to explain the socio-political dynamics among a dozen sites located in the Panuco-Moctezuma Basin in the present-day state of Queretaro. To this end, the author offers a diachronic overview that explains the commercial relationship of this region with Teotihuacan and its consolidation with a new spatial, social, and political organisation appearing during the Epiclassic. The chapter deals with six settlements located in upland areas surrounded by deep canyons, a characteristic feature of sites of this period, in addition to the presence and absence of ballcourts, petroglyphs, and different ceramic types. One of the most notable suggestions in this chapter is the division of the Epiclassic period into potentially three phases.

Looking westward toward south-central Michoacan, José Luis Punzo Díaz presents an analysis of a region that stretches over 100 square kilometres and ranges from 200 to 3,000 meters in elevation. In this area of great biodiversity, Epiclassic settlements stand out, at the interstice between three archaeological traditions: the Lupe Sphere, the Tepalcatepec River Sphere, and the Middle Balsas Sphere. At the convergence of these three spheres is the site of Tingambato, which, thanks to recent research, has been shown not to be a Teotihuacan outpost, as had previously been assumed, but rather an Epiclassic centre that played an important role in the development of the region.

In the western region, Grégory Pereira focuses on the study of monumental architecture in the Zacapu region during the Epiclassic period. The author presents the results of information obtained through studies using LiDAR technology and the identification of a new type of territorial organisation that reflects increasing social stratification, as well as the documentation of previously unidentified monumental architecture. These findings led to the recognition of a configuration similar to what are considered palaces in other areas of Mesoamerica, particularly, that of the monumental platform of Cacaxtla, which leads him to question the mechanisms that could have been established between distant territories.

In the following chapter, Magnus Pharao Hansen, provides us with a linguistic perspective to the Epiclassic, fleshing out the linguistic panorama of the period, something that has been critically overlooked to date, but which provides an important foundation to our understanding of the linguistic diversity of the peoples who shared in and actively participated in Epiclassic culture. The evidence afforded, likewise considers the role and place of early Nahua speakers in central Mexico and conclusive demonstrates that Epiclassic cultures were characterised by a high degree of linguistic diversity. This chapter offers an alternative view of population movements through its proposed linguistic model, which, as the author points out, could be corroborated by new epigraphic, genetic and archaeological evidence.

The chapter by Juliette Testard explores the significance of "models" in understanding the emulation of artistic styles and cultural practices during the Epiclassic period, emphasizing the identification of canonical objects that served as standards for imitation. It reveals insights into the socio-economic and political dynamics of city-states and the active choices made by artists. The study underscores the dynamic role of models for achieving realism in art and the creative reinterpretation of imported styles and techniques. Testard also addresses the interaction and exchange of material culture during the Epiclassic from both synchronic and diachronic perspectives. Her aim is to identify the models used for emulation and adaptation, using the material culture of two emblematic sites of the period, namely Cacaxtla and Xochicalco, as representative case studies. Despite challenges in establishing precise archaeological chronologies, identifying these models illuminates the complexity of cultural exchange and highlights how hybridisation and innovation shaped the artistic legacy of Epiclassic Mesoamerican societies.

Cacaxtla is renowned in Epiclassic archaeology for its elaborate polychromatic murals, which display a wide array of Maya-inspired stylistic traits and Maya ritual objects. However, analogous features are not discussed for other Epiclassic sites in central Mexico. The chapter by Christophe Helmke, Jesper Nielsen, Claudia I. Alvarado León and Silvia Garza Tarazona provides an extensive review of the material evidence from Xochicalco, indicating a strong emulation of Maya elite culture and symbolic expression. Beyond the superficial stylistic similarities debated by art historians, significant material features such as eccentrics, censers, architecture, sculptures, and idealised depictions of rulers reveal greater and more evident Maya influence. The substantial evidence of Maya-style elements at Xochicalco, coupled with a heretofore unpublished and fragmentary polychromatic mural from

the site, prompts the authors to suggest that that the rulers of Xochicalco adopted Maya forms of governance, reflecting a translation of foreign ideologies into a central Mexican context, likely modelling their system after the monarchical city-states of the Maya.

In the final chapter, we present some of the most salient themes that emerged during the roundtable sessions discussions. These allowed us to outline some of the major aspects of the Epiclassic and propose a redefinition of the Epiclassic in Mesoamerica. Many of these traits, themes and features are addressed and have often been reiterated without the benefit of thorough analyses such as: chronology, population movements and settlement patterns. Likewise, the roundtables granted us the opportunity to delve into a discussion incorporating new data and to consider topics that have been generally overlooked, such as the linguistic panorama of the Epiclassic, the shared writing system, as well as the nature and timing of foreign influences attested in material and visual culture. Our collective effort highlights the heterogeneity of scenarios, material culture, dates, and regionality, and to confine these to one single model is evidently an impossible task. However, as was stated above, we offer this new redefinition for the benefit of our colleagues dedicated to the study of the Epiclassic with the sole objective of stimulating the discussion as we collaborate together to make significant progress in our understanding of the Epiclassic.

# Chapter 1
# Disentangling the Epiclassic

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Concepts, as mental constructs, are essential tools that shape and refine our understanding of reality. They allow us to systematically organise and categorise the complexities of the world, enabling us to interpret and explain it more effectively. The "Epiclassic" is one such conceptual tool—initially formulated by Wigberto Jiménez M. (1959) to bring into focus a unique, although transitional, period in Mesoamerican history (Diehl and Berlo 1989; Dumond and Müller 1972: 1211; Hicks and Nicholson 1964: 493, 499; Marcus 1989; Nagao 1989: 83; Salomón Salazar 2006, 2010: 108; Sánchez 2013: 299; Serra Puche and Lazcano Arce 2005: 287; Solar Valverde 2006, 2023; Stanton *et al.* 2023: 3; Sugiura 1996, 2001: 347, 2005a: 195, 2006: 127–130). However, this focus on the period's transitional nature is also one of the concept's inherent limitations: it tends to frame the Epiclassic as merely a bridge between the rise and fall of two prominent urban centres, namely Teotihuacan and Tula, potentially downplaying its significance as a distinct historical moment.

Although periods of transition often receive less scholarly attention than the major events that precede or follow them (Armillas 1948: 146; Clayton 2016: 107; Jennings 2016: 14–15), they do not necessarily involve sudden or abrupt change. Instead, they often represent phases of gradual restructuring that are critical to the continuity and development of historical processes. In this sense, although the Epiclassic is widely recognised as a time of significant transformation, it should not be reduced to a mere transitional phase. Rather, it encompassed its own internal developments and trajectories—many of which remain only partially understood to this day (Clayton 2016: 107, 2020; Hirth 1989, 2000; Testard 2023). For this reason, I follow Cowgill's (2013: 132) recommendation to move away from the term "transition" or "transitional," as it risks oversimplifying the complexity of sociocultural change and obscuring the rich dynamics that defined this period.

The idea of the Epiclassic was proposed as a working hypothesis to define and interpret specific events and changes within Mesoamerican history (Jiménez M. 1959: 1064). More than half a century has elapsed since this hypothesis was formulated, and yet it has seldom been the object of intentional testing, in spite of the existence of empirical data that have challenged aspects of its framework. For instance, during the 1960s, the prevailing scholarly consensus was that Teotihuacan was a theocratic society, with the presence of militaristic imagery being interpreted as signalling a decisive cultural shift. However, subsequent studies have demonstrated that Teotihuacan had a longstanding military presence, focusing on martial themes in iconography and the veneration of fallen warriors figuring prominently in its religion and rituals (Cabrera *et al.* 1989; Headrick 2007; Moragas Segura this volume; Sugiyama 1993). Collectively, these studies challenge earlier interpretations offering a more factual insight into the Epiclassic as a period of both continuity, adaptation and restructuring, rather than abrupt or radical shift.

This period is often portrayed as a time in which populations migrated, new cities emerged, political institutions evolved, trade networks were reconfigured, new ceramic styles appeared and diverse resource exploitations shifted (Beekman and Christensen 2003; Bonfil 2005; Diehl 1989; Diehl and Berlo 1989; Fournier G. *et al.* 2006; García Cook 1996a, 1996b; Hirth 2000; López Luján 1995; Manzanilla 2005; Parsons and Sugiura 2012; Pereira *et al.* 2005; Serra Puche and Lazcano Arce 2005; Sugiura 2001; Testard 2019). Yet, as some scholars have pointed out (Cohodas 1989; Morehart, this volume; Parsons *et al.* 1982), much of these transformations and innovations began while Teotihuacan was still the largest and most densely populated city in the Basin of Mexico and the central highlands.

Therefore, a comprehensive analysis of the sociopolitical shifts and fundamental cultural patterns that resulted in restructured social relations is essential. Advances in empirical research over the preceding two decades have facilitated enhanced comprehension of this period, including chemical sourcing of ceramics (Crider 2011, 2013; Crider *et al.* 2007; Jaimes *et al.* 2021) and lithics (Alvarado León *et al.*, in prep.; Elam *et al.* 2008; Feinman *et al.* 2022; Hirth 2006; Kabata; 2010; Nicholas *et al.* 2022). Additionally, a substantial corpus of bioarchaeological

data (Fournier and Vargas Sanders 2002; Pacheco-Forés *et al.* 2021; Pacheco-Forés *et al.* 2023) in conjunction with Geographic Information System (GIS)-based analyses, such as least-cost path (LCP) modelling (Morehart *et al.* 2023; Nieto Hernández *et al.*, forthcoming), studies in technology and production methods (Melgar *et al.* 2021), broader regional archaeological projects (Fournier and Bolaños 2007; Lazcano Arce and Sallum 2015; Sugiura 1990, 2005b), systematic analyses of iconography and stylistic elements, and the study of writing systems (Helmke and Nielsen 2011, 2013a, 2013b, 2023a, 2023b; Helmke *et al.* 2017; Nagao 2014; Nielsen and Helmke 2023; Testard 2023), have provided invaluable insights into a shift in perspective regarding the Epiclassic. The progress achieved by each of these and other studies have collectively contributed to discerning the period's nature, identity and inherent complexities.

It is from this perspective that this period must be recognised not only by the decentralisation of the ancient state and people seeking out new places to settle. The Epiclassic also comprised the adaptation to new environments, the emergence of new social structures and forms of social organisation, and the establishment of a new political order that paved the way for the development of hegemonic "imperial" states. Consequently, it is imperative to reconsider and reevaluate some of the foundational principles that underpin the concept. This volume provides a valuable opportunity to acknowledge that significant work remains to be done, as existing information gaps contribute to that conventional perception of the Epiclassic when, in reality, it was a decisive period of substantial significance in its own right.

In this context, this chapter examines three critical aspects that are essential for re-examining and redefining this moment in time: chronology, militarism, and artistic representation. My objective is to delineate the timeframe encompassed by this period. However, as I said and will demonstrate, considerable work remains to be done to accurately define the onset and decline of Epiclassic societies. Although this is not first—and hopefully not the last—attempt to divide the period into phases (see Crider 2011, 2023; Fenoglio Limón, this volume; Sanders 2006), on the basis of recent empirical data from sites such as Cacaxtla, Xochicalco and Teotenango, I present a preliminary framework for the division of the Epiclassic into at least three distinct phases, the last of which serves as an interim stage leading into the Postclassic. This division is echoed in some of the other contributions to this volume (see Alvarado León *et al.*; Fenoglio Limón; Morehart; Sugiura and Nieto Hernández).

## Chronology

The Epiclassic in central Mexico, as a time of profound social and political transformation, has long been defined by its chronological boundaries: from the decline of Teotihuacan to the rise of Tula. However, this seemingly straightforward framework obscures

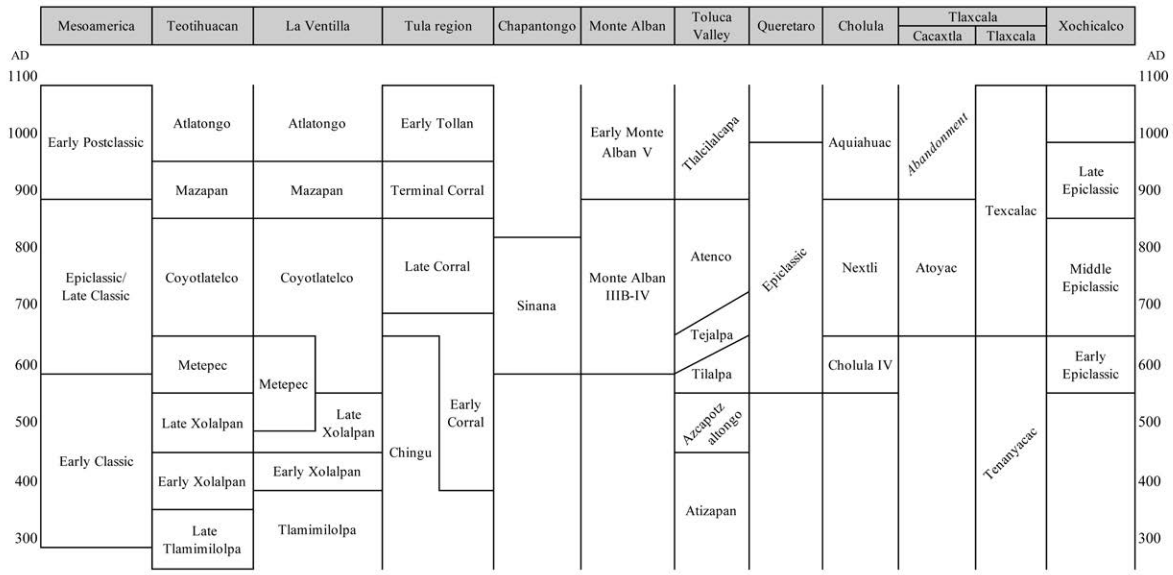


**Figure 1.1:** Chronologies of the central highlands. Chronology based on Cowgill (2015b) and Nichols (2015) for Teotihuacan; Buckley *et al.* (2023) for La Ventilla; Healan *et al.* (2021) for Tula region; Fournier G. and Sánchez-Aldana (this volume) for Chapantongo; Feinman *et al.* (2022) for Monte Albán; Sugiura and Nieto Hernández (2016) for Toluca Valley; Fenoglio Limón *et al.* (2008) for Queretaro; Uruñuela and Plunket (2023) for Cholula; Serra Puche and Lazcano Arce (2011) for Cacaxtla; García Cook (1996a) for Tlaxcala; Alvarado León for Xochicalco.

the complexities and the dynamic processes, without mentioning that each city-state that emerged during this period, may have had their own discrete temporal trajectories. As Diehl and Berlo (1989: 1) emphasize in their seminal work *Mesoamerica after the Decline of Teotihuacan (A.D. 700–900)*, "cultural processes do not begin and end at specific points in time," it is important to recognise that these unfold over extended periods, yielding diverse consequences and outcomes (Crider 2011: 33–34; Fournier G. *et al.* 2006: 55; Morehart *et al.* 2023: 322; Solar Valverde 2006: 20, 2023: 794).

While often perceived as a brief interlude, the Epiclassic generally spans approximately three centuries, typically from AD 600 to 900 (Nichols 2015: 30; Testard 2023: 63; Turner 2016: 1; Turner and Kristan-Graham 2023) (Figure 1.1). This temporal delimitation has been fundamental to the concept. Nevertheless, it is necessary to acknowledge that much of our understanding continues to be based on assumptions rather than robust empirical evidence.

The prevailing framework for defining the period relies heavily on the latest chronological markers from Teotihuacan to signal its beginning, while its conclusion is often linked to the emergence of the site of Tula Grande. However, several significant factors must be taken in consideration. The scholarly community has yet to reach a consensus on whether the fall of Teotihuacan was a sudden event (Millon 1981), a gradual process (Goguitchaichvili *et al.* 2022; Nichols 2015; Testard 2023), or if the site was partially abandoned and subsequently reoccupied by foreign groups (López Pérez and Nicolás Careta 2023; Manzanilla *et al.* 1996; Rattray 2001). Additionally, the major burning of several structures within Teotihuacan's epicentre, the emergence of Coyotlatelco ceramics, and population decline, must be considered when establishing the beginning of the Epiclassic period since each of these factors is associated with different dates and ceramic phases (Beramendi-Orosco *et al.* 2009; Beramendi-Orosco *et al.* 2021; Cowgill 2013, 2015a; Manzanilla 2003; Nichols 2015, 2020; Rattray 1991; Sanders *et al.* 1979). Recent research conducted by Buckley and colleagues (2023) on a sample of 11 skeletal individuals associated with Coyotlatelco ceramics from La Ventilla indicates that the incursion of these ceramics occurred *c.* AD 550, coinciding with earlier ceramics phases.

On the other hand, defining the end of the Epiclassic solely by the founding of Tula Grande presents its own set of challenges. Recent research by Cobean and colleagues (2021; Healan *et al.* 2021) indicates that Tula Chico was occupied as early as the Middle Classic period, with monumental construction beginning around AD 600–650. Furthermore, Healan and colleagues (2021) argue that ceramic and chronometric data from Tula Grande demonstrate continuity from the terminal Corral phase, associated with the Epiclassic, to the Tollan phase, traditionally linked to the Early Postclassic. This suggests that Tula Grande experienced construction activity prior to the eleventh century, traditionally considered the start of the Early Postclassic and the rise of Tula's prominence. These findings complicate the use of Tula Grande's occupation as a definitive marker for the end of the Epiclassic period, as they suggest a more gradual transition and potential overlap between this moment in time and Early Postclassic in the Tula region. A more detailed examination of this chronological overlap will be addressed later in this chapter (see also Morehart, this volume).

Furthermore, while a Teotihuacan-centric perspective obscures the diverse regional developments of this era, the association of Coyotlatelco ceramics with the Epiclassic period introduces additional layers of complexity rather than providing clear chronological markers. This is especially true, given that for a long time, scholars have assumed that Coyotlatelco ceramics constitute a horizon marker for the Epiclassic. Although scholarly efforts have been made to clarify the role and place of Coyotlatelco ceramics vis-a-vis chronology (Cervantes Rosado and Fournier 1994; Gaxiola González 1999; Sánchez 2013; Solar Valverde 2006), it is necessary to recognise that these ceramics, whether categorised as a style, type, sphere, culture, tradition or complex, are not universally present at Epiclassic sites as it is strongly present at some, and wholly absent at others. Therefore, relying solely on the presence or absence of Coyotlatelco ceramics to date sites or define the chronological boundaries of the period can be highly misleading. As Diehl and Berlo (1989: 2) caution, ceramic comparisons without supporting chronometric data are inherently problematic. Attributing diagnostic values to specific ceramic traits in the absence of absolute dating can lead to inaccurate chronological assessments and hinder efforts to comprehend the intricate cultural developments of the period.

On this matter, Inomata and colleagues (2017: 1293) emphasize that a detailed construction of rapid transformations during the Terminal Classic in the Maya area, similar to those that seems to have occurred during the Epiclassic in central Mexico, requires a refined chronology. However, constructing such a chronology remains a challenge. In 1989, Diehl and Berlo already drew attention to the limited number of radiocarbon samples available, a problem that persists despite the progress made in recent decades. While more radiocarbon dates have been obtained, their utility for comparison and analyses is often hampered by inconsistencies in methodology and presentation (Buckley *et al.* 2023: 15; Fournier and Bolaños 2007: 482). Some studies show date ranges, while others offer only

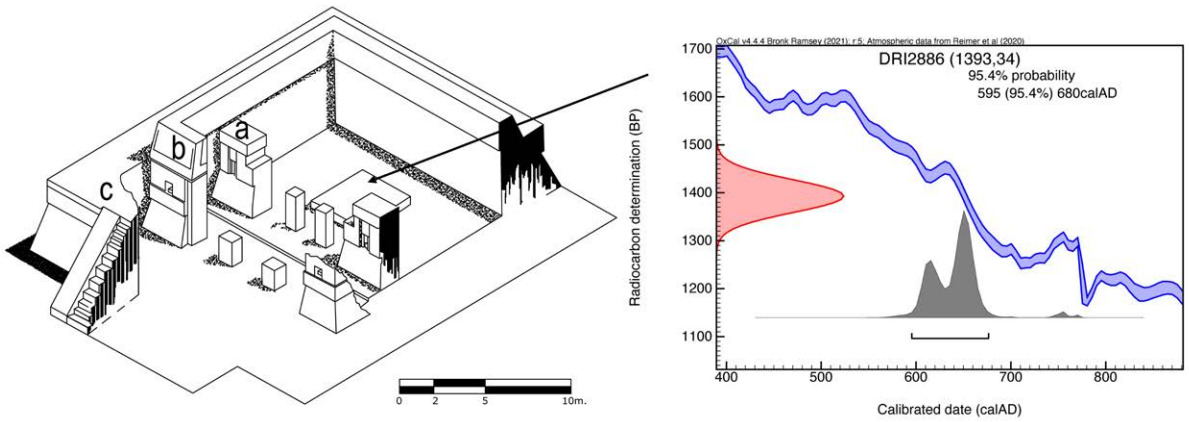


**Figure 1.2:** Constructive sequence of the Pyramid of the Feathered Serpents of Xochicalco and recalibrated date from the first constructive stage (drawing and recalibration by Claudia I. Alvarado León).

**Table 1.1:** Recalibrated dates from Xochicalco.

| Sample | Location | Context | Material | Conventional Radio-carbon Age | 2σ |
|---|---|---|---|---|---|
| DRI 2864 | B2-2 | on floor | pine charcoal | 1200 ± 55 BP | AD 675–980 |
| DRI 2875 | G3 Elem 14 | on floor | pine charcoal | 1233 ± 59 BP | AD 660–955 |
| DRI 2866 | G2 (sub-str. 1) | on floor | pine charcoal | 1319 ± 56 BP | AD 605–875 |
| DRI 2885 | G4 | on floor | pine charcoal | 1260 ± 33 BP | AD 665–880 |
| DRI 2889 | AC8 patio/room8 | on floor | pine charcoal | 1370 ± 27 BP | AD 605–775 |
| DRI 2887 | H5 | on floor | pine charcoal | 1226 ± 35 BP | AD 680–890 |
| DRI 2899 | G6 | on floor | pine charcoal | 1215 ± 38 BP | AD 680–945 |
| DRI 2886 | G1 (FSP) | 2m under altar | pine charcoal | 1393 ± 34 BP | AD 595–680 |
| INAH 2151 | Pyramid of the Stelae S room | on floor | charcoal | 1014 ± 22 BP | AD 990–1125 |
| INAH 2153 | E 2-2 | on floor | charcoal | 1192 ± 19 BP | AD 770–890 |
| INAH 2155 | Portico I4 | on floor | charcoal | 1095 ± 19 BP | AD 890–995 |
| INAH 2157A | Ac 8 room 5 | on floor | charcoal | 1348± 17 BP | AD 645–760 |

Recalibration OxCal v.4.4.4 with the IntCal20 Northern Hemisphere curve (Reimer *et al.* 2020).

*Date considered out of range, possibly contaminated.

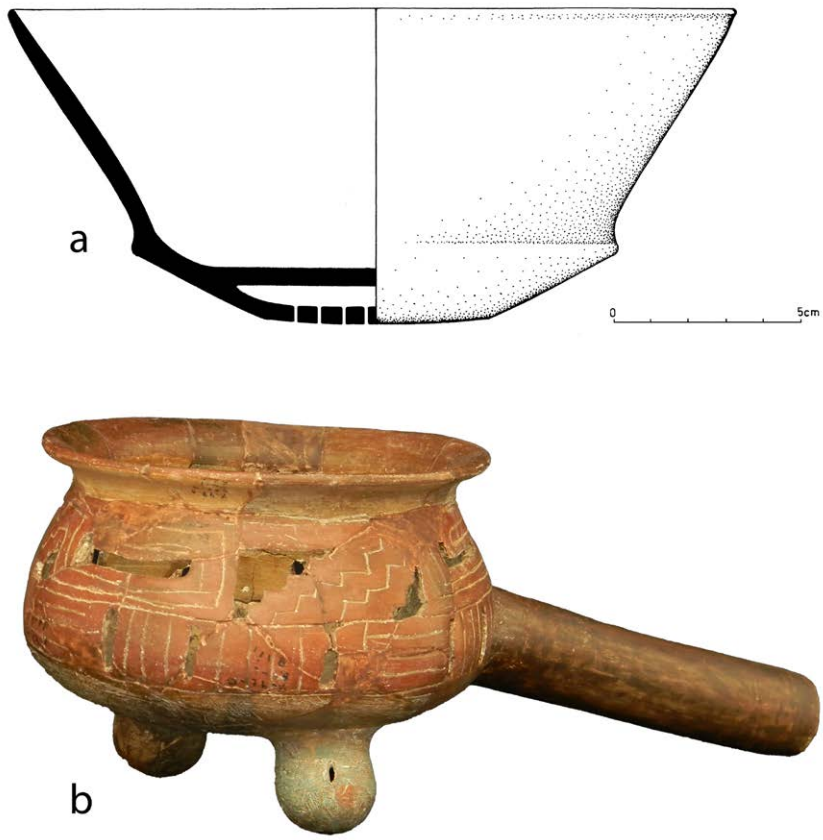


**Figure 1.3: a)** Basal ridge bowl and **b)** Alicia Openworked censer from Xochicalco (drawing by Gonzalo Gaviño in Garza Tarazona and González Crespo 2006: Fig. 14; photograph from Alvarado León 2023: Fig. 6).

averages (e.g. Healan *et al.* 2021). Similarly, the reporting of confidence levels varies, further complicating efforts to synthesize and interpret the available data (see Moreno *et al.* 2005). These discrepancies hinder the development of a robust chronological framework for the Epiclassic, ultimately impeding a thorough understanding of the period's chronometric character and temporal thrust.

It is evident that an explanation of the socio-political restructuration of the Epiclassic period can only be achieved by transcending the limitations of intrasite cross-dating based on material culture traits, despite the usefulness and potential advantages of this method. Instead, there is a compelling need to integrate a substantial corpus of high-resolution chronometric data (e.g. Beramendi-Orosco *et al.* 2021). Such data will enable researchers to trace the rise and fall of individual city-states, analyse their interactions within regional networks and ultimately reconstruct the complex dynamics that characterised this transformative era in Mesoamerican history.

To date, empirical data points to a period of significant change in central Mexico beginning around AD 550. This is manifested not only by the decline in Teotihuacan's influence, indicated by the abandonment of its periphery, marked population decline, and evidence of burning in the city's epicentre (Beramendi-Orosco *et al.* 2019, 2021; Cowgill 2015b: 233; Millon 1988), but also the concurrent rise of independent city-states throughout the region (Hirth 2000; Sanders *et al.* 1979; Sugiura 2005b). This shift in the political landscape resulted in a dynamic interplay of emerging powers vying for dominance and control of resources (Cowgill 2015a: 157; Litvak 1970). Xochicalco exemplifies this phenomenon emerging as a major centre in western Morelos during this period of widespread changes. The archaeological investigations have revealed that Xochicalco's development was a multi-phased process. Initial constructions on the Xochicalco hilltop appear to coincide with Teotihuacan's decline, around AD 600/650 (González Crespo *et al.* 2008, n.d.; Hirth 2000), while the iconic Pyramid of the Feathered Serpents, a hallmark of Xochicalco's architecture, along with other

**Table 1.2:** Archaeomagnetic dates from Xochicalco.

| Sample | Location | Material | Date |
|---|---|---|---|
| XO11* | Ac Wall | burnt stucco | AD 1017–1115 |
| XO7* | B Stuccoed floor | burnt stucco | AD 967–1031 |
| XO20 | Portico I4 | burnt stucco | AD 935–1065 |
| XO23 | Ac8 room 5 | burnt stucco | AD 700–750 |

*Soler-Arechalde *et al.* 2019

notable structures, were constructed in later phases (Alvarado León 2015; González Crespo *et al.* 2008) (Figure 1.2). This indicates that Xochicalco's trajectory and complexity extended beyond the immediate aftermath of Teotihuacan's decline, suggesting a more intricate interplay of factors contributing to its rise. A radiocarbon date from the earliest substructure of the Pyramid of the Feathered Serpents provides a calibrated date range of AD 595–680 (DRI2886) (Table 1.1). This date, while offering a general timeframe for early activity at the site, further underscores the need for a more refined chronology to fully understand the phases of Xochicalco's development and its relationship to broader regional changes.

The shared presence of basal ridge bowls at both Teotihuacan and Xochicalco offers evidence for potential interaction during the Epiclassic period. This distinctive ceramic form, also known as Z-angle or Composite Silhouette Bowls, has been identified at Teotihuacan during the Metepec or Late Xolalpan phase (Manzanilla *et al.* 1996: 258, 261; Piña Chán 1967: 147; Rattray 2001: 299–302; Sanders 2006: 193) and are also a recognised component of the ceramic sphere prevalent at Xochicalco (Cyphers and Hirth 2000; Garza Tarazona and González Crespo 2006; Sugiura 1996: 245, 2006: 139) (Figure 1.3). This ceramic may indicate interaction between Xochicalco, the southern Basin of Mexico and Teotihuacan, either mediated through shared participation in broader regional networks or through intermediary sites, during the Early Epiclassic (Crider 2011). However, clarifying the synchronicity, precise nature and extent of this interaction requires not only a more refined chronology for the final phases of Teotihuacan in conjunction with a detailed chronological framework for the earliest stratigraphic contexts at Xochicalco, but also petrographic analyses of these ceramics to identify the place where they were produced and trace the routes along which they might have moved.

Additionally, the association of the end of the Epiclassic with the foundation of Tula Grande requires further scrutiny. Chronometric data from Xochicalco, including archaeomagnetic samples dating from AD 935–1115 (González Crespo *et al.* n.d.; Soler-Arechalde *et al.* 2019) (Table 1.2), indicate that this city remained active well into the eleventh century, overlapping with the Early Postclassic period, which conventionally is seen to coincide with the rise of Tula Grande. This suggests a more complex scenario than a simple transition between these two major centres. The presence of Early Postclassic ceramics from the Toluca Valley and Tula at Xochicalco, such as Matlatzinca wares and the type Alicia Openworked (Cobean 1990) (Figure 1.3), further supports the contemporaneity of these sites and highlights the need for a more nuanced understanding of the Epiclassic-Postclassic transition.

While a readjustment undoubtedly occurred, I propose that this was limited to an early and later phase. The Early Epiclassic, which coincided with the decline of Teotihuacan and the rise of new settlements, is defined by a gradual adjustment based on the interaction of social, political and economic forces. In order to sustain the trajectory of those newly formed societies, these forces sought to reinforce a novel system of non-centralised political organisation. Furthermore, based on empirical data from Xochicalco, I argue that another significant period of readjustment occurred during the Late Epiclassic. This phase laid the groundwork for the consolidation of Postclassic hegemonic states in central Mexico, demonstrating the continued impact of the transformative processes initiated between AD 550–600.

To overcome the challenges inherent in studying the period, future research must prioritise the refinement of chronological frameworks. This requires a multi-faceted approach that goes beyond simply collecting more dates. First and foremost, a more precise delineation of Teotihuacan's final phases is crucial. In addition, a detailed chronological framework, not only for key sites, such as Xochicalco, Teotenango, and Cacaxtla, but also from smaller settlements and rural areas, will provide a more comprehensive picture of the

chronological variability within the Epiclassic world, from urban centres to the sparsely settled hinterlands.

## Conflict and militarism

The Epiclassic is often defined by a volatile political environment, largely attributed to the power vacuum created by the decline of Teotihuacan's centralised governance (Hirth 1989, 1995; *cf.* Hirth 2000: 251; López Luján 1995: 262). However, evidence for widespread conflict and warfare throughout the period is still open to question.

Despite the assumption of pervasive warfare, direct empirical data for conflict or war between city-states is scarce (Kabata 2010: 6; Solar 2002: 118–120, 2003). Furthermore, architectural features typically associated with militarism, such as structures for military gatherings (e.g. Casa de las Águilas, Templo Mayor) or armouries (e.g. *Tlacochcalco Acatl Yiacapan*, Tenochtitlan), are uncommon in Epiclassic contexts if not altogether non-existent. Similarly, obsidian artefacts that can be definitively identified as weapons are relatively infrequent, at least within the major urban centres (but see Andrews and Glascock 2020: 77). This lack of data underscores the need for an in-depth exploration of combat and militarism, considering the possibility of alternative forms of conflict resolution, shifting power dynamics, and the diverse expressions of power and authority.

The defensive location of sites, particularly those situated on hilltops, has been considered a key indicator of violence during the Epiclassic (Fenoglio Limón, this volume; Hassig 1992: 101; Pasztory 1978: 16). This inference is often supported by the presence of supplementary architectural features, such as dry moats, trenches, and fortification walls (Alvarado León and Garza Tarazona 2010; Armillas 1948, 1951; González Crespo *et al.* 1995; Hassig 1992: 104; Hirth 1989, 1995, 2000; Litvak King 1971; Morehart, this volume; Morehart *et al.* 2023; Nielsen and Helmke 2015; Togno 1979). However, as an alternative to the interpretation of defensive features directly related to warfare, scholars have proposed symbolic, ritualistic, or territorial demarcation purposes, among others (Dahlin 2000: 294; Moore 1996; Nelson 2003: 84; Solar 2002; Wiesheu 2002).

Teotenango constitutes a pertinent case study for the purpose of evaluating the military and violent aspects of the period, while concurrently providing additional evidence for the chronological overview previously presented. The site has frequently been identified as an exemplary Epiclassic stronghold (e.g. López Austin and López Luján 1996, 1999; Piña Chán 1972, 1975) exhibiting the distinctive characteristics associated with the period, including the presence of Coyotlatelco pottery, its strategic hilltop location, and its defensive walls (Figure 1.4a and b). Thermoluminescence analyses of the stuccoed floors associated with Coyotlatelco ceramics at Teotenango provide a date of approximately AD 800 (González M. *et al.* 2002: 224), which raises questions regarding the timing of the earliest occupation of the site as a response to the decline of Teotihuacan. Additionally, there is an absence of conclusive empirical evidence to determine the construction date of the walls, something that is exacerbated by Teotenango's extensive occupational history in the Late Postclassic period (Piña Chán 1975: 366). Nevertheless, this feature has been repeatedly used to consider the site an Epiclassic settlement (García Moll 1995; Piña Chán 1972: 15–16, 33; Reyes V. 1975: 123), even though the possibility that the walls were erected at a later date, perhaps around AD 1200, when the city was conquered by the Chichimeca-Matlatzinca (Alvarado León and Testard forthcoming; Reyes V. 1975: 124).

Xochicalco provides another important example of a site with potential military significance. In 1984 and 1986, González Crespo and colleagues (1995) conducted fieldwork in the area called Loma Sur. During the explorations, the following actions were taken: the dry moat was excavated, 423 metres of defensive wall at the first terrace were cleared, and one of the main entrances to the city was exposed. The archaeologists determined the constructive system of the defensive wall, in which cut stones were used, joined with lime mortar, and finally covered with stucco; a section of the moat was cleaned and its constructive form was documented, and the materials used and the final finish could be verified. The excavations did not reveal any indication of violence, nor were weaponry or human remains identified.

A comparative analysis of the defensive wall at Xochicalco and Teotenango reveals significant disparities in the quality, time, and labour intensity involved in their construction. The Teotenango walls exhibit inferior quality, characterised by unworked stone that has not been bonded or finished, suggesting a potentially substandard level of craftsmanship or hasty construction. Consequently, the conventional explanation of these structures as indicators of the Epiclassic characterised by conflict should be re-evaluated.

While the architectural context might not provide definitive proof of warfare, iconographic representations offer another perspective on the potential role of militarism at Xochicalco. Hirth (1989: 72) notes that "militarism in its simplest form is portrayed on the Pyramid of the Feathered Serpents as warriors arrayed in battle costume and carrying a shield and darts" (see also Hirth 2000: 254–255; Smith 2000).


**Figure 1.4: a)** Panoramic view at the hilltop of Teotenango and **b)** section of the western wall (photographs by Claudia I. Alvarado León).

These depictions of warriors suggest that militaristic themes indeed figured prominently in Xochicalco's visual culture. Further evidence potentially related to militarism includes two carved human crania recovered in 1977 from a test pit in an area interpreted as a midden (Hirth 1989). These exhibit deliberate modifications and have been interpreted as warrior trophies (Figure 1.5a), potentially linked to warfare or ritualised violence (Helmke 2020: 34–35; Hirth 1989: 76, 2000: 260). Additionally, a sculpture reported by Peñafiel in 1890 depicts a headless torso with severed lower limbs, exposed ribs, and a longitudinal cut across the chest (Figure 1.5b). This statue suggests a violent end for the individual depicted, possibly related to warfare or sacrifice. For Peñafiel, as well as for Hirth (1989: 75, 2000: 259) and Garza (Garza *et al.* 2003: 195), this sculpture portrays a sacrificial victim that was used as an altar. Moreover, suggestive evidence of violence and militarism at Xochicalco comes from the presence of partly articulated human remains. Skulls, mandibles, long bones, and pelvic girdles exhibit a lack of biological correspondence, indicating that these represent multiple individuals (Garza G. 1994: 60; *cf.* Nelson *et al.* 1992: 302). Many of these bones and skulls bear perforations and evidence of wear suggesting they were tied together with ropes and likely suspended from ceilings (Figure 1.6) (Garza *et al.* 2003: 196; Pijoan *et al.* 2003: 418–419). This practice of displaying human skeletons, potentially as trophies of war, aligns with similar practices documented at other Epiclassic sites, such as La Quemada (Nelson and Martin 2015), Cerro del Huistle (Hers 1989: 68, 91–92), and Alta Vista (Kelley 1976: 34), where early evidence of bone display has been recorded (Pijoan and Mansilla 1990). The display of these modified human skeletons at Xochicalco points to a society that engaged in practices of violence and ritualised warfare, likely as part of political or religious expression.

The final chapter—Late Epiclassic—in Xochicalco's history is marked by a conflagration that occurred around AD 1100, just before the city's complete abandonment (González C. *et al.* n.d.; see Alvarado León 2019). This destructive event, characterised by widespread burning and destruction, is interpreted as the result of an internal conflict among factions within the ruling elite (González Crespo *et al.* 1995; Garza Tarazona and González Crespo 1995). Evidence includes hundreds of plundered, destroyed, and dispersed artefacts found on patios and plazas. Additionally, the remains of 38 individuals (MNI) were found beneath a collapsed portico in the city centre (Ángeles 1993–1994: 341–342; Garza G. 1994). This violent episode underscores the fragility of power and internal strife, even within seemingly well-established Epiclassic centres. Teotenango provides another example of potential violence and conflict during this period.

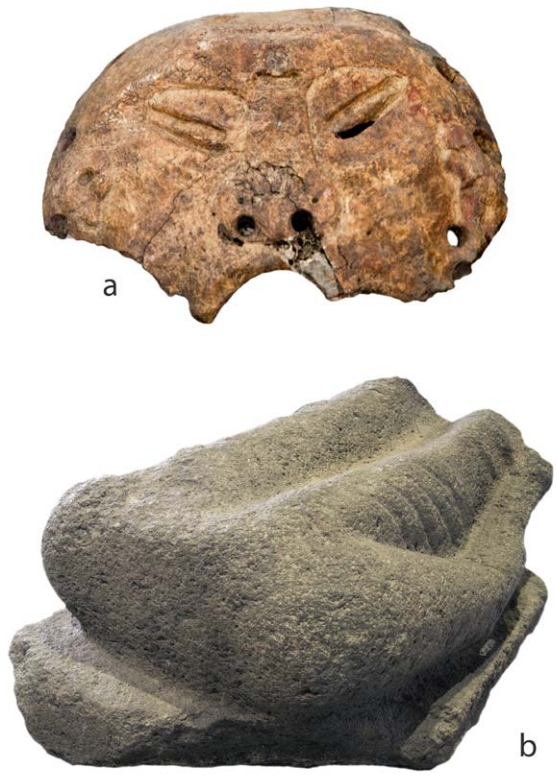


**Figure 1.5: a)** Human cranium and **b)** sculpture of a decapitated torso (upper photograph by Christophe Helmke; lower photograph by Archivos compartidos UAEM-3Ríos). Objects are not to scale.

Excavations at the site have uncovered 13 deposits containing the disarticulated bones of 92 individuals, ascribed chronologically to the period between AD 900 and 1150 (Zacarías 1975: 366, 373). These deposits, characterised by disarticulated bones with cut marks, evidence of burning, beheading, and mutilation, again suggest practices of ritualised violence and sacrifice (Piña Chán 1972; Zacarías 1975). The commingled appearance of the bones and the presence of rubble within these deposits further support their interpretation as ritualistic or sacrificial, rather than simple inhumations. Whereas Piña Chán (1972: 24–27) suggests these remains constitute a dedication to the main platform, Zacarías (1975: 378) instead proposes a connection to a violent event related to the site's destruction (see Testard and Alvarado León forthcoming). Further investigation is needed to clarify the specific circumstances surrounding these deposits and their implications for understanding violence and conflict at Teotenango in the transition from the latter facet of the Epiclassic and into the Early Postclassic.

Although the evidence presented here indicates a violent, militaristic moment, these elements

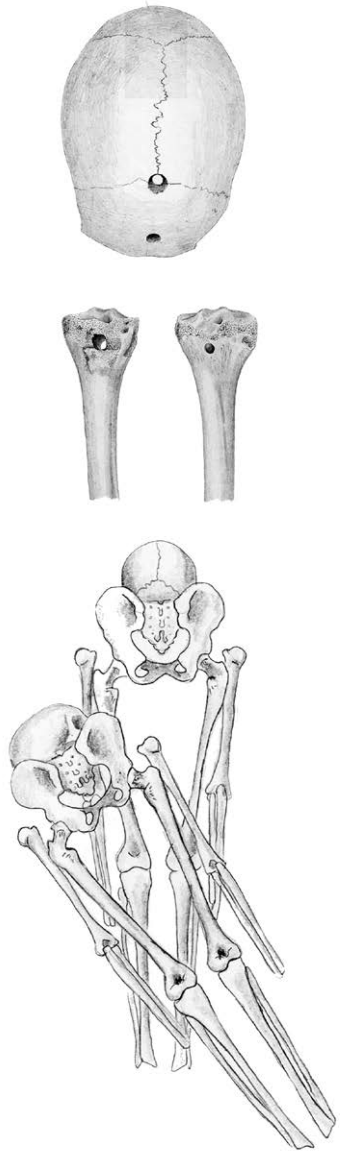

**Figure 1.6:** Sets of disarticulated human bones from Xochicalco (drawing by Gonzalo Gaviño in Ángeles 1993-1994: Figs. 6.3 and 6.4).

are associated with later phases of the Epiclassic. Considering the sole radiocarbon date from the primary substructure of the Pyramid of the Feathered Serpents, the construction date of the third stage, which exhibits the well-known carved friezes, has been calculated to date to *c.* AD 800 (Alvarado León 2015; González C. *et al.* 2008). In contrast, the human bones from Teotenango and Xochicalco likely date to a much later phase, possibly towards the final years of occupation at each site.

Compelling evidence for inter-polity conflict during the period comes from the work of Nielsen and Helmke. In their unpublished paper, "Bellicose Relations between Cacaxtla and Xochicalco in the Epiclassic Period", presented at the 2015 Annual Meeting of the Society for American Archaeology, they argue that the depictions of stripped and starved human figures on the hieroglyphic stair at Cacaxtla represent captive elites from Xochicalco, based on their distinctive headdresses and references in the accompanying text to 'Turkey Mountain,' the ancient name of Xochicalco (see also Helmke and Nielsen 2011, 2013a, 2023a; Nielsen *et al.* 2021). This interpretation supports the notion of conflict and warfare between major Epiclassic centres—frequently posited but rarely supported by direct evidence. However, the precise dating of these murals remains a point of contention. While there have been attempts to date the murals of Cacaxtla (Brittenham 2015: 224; Helmke and Nielsen 2013a, 2014, 2023a: 54; Moreno *et al.* 2005: 55) based on architectural sequences, iconographic comparisons, and a single radiocarbon date, we have no certainty of when the hieroglyphic stair was painted. The establishment of a more precise chronology for these murals is of crucial importance in order to contextualise not only the moment of possible confrontation between the two great capitals, but also its implications. Moreover, the findings would incentivise further research into the allies, causes, effects, and scope of these events.

In addition to the major centres, smaller sites in the Basin of Mexico also yield evidence of violence during the Epiclassic. At Lake Xaltocan and Los Mogotes, for example, archaeologists have uncovered burials of decapitated individuals, suggesting human sacrifice and potentially in the wake of interpolity warfare (Morehart *et al.* 2012; Morehart *et al.* 2023; Pacheco-Forés *et al.* 2021). However, the interpretation of these burials remains open to debate. While they may reflect violent conflict, they could also represent ritual offerings, as suggested by Fournier and Vargas Sanders (2002; also, Fournier and Bolaños 2007) based on similar finds at Chapantongo.

While militaristic themes are prominent in Epiclassic iconography and some archaeological evidence points to instances of conflict and violence, it is important to remember that such manifestations were not entirely new to this period. Earlier expressions of militarism and warfare were present during Teotihuacan's apogee, as evidenced by iconographic representations and archaeological finds (Bove and Medrano 2003; Cowgill 2000: 310–312; Hirth 2000: 263; Millon 1988: 109–110; Nielsen 2019; Sugiyama 1989, 2005; Sugiyama and Sugiyama 2020; Sugiyama *et al.* 2022). The absence of large, fortified hilltop centres in the Basin of Mexico during the Epiclassic, in contrast to their presence in surrounding regions (Crider 2011: 39, 2013: 109; Sanders *et al.* 1979: 129), suggests a more complex

picture of power dynamics and conflict. It is possible that Teotihuacan, despite its decline, continued to exert influence over the Basin of Mexico, limiting the development of heavily fortified centres in its immediate periphery (Hirth 2000: 251). On this matter, Parsons and colleagues (1982; Parsons 1989) posit evidence for an increase in population, in the southern part of the Basin of Mexico, specifically in the regions of Iztapalapa, Chalco-Xochimilco and Texcoco, without the appearance of larger sites. Despite the settlement pattern being consistent with that which is traditionally known from the Epiclassic period (regional settlements distant from one another), thus far, evidence of a prevalence of sites settled in elevated areas has not been found. Chicoloapan, a site 40 km to the south of Teotihuacan illustrates this point. The temporal framework delineated by Clayton (2020) indicates that during the late 500s to the mid-600s, a significant degree of activity was observed in the construction of residential structures intended to house displaced populace from Teotihuacan, as well as individuals from other regions within the basin. These new communities could not afford to concentrate large numbers of people in one central location. The reorganisation of human groups, the establishment of new places to live and the creation of a supply system for subsistence must have been priorities before any conflict with neighbouring regions could be entered into. The chronological and archaeological evidence indicates that the turbulent and violent environment that has been identified as a defining feature of the Epiclassic did not occur abruptly; rather, it was the result of a gradual process in which new settlements, elites and institutions gained power and developed new methods of legitimisation, alliance and domination.

At Xochicalco (Alvarado León 2015; González Crespo *et al.* 2008; Salomón and Garza Tarazona 1994), architectural analyses provided valuable insights into the chronology of defensive features and militaristic imagery. While architectural data may not offer precise dates, it can reveal that many of the features associated with Epiclassic militarism were actually built in later phases, after the initial establishment and consolidation of these new city-states. For example, the Pyramid of the Feathered Serpents, with its iconic warrior imagery, underwent three construction stages. While the earliest dates to AD 595–680 (Figure 1.2), the final, with its elaborate reliefs, was likely completed, potentially in the latter half of the ninth century (Alvarado León 2015; González Crespo *et al.* n.d.). This suggests that the militaristic imagery so prominently displayed on the pyramid may reflect a later aspect in Xochicalco's history, rather than being intrinsically linked to the initial phases of the Epiclassic period.

Nevertheless, and despite the occurrence of conflict and violence, the present corpus of evidence is inadequate to establish the temporal parameters of the events, the specific actors involved and the nature of the disputes among city-states. In order to achieve a comprehensive understanding of the complex role of conflict and warfare in shaping the sociopolitical landscape of Epiclassic central Mexico, it is necessary to move away from simplistic assumptions regarding widespread warfare and to undertake a critical evaluation of the extant evidence, on a site-by-site basis. The achievement of this objective depends on implementing a multifaceted research method for future studies, incorporating chronological data, as well as architectural, osteological, and lithic analyses, alongside iconographic interpretation.

## Style and identity

The monumental art and architecture of the Epiclassic period provide a rich source of information about the cultural and political forces that shaped the period. As demonstrated through numerous studies on style, iconography, and writing systems, the evidence derived from these monuments serves as a key diagnostic feature (Berlo 1989; Helmke and Nielsen 2011, 2013a, 2013b, 2023a, 2023b; Helmke *et al.* 2017; Nagao 1989; Nielsen and Helmke 2023; Testard 2023; Turner 2016).

From an art historical perspective, the human figures represented in the painted murals of Cacaxtla and the carved reliefs of the Pyramid of the Feathered Serpents at Xochicalco exhibit a striking blend of stylistic elements. These figures not only display attire and iconography known from other regions, such as the Maya area (Helmke *et al.*, this volume), but also incorporate actions, postures, and physical traits that deviate from established traditions in central Mexico. The so-called "eclectic style" (Diehl and Berlo 1989; Foncerrada 1976; Hirth 2000: 264–265; Kubler 1980; Parsons 1969: 164; Pasztory 1978: 16; Smith 2000: 64), evident in various forms of material culture but particularly prominent in elite contexts, has been interpreted as reflecting a dynamic process of adaptation, adoption, and emulation (Berlo 1989; Cowgill 2013, 2023; Hassig 1992 note 107; Nagao 1989; Testard 2014, 2021, 2023), and even potential migration of artists or cultural bearers (Turner 2019). Some scholars understand it as reflecting increased interaction and exchange with distant regions (Hassig 1992: 106; Hirth 2000: 265; Martin 2013; Solar 2003), while others see it as a strategy employed by elites to legitimise their power and authority (Hirth 2000; Smith 2000; Testard 2014: 2, 2018, 2021, 2023; see also Helmke *et al.*, this volume). The question of why elites adopted

foreign stylistic elements has been approached from various perspectives. Nagao (1989: 84) suggests that the appeal of Maya art styles at sites like Xochicalco and Cacaxtla may stem from their contrast to Teotihuacan traditions, representing a deliberate rejection of previous artistic canons and drawing inspiration from a variety of contemporaneous sources. In contrast, Hirth (2000: 264) proposes that the incorporation of foreign elements into art and architecture served to "reinforce and promote political, economic and social cooperation". He argues that the artistic diversity of the Epiclassic reflects not ethnic migration, but rather interregional elite interaction aimed at maintaining political alliances and forging a new multi-ethnic symbolic system (Hirth 2000: 265). This perspective highlights the strategic use of art and architecture to construct a shared identity and legitimise power in a changing political landscape (see Pereira, this volume).

The concept of ethnic identity itself is complex and multifaceted. While some scholars define it based on shared heritage, either biological or cultural (Stark and Chance 2008: 8), others emphasize a sense of belonging to a particular group, especially in the context of migration (Epstein and Heizler 2015). In the case of Epiclassic societies, neither of these definitions seems entirely satisfactory. It is possible that the adoption of foreign artistic elements was not primarily driven by ethnic considerations, but rather by a desire to create a novel symbolic system that would distinguish the new elite and consolidate their power and authority (Hirth 2000: 266; Schortman *et al.* 2001). This interpretation suggests that elite art and architecture played a crucial role in constructing and negotiating social and political identities in a rapidly changing world; however, it is fundamental to consider the perspectives of non-elite groups in order to achieve a more accurate interpretation of the Epiclassic social landscape. To that end, we must move beyond the material culture of the ruling class and explore how identity was negotiated and expressed by those outside the centres of power. This requires examining a wider range of archaeological and iconographic evidence, including materials from residential areas, workshops, and burials associated with different social strata. By incorporating these diverse perspectives, we could obtain a more nuanced insight of the complex identity formation and social differentiation during the period.

Moreover, although this caveat may now seem repetitive, it is imperative to undertake a critical examination of the chronology of the monuments, architecture and mural paintings that function as diagnostic features of the period. As demonstrated through the architectural sequences of key sites such as Xochicalco, Cacaxtla, and Teotenango, many of these features were not constructed in the initial phases. This observation is of significant consequence for the development of Epiclassic artistic styles and iconography. It is suggested that the distinctive features often associated with this period may reflect a subsequent moment in the development of these city-states, potentially arising after a stage of consolidation and experimentation with new forms of expression. Consequently, when analysing the motivations and processes behind the emergence of Epiclassic artistic styles, it is essential to consider the chronological context and the potential for evolving artistic trends.

## The division of the period: A proposal

Recent investigations have challenged long-held assumptions and prompted a reassessment of several key aspects of this transformative moment in time, including its chronological boundaries. New data from Teotihuacan and other Epiclassic sites within and without central Mexico demonstrate a clear contemporaneity with both the Late Classic and Early Postclassic periods (e.g. Beekman 2010). This evidence underscores the need to move beyond the traditional framework that views the Epiclassic as a brief interlude *after* Teotihuacan and *before* Tula. Instead, we must recognise that it has its own internal forces and far-reaching consequences, interwoven with the broader tapestry of Mesoamerican history.

It is necessary to recognise the limitations of the current chronological data and the pressing need for a meticulous and robust chronology to understand the intricacies of the rise and fall of city-states, the evolution of regional interactions, and the genesis of novel artistic and political expressions. This endeavour involves the broadening of the application of absolute dating techniques to a more extensive array of sites and contexts, whilst maintaining methodological consistency. Although the construction of a chronological framework remains a work in progress, the available empirical data such as the absolute dates derived from radiocarbon and archaeomagnetism, the analysis of architectural sequences to establish relative chronologies, and the use of stylistic cross-dating to identify connections and potential interactions between distinct sites, can be utilised to refine our interpretations. The integration of these distinct lines of evidence will facilitate our advancement in the recognition of the Epiclassic as a period of complexity and great significance within the broader trajectory of Mesoamerican societies.

The formulation of a proposal for the division of the Epiclassic into phases was undertaken by consulting the available information regarding Xochicalco. The available chronometric data present limitations in terms of both quantity and source, potentially hindering our

ability to construct a precise chronological sequence for the site. Hirth (1983) presents only a single radiocarbon date from the city itself, which, according to Heath-Smith (2000: 184), has a broad calibrated range of AD 695–1206 (2σ). Furthermore, the dates obtained by González C. and colleagues (González C. *et al.* 2008; González C. *et al.* n.d.) are based on samples of burnt wood from beams, supports, lintels, and other architectural elements. While these dates provide valuable information, it is important to approach them with caution due to the potential for inherent age or contamination in such materials (Beramendi-Orosco *et al.* 2009; Beramendi-Orosco *et al.* 2021; Van der Wal 2021; see also Palincaș 2017: 2). Nevertheless, these dates can help to establish approximate chronologies for specific buildings, such as the Portico I4, where the aforementioned arrays of disarticulated human bones were found.

As stated, the notion of dividing the period into phases is not a novel one; indeed, other scholars have previously posited a division based on ceramic types (Parsons and Sugiura 2012; Piña Chán 1967; Sugiura 2006; see Morehart, this volume). For instance, Crider (2011, 2013, 2023) proposed a division of an Early and Late Epiclassic based on ceramics. However, Clayton's (2016) analysis of Chicoloapan pottery challenges this division, highlighting the limitations of relying solely on ceramic typology for chronological distinctions.

The suggestion that the Epiclassic should be divided into phases presents an opportunity to diverge from the conventional and generalised perception of a monolithic and transitory period characterised by a homogeneous expression of violence and eclecticism. Whilst acknowledging the potential of ceramic sequences to contribute to the establishment of relative chronologies, it is important to recognise the limitations of relying on changes identified in a single sort of material culture. This consideration assumes particular significance in instances where there is an absence of clear stratigraphic deposits, as evidenced at Xochicalco (Noguera 1945). Consequently, a more robust approach requires the integration of complementary empirical data.

Based on the analysis of available dates, architectural sequences, and iconographic cross-references, I propose a preliminary division of the period into three distinct phases, each characterised by unique sociopolitical and cultural developments:

***Early Epiclassic (AD 550–650)***

This phase represents a time of significant transition, marked by the decline of Teotihuacan's dominance and the emergence of new sociopolitical configurations in central Mexico. While Teotihuacan still exerted considerable influence during this period, the political landscape was undergoing a profound reconfiguration, with increased population movements, the circulation of new ceramic styles (such as Coyotlatelco), a decline in the use of Pachuca obsidian and the nascent formation of independent city-states. This phase can be considered a crucial moment of adjustment between the Classic and Epiclassic, characterised by adaptations and realignments as new polities emerged and competed for resources and influence in the absence of Teotihuacan's centralised control. This period likely witnessed the establishment of new alliances and trade networks as emerging city-states sought to secure access to essential resources previously controlled by Teotihuacan.

***Middle Epiclassic (AD 650–800/850)***

Following a demographic, political and social realignment, the newly established city-states underwent a phase of consolidation and expansion. The increasing construction activity at sites such as Xochicalco and Cacaxtla reflects the growing power and influence of local elites. This period also saw the development of a distinctive artistic style characterised by the incorporation of iconographic elements from various regions, including different city-states in the Maya area (see Helmke *et al.*, this volume). This artistic expression may have served as a means of communication and legitimisation for the emerged elites, reflecting their connections to broader regional networks and their aspirations for power and prestige. Furthermore, the appearance of militaristic imagery during this phase suggests that these more established and organised societies were actively seeking to expand their territories, control vital resources and assert their dominance within the regional political landscape. By this time, is possible that sites located at valley levels began to move to upper positions, as the case of Ojo de Agua, State of Mexico, that is abandoned and its populations moved to the Cerro Tetepetl, known as Teotenango (Alvarado León and Testard forthcoming; Sugiura 2005b)

***Late Epiclassic (AD 800/850–1000)***

The evidence suggests an escalation in levels of conflict, violence and war. The validity of this assertion is substantiated by the construction of defensive features and the employment of propaganda through the dissemination of fear-mongering strategies, such as the exhibition of skeletal remains. The presence of pottery from the Mezquital and Toluca valleys in western Morelos indicates a persistent interaction with adjacent regions. This phase also marks the beginning of the decline of many city-states, as internal strife and

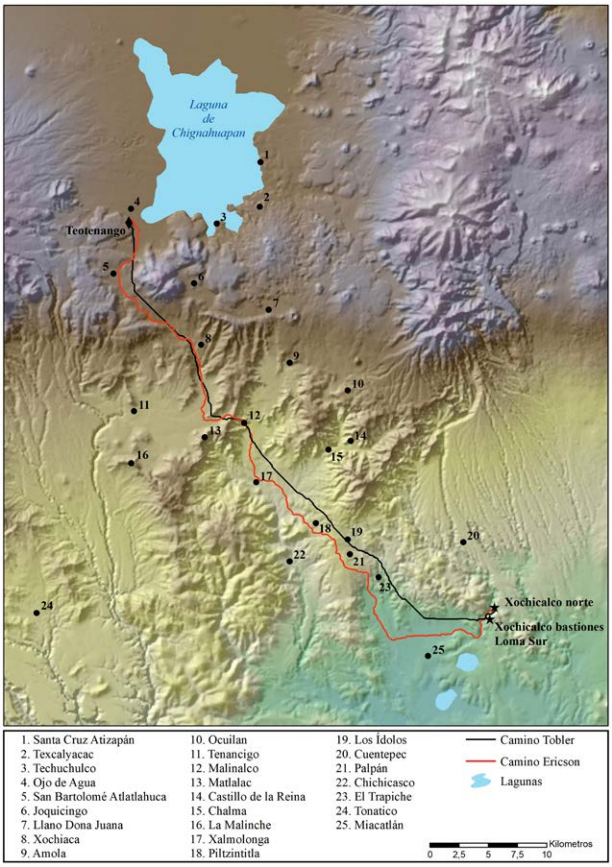


**Figure 1.7:** Least-cost-paths between Teotenango-Xochicalco (map by Rubén Nieto, Claudia Alvarado, Juliette Testard and Jean-Francois Cuenot).

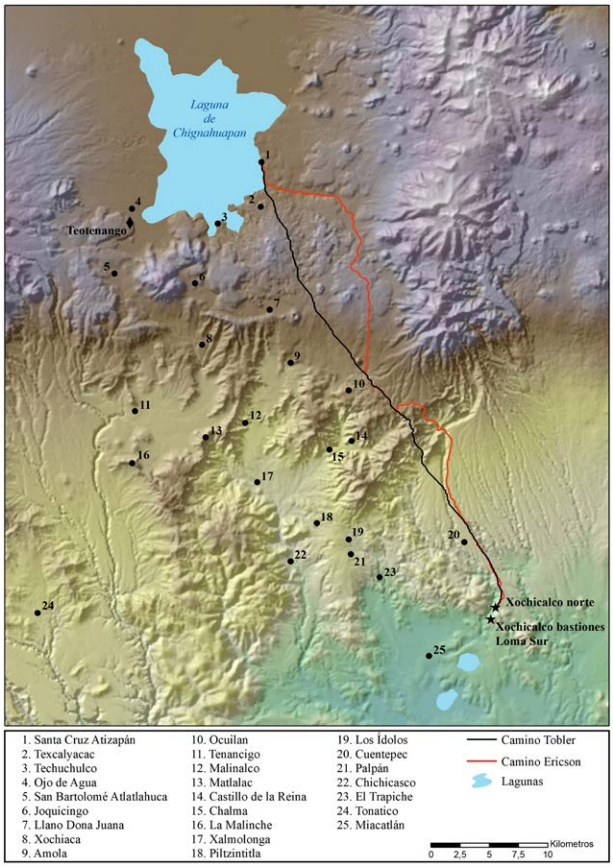


**Figure 1.8:** Least-cost-paths between Santa Cruz Atizapan-Xochicalco (map by Rubén Nieto, Claudia Alvarado, Juliette Testard and Jean-Francois Cuenot).

external pressures led to their eventual abandonment. The Late Epiclassic can be regarded as a transitional phase, which subsequently led to the establishment of the imperialist societies that characterised the Postclassic. As this phase reaches its conclusion and the Early Postclassic commences, Tula Grande experiences a moment of significant growth and development. The establishment of a more substantial military apparatus is a hallmark of that moment, characterised by an increase in the size and complexity of the military infrastructure relative to that observed in earlier periods.

Although this division of the Epiclassic into three phases is a provisional one and represents a work in progress, it does have a twofold objective. On the one hand, it is intended to stimulate discussion; on the other, it is an attempt to provide a basis for the inclusion of a larger number of variables that have not been considered in this study, in order to reinforce, refute or readjust according to the particularities of each region and the extent of the empirical data.

## Final words

As emphasized throughout this chapter, cultural processes are complex and multifaceted. These did not unfold uniformly across regions, nor do they manifest in identical ways or produce the same outcomes. Expanding our focus beyond the major centres and embracing a more inclusive perspective (Solar 2023), will allow to deepen the intricacies of the sociopolitical dynamics, interactions, conflicts, and identities that shaped this period.

While sites like Cacaxtla and Xochicalco provide valuable insights into the Epiclassic phenomenon, they represent only a segment of the broader picture. These prominent city-states should not overshadow the diverse range of trajectories that characterised this era. Santa Cruz Atizapan is a contrasting example. Located in a valley on a lacustrine terrain, the site was established during the Late Classic period and reached its apogee during the Epiclassic, controlling key routes to Morelos and Guerrero (Sugiura and Nieto Hernández

2016: 51–52, this volume). It has been hypothesized that Santa Cruz Atizapan may have functioned as an intermediary in the obsidian trade between Michoacan and the Balsas region of the Tierra Caliente of Morelos and Guerrero (Nieto Hernández *et al*., forthcoming; Sugiura and Nieto Hernández, this volume) (Figures 1.7 and 1.8). Further investigation into this hypothesis, incorporating the analysis of obsidian artefacts and other material culture remains at Santa Cruz Atizapan, has the potential to shed light into the interactions and exchanges that connected disparate regions.

The adoption of an integrated perspective that encompasses the diverse experiences and trajectories of various communities, from the rise and fall of major centres to the dynamics of smaller settlements and rural communities necessitates a multi-faceted research agenda that prioritises:

- Expanding the scope of archaeological investigation: This includes conducting systematic surveys and excavations at a wider range of Epiclassic sites, including those beyond the major centres, to gain a more comprehensive understanding of regional variability of diverse communities.
- Refining chronological frameworks: Developing more precise and robust chronologies for Epiclassic sites, through the expanded application of absolute dating techniques and the integration of archaeological and iconographic data, is essential for understanding the timing and pace of cultural and political transformations.
- Analysing diverse lines of evidence: Integrating archaeological, iconographic, and epigraphic data to reconstruct the complex social, political, and economic interactions.
- Considering the long-term implications: Exploring the connections between the Epiclassic and the subsequent Postclassic is crucial for understanding the lasting legacies of this transformative period and its contributions to the broader trajectory of Mesoamerican societies.

By pursuing these avenues of research, we can move beyond simplistic generalisations and begin to recognise the complexity, diversity, and enduring significance of the Epiclassic in Mesoamerican history.

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**References cited:**

Alvarado León, Claudia I.
2015 El espacio construido y los procesos de cambio en la Acrópolis de Xochicalco. *Cuicuilco*, Vol. 22 (63): 171–205.
2019 Las relaciones sociales del espacio social en los entornos construidos del sitio arqueológico de Xochicalco, Morelos. Doctoral thesis. Universidad Nacional Autónoma de México, Mexico City.

Alvarado León, Claudia I. and Silvia Garza Tarazona
2010 El Carácter Defensivo de Xochicalco (650–1100 d.C.). *Arqueología*, Núm. 43: 136–54.

Alvarado León, Claudia I.
2023 Xochicalco. *Arqueología Mexicana*, Vol. 29 (179): 22–27.

Alvarado León, Claudia I. and Juliette Testard
forthcoming Teotenango y Xochicalco: entornos, asentamientos y patrones constructivos. *Xochicalco y Teotenango (650-1150 d.C.): dos ciudades sobre cerros. Estudio comparativo*, coordinated by Geneviève Lucet and Claudia I. Alvarado León. Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México, Mexico City.

Alvarado León, Claudia I., Juliette Testard, Emiliano Melgar, Guillermo Acosta, Agesandro García Arriola and Silvia Garza Tarazona
in preparation The Xochicalco stone figurines, a tradition of its own: technological and compositional analysis.

Andrews, Bradford and Michael Glascock.
2020 La economía de la lítica tallada y las élites en Mesoamérica prehispánica: el caso de Xochicalco durante el Epiclásico. *Arqueología*, Núm. 61:70–90.

Ángeles, Mauro de
1993–1994 Informe de los materiales óseos humanos. *Informe de materiales arqueológicos del Proyecto Especial Xochicalco 1993–1994*, coordinated by N. González C., pp. 329–358. Unpublished Report. Archivo de la Coordinación Nacional de Arqueología del Instituto Nacional de Antropología e Historia, Mexico City.

Armillas, Pedro
1948 Fortalezas mexicanas. *Cuadernos Americanos*, Vol. 61 (5): 143–168.
1951 Mesoamerican Fortifications. *Antiquity*, Vol. 25 (98): 77–86.

Beekman, Christopher
2010 Recent Research in Western Mexican archaeology. *Journal of Archaeological Research*, Vol. 18: 41–109.

Beekman, Christopher S. and Alexander F. Christensen
2003 Controlling for Doubt and Uncertainty through Multiple Lines of Evidence: A New Look at the

Mesoamerican Nahua Migrations. *Journal of Archaeological Method and Theory*, Vol. 10 (2): 111–164.

Beramendi-Orosco, Laura, Galia González-Hernández, Jaime Urrutia-Fucugauchi, Linda R. Manzanilla, Ana M Soler-Arechalde, Avto Goguitchaishvili and Nick Jarboe

2009 High-resolution chronology for the Mesoamerican urban center of Teotihuacan derived from Bayesian statistics of radiocarbon and archaeological data. *Quaternary Research*, Vol. 71 (2): 99–107.

Beramendi-Orosco, Laura, Galia Gonzalez-Hernandez, Ana M Soler-Arechalde and Linda R. Manzanilla

2019 Ubicando a Xalla en el tiempo–Cronología de 14C y arqueomagnetismo. *El palacio de Xalla en Teotihuacan. Primer acercamiento*, edited by Linda Manzanilla, pp. 307–326. Dirección General de Asuntos del Personal Académico & Instituto de Investigaciones Antropológicas, Universidad Nacional Autónoma de México, Mexico City.

2021 High-Resolution Chronology for the Palatial Complex of Xalla in Teotihuacan, Mexico, Combining Radiocarbon Ages and Archaeomagnetic Dates in a Bayesian Model. *Radiocarbon*, Vol. 63 (4): 73–1084.

Berlo, Janet C.

1989 *Early Writing in Central Mexico:* In Tlilli, In Tlapalli *before A.D. 1000. Mesoamerica after the Decline of Teotihuacan A.D. 700–900*, edited by Richard A. Diehl and Janet C. Berlo, pp. 19–47. Dumbarton Oaks Research Library and Collection, Washington, D.C.

Bonfil, Alicia

2005 Cultura y contexto: El comportamiento de un sitio del Epiclásico en la región de Tula. *Reacomodos demográficos del Clásico al Posclásico en el centro de México*, edited by Linda R. Manzanilla, pp. 227–259. Instituto de Investigaciones Antropológicas, Universidad Nacional Autónoma de México, Mexico City.

Bove, Frederick J. and Sonia Medrano Busto

2003 Teotihuacan, Militarism, and Pacific Guatemala. *The Maya and Teotihuacan: Reinterpreting Early Classic Interaction*, edited by George Braswell, pp.45–79. University of Texas Press, Austin.

Britthenham, Claudia

2015 *The Murals of Cacaxtla. The Power of Painting in Ancient Central Mexico.* University of Texas Press, Austin.

Buckley, Gina M., Sarah Clayton, Sergio Gómez Chávez, Rubén Cabrera Castro, Laurie Eccles, Brendan Culleton and Douglas Kennett

2023 Refining Ceramic Chronology and Epiclassic Reoccupation at La Ventilla, Teotihuacan Using Trapezoidal Bayesian Modeling. *Radiocarbon*, Vol. 65 (3): 1–25. DOI:10.1017/RDC.2023.21

Cabrera, Rubén, George W. Cowgill, Saburo Sugiyama and Carlos Serrano

1989 El Proyecto Templo de Quetzalcoatl. *Arqueología*, Núm. 5: 51–79.

Cervantes Rosado, Juan and Patricia Fournier

1994 Regionalización y consumo: una aproximación a los complejos cerámicos epiclásicos del Valle del Mezquital, México. *Boletín de Antropología Americana*, Núm. 29: 105–130.

Clayton, Sarah

2016 After Teotihuacan: A View of Collapse and Reorganization from the Southern Basin of Mexico. *American Anthropologist*, Vol. 118 (1): 104–120.

2020 The collapse of Teotihuacan and the regeneration of Epiclassic societies: a Bayesian approach. *Journal of Anthropological Archaeology*, Vol. 59: 101223. DOI: 10.1016/j.jaa.2020.101203

Cobean, Robert

1990 *La cerámica de Tula, Hidalgo*. Colección Científica 215. Instituto Nacional de Antropología e Historia, Mexico City.

Cobean, Robert, Dan Healan and Ma. Elena Suárez

2021 Recent Investigations at Tula Chico, Tula, Hidalgo. *Ancient Mesoamerica*, Vol. 32 (1): 41–55. DOI: 10.1017/S0956536120000139

Cohodas, Marvin

1989 The Epiclassic Problem: A Review and Alternative Model. *Mesoamerica after the Decline of Teotihuacan A.D. 700–900*, edited by Richard A. Diehl and Janet C. Berlo, pp. 219–240. Dumbarton Oaks Research Library and Collection, Washington, D.C.

Cowgill, George

2000 State and Society at Teotihuacan, Mexico. *The Ancient Civilizations of Mesoamerica*, edited by Michael E. Smith and Marilyn A. Masson, pp. 300–323. Blackwell, Oxford.

2013 Possible migrations and shifting identities in the central Mexican Epiclassic. *Ancient Mesoamerica*, Vol. 24 (1): 131–149.

2015a The Teotihuacan Mapping Project: Experiences with Data Files, Big Questions, and Some Research Priorities for Teotihuacan. *Ancient Mesoamerica*, Vol. 26 (1): 153–161.

2015b *Ancient Teotihuacan. Early Urbanism in Central Mexico*. Cambridge University Press, New York.

Crider, Destiny

2011 Epiclassic and Early Postclassic Interaction in Central Mexico as Evidenced by Decorated Pottery. PhD dissertation. Arizona State University, Tucson.

2013 Shifting Alliances: Epiclassic and Early Postclassic Interactions at Cerro Portezuelo. *Ancient Mesoamerica*, Vol. 24 (1): 107–30.

2023 Advances in the Study of Archaeological Ceramics of the Epiclassic and Early Postclassic Basin of Mexico. *The Legacies of "The Basin of Mexico"*, edited by Carlos E. Cordova and Christopher T. Morehart, pp. 285–315. University Press of Colorado, Denver.

Crider, Destiny, Debora L. Nichols, Hector Neff and Michael Glascock

2007 In the Aftermath of Teotihuacan: Epiclassic Pottery Production and Distribution in the Teotihuacan

Valley, Mexico. *Latin American Antiquity*, Vol. 18 (2): 123–143.

Cyphers, Ann and Kenneth Hirth

2000 Ceramics of Western Morelos: The Cañada through Gobernador phases at Xochicalco. *Ancient Urbanism at Xochicalco*, edited by Kenneth Hirth, pp. 102–135. University of Utah Press, Salt Lake City.

Dahlin, Bruce

2000 The Barricade and Abandonment of Chunchucmil: Implications for Northern Maya Warfare. *Latin American Antiquity*, Vol. 11 (3): 283–98.

Diehl, Richard

1989 A Shadow of Its Former Self: Teotihuacan during the Coyotlatelco Period. *Mesoamerica after the Decline of Teotihuacan A.D. 700–900*, edited by Richard A. Diehl and Janet C. Berlo, pp. 9–18. Dumbarton Oaks Research Library and Collection, Washington, D.C.

Diehl, Richard and Janet C. Berlo (eds)

1989 Introduction. *Mesoamerica after the Decline of Teotihuacan A.D. 700–900*, pp. 1–8. Dumbarton Oaks Research Library and Collection, Washington, D.C.

Dumond, Donald and Florencia Müller

1972 Classic to Postclassic in Highland Central Mexico. *Science*, Vol. 175 (4027): 1208–1215.

Elam, Michael J., Michael D. Glascock, Hector Neff

2008 Obsidian Source Analysis. *Un lugar de jade: Sociedad y economía en el Antiguo Chalco*, edited by Mary G. Hodge, pp. 259–268. Instituto Nacional de Antropología e Historia, Mexico City

Epstein, Gil S. and Odelia Heizler

2015 Ethnic identity: a theoretical framework. *IZA Journal of Migration*, Vol. 4 (9).

Feinman, Gary M., Linda Nicholas and Mark Golitko

2022 Macroscale Shifts in Obsidian Procurement Networks Across Prehispanic Mesoamerica. *Obsidian Across the Americas. Compositional Studies Conducted in the Elemental Analysis Facility at the Field Museum of Natural History*, edited by Gary M. Feinman and Danielle J. Riebe, pp. 98–123. Archaeopress, Oxford.

Fenoglio Limón, Fiorella, Enah Fonseca Ibarra and Israel Hinojosa Baliño

2008 El Epiclásico en el Marqués, Querétaro. Un grano de arena. *Tiempo y Región. Estudios Históricos y Sociales Vol. II,* coordinated by Carlos Viramontes, pp. 57–76. Instituto Nacional de Antropología e Historia & Universidad Autónoma de Querétaro & Archivo Histórico Municipal de Querétaro, Mexico City.

Foncerrada, Marta

1976 La pintura mural de Cacaxtla, Tlaxcala. *Anales del Instituto de Investigaciones Estéticas*, Vol. 13 (46): 5–20.

Fournier, Patricia and Victor H. Bolaños

2007 The Epiclassic in the Tula Region Beyond Tula Chico. *Twin Tollans*, edited by Jeff F. Kowalski and Cynthia Kristan-Graham, pp. 481–529. Dumbarton Oaks Research Library and Collection, Washington, D.C.

Fournier, Patricia and Rocío Vargas Sanders

2002 En busca de los "dueños del silencio": cosmovisión y ADN Antiguo de las poblaciones otomíes epiclásicas de la región de Tula. *Estudios de Cultura Otopame*, Núm. 3: 37–75.

Fournier G., Patricia, Juan Cervantes Rosado and M. James Blackman

2006 Mito y Realidad del Estilo Epiclásico Coyotlatelco. *El fenómeno Coyotlatelco en el centro de México: tiempo, espacio y significado*, edited by Laura Solar Valverde, pp. 55–82. Consejo Nacional para la Cultura y las Artes & Instituto Nacional de Antropología e Historia & Coordinación Nacional de Arqueología, Mexico City.

García Cook, Ángel

1996a Transición del Clásico al Posclásico en Tlaxcala: Fase Tenanyecac. *Antología de Tlaxcala, Vol. II*, edited by Ángel García and Beatriz L. Merino, pp. 90–124. Instituto Nacional de Antropología e Historia & Gobierno del Estado de Tlaxcala, Tlaxcala.

1996b Una secuencia cultural para Tlaxcala. *Antología de Tlaxcala, Vol. II*, edited by Ángel García and Beatriz L. Merino, pp. 57–89. Instituto Nacional de Antropología e Historia & Gobierno del Estado de Tlaxcala, Tlaxcala.

García Moll, Roberto

1995 *Teotenango*. Estado de México. Consejo Nacional para la Cultura y las Artes & Instituto Nacional de Antropología e Historia, Mexico City.

Garza G., Isabel

1994 Evidencias de sacrificio humano en Xochicalco, Morelos. *Memoria III Congreso Interno del Centro INAH Morelos*, pp. 59–64. Centro INAH Morelos, Cuernavaca.

Garza Tarazona, Silvia and Norberto González Crespo

1995 Xochicalco. *La Acrópolis de Xochicalco*, edited by J. Wimer, pp. 89–144. Instituto de Cultura de Morelos, Cuernavaca.

2006 Cerámica de Xochicalco. *La producción alfarera en el México antiguo III*, edited by Beatriz L. Merino and Ángel García, pp. 125–159. Colección Científica 502. Instituto Nacional de Antropología e Historia, Mexico City.

Garza, Silvia, Carmen Pijoan, Josefina Mansilla and Norberto González C

2003 Pórtico I4 de Xochicalco, Morelos, México. Localización Arqueológica de los Materiales Esqueléticos. *Antropología y Biodiversidad*, Vol. 1, edited by María P. Aluja, Asunción Lagosa and Ramón Nogués, pp. 191–198. Bellaterra, Barcelona.

Gaxiola González, Margarita

1999 Huapalcalco y las tradiciones alfareras del Epiclásico. *Arqueología*, Núm. 21: 45–72.

Goguitchaichvili, Avto, Verónica Ortega, Gloria Torres, Jorge Archer, Ruben Cejudo, Vadim Kravchinsky, Karen Arreola Romero and Juan Morales

2022 Refining the absolute chronology of Teotihuacan (Mesoamerica): New archaeomagnetic datings of fire footprints. *Journal of Archaeological Science: Reports*, Vol. 42: 103363

González Crespo, Norberto, Silvia Garza T., Hortensia de Vega, Pablo Mayer Guala and Giselle Canto

1995 Archaeological Investigations at Xochicalco, Morelos 1984–1986. *Ancient Mesoamerica*, Num. 6: 223–236.

González Crespo, Norberto, Silvia Garza, Beatriz Palavicini and Claudia Alvarado León

2008 La Cronología de Xochicalco. *Arqueología*, Núm. 37: 122–139.

González Crespo, Norberto, Silvia Garza, Claudia Alvarado and Beatriz Palavicini

n.d. *Xochicalco en la secuencia Mesoamericana*. Manuscript in possession of the author.

González M., Pedro, Demetrio Mendoza A., Carmen López R., Ángel Ramírez L., Peter Schaaf, Martín A. Mondragón and Patricia Aguirre M.

2002 Thermoluminescence Dating of Ceramics from Teotenango - Mexico. *Revista de Arqueología Americana*, Núm. 21: 215–225.

Hassig, Ross

1992 *War and Society in Ancient Mesoamerica*. University of California Press, Berkeley.

Headrick, Annabeth

2007 *The Teotihuacan trinity: the sociopolitical structure of an ancient Mesoamerican city*. University of Texas Press, Austin.

Healan, Dan M., Robert H. Cobean and Robert T. Bowsher

2021 Revised Chronology and Settlement History of Tula and the Tula Region. *Ancient Mesoamerica*, Vol. 32 (1): 165–186.

Heath-Smith, Cynthia

2000 Analysis of Faunal Material Recovered from Xochicalco. *Ancient Urbanism at Xochicalco*, edited by Kenneth Hirth, pp. 184–192. University of Utah Press, Salt Lake City.

Helmke, Christophe

2020 Tactics, Trophies, and Titles: A Comparative Perspective on Ancient Maya Raiding. *Ancient Mesoamerica*, Vol. 31 (1): 29–46.

Helmke, Christophe and Jesper Nielsen

2011 *The Writing System of Cacaxtla, Tlaxcala, Mexico*. Ancient America, Special Publication No. 2. Boundary End Archaeology Research Center, Barnardsville.

2013a La iconografía de Cacaxtla bajo la influencia maya: Identidad, procedencia y datación. *La Pintura Mural Prehispánica en México V, Cacaxtla, Tomo II,* edited by María Teresa Uriarte Castañeda and Fernanda Salazar Gil, pp. 363-381. Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México, Mexico City.

2013b La escritura jeroglífica de Cacaxtla. *La Pintura Mural Prehispánica en México V, Cacaxtla, Tomo II,* edited by María Teresa Uriarte Castañeda and Fernanda Salazar Gil, pp. 383–425. Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México, Mexico City.

2014 Identifying the Provenance and Dating of Maya Influences at the Cacaxtla Court. *Palaces and Courtly Culture in Ancient Mesoamerica*, edited by Julie Nehammer Knub, Christophe Helmke and Jesper Nielsen, pp. 17–35. Pre-Columbian Archaeology Vol. 4. Archaeopress, Oxford.

2023a The Writing System of Epiclassic Central Mexico. *Western Mesoamerican Calendars and Writing Systems*, edited by Mikkel Bøg Clemmensen and Christophe Helmke, pp. 49–74. Archaeopress Archaeology, Oxford. DOI: 10.32028/9781803274850.

2023b La escritura jeroglífica de Xochicalco. *Arqueología Mexicana*, Vol. 29 (179): 46–53.

Helmke, Christophe, Jesper Nielsen and Ángel Iván Rivera Guzmán

2017 Tras las huellas de la tradición cartográfica en el altiplano central de México. *Estudios de cultura náhuatl*, Vol. 54: 79–133.

Hers, Marie-Areti

1989 *Los toltecas en tierras chichimecas*. Universidad Nacional Autónoma de México, Mexico City.

Hicks, Frederic and Henry B. Nicholson

1964 The Transition from Classic to Postclassic at Cerro Portezuelo, Valley of Mexico. *XXXV Congreso Internacional de Americanistas, México 1962*, Vol. 1: 493–505. Libros de México S.A., Mexico City.

Hirth, Kenneth

1983 *Proyecto Cartográfico Xochicalco*. Unpublished Report. Archivo de la Coordinación Nacional de Arqueología del Instituto Nacional de Antropología e Historia, Mexico City.

1989 Militarism and Social Organization at Xochicalco, Morelos. *Mesoamerica after the Decline of Teotihuacan A.D. 700–900*, edited by Richard A. Diehl and Janet C. Berlo, pp. 69–81. Dumbarton Oaks Research Library and Collection, Washington, D.C.

1995 Urbanism, Militarism, and Architectural Design. *Ancient Mesoamerica*, Vol. 6 (2): 237–50.

2000 *Ancient Urbanism at Xochicalco. The Evolution and Organization of a Pre-Hispanic Society*. University of Utah Press, Salt Lake City.

2006 *Obsidian Craft Production in Ancient Central Mexico. Archaeological Research at Xochicalco*. University of Utah Press, Salt Lake City.

Inomata, Takeshi, Daniela Triadan, Jessica MacLellan, Melissa Burham, Kazuo Aoyama, Juan Manuel Palomo, Hitoshi Yonenobu, Flory Pinzón and Hiroo Nasu.

2017 High-Precision Radiocarbon Dating of Political Collapse and Dynastic Origins at the Maya Site of Ceibal, Guatemala. *Proceedings of the National Academy of Sciences*, Vol. 114 (6): 1293–1298.

Jaimes, Gustavo, Yoko Sugiura, José Guadalupe Pérez, Guillermo Acosta and Rosa Ángeles Nava
2021 Bienes de otras regiones introducidos al valle de Toluca: la cerámica foránea de Santa Cruz Atizapán vista a través de análisis por activación de neutrones (AAN), fluorescencia de rayos x portátil (FRXp) y difracción de rayos X (DRX). *El Estudio de la cerámica cotidiana del Valle de Toluca desde una Perspectiva arqueométrica*, coordinated by Yoko Sugiura, Gustavo Jaimes, María del C. Pérez and Rubén Nieto, pp. 52–66. El Colegio Mexiquense A.C., Zinacantepec.

Jennings, Justin
2016 *Killing civilization*. University of New Mexico Press, Albuquerque.

Jiménez M., Wigberto
1959 Síntesis de la Historia Pretolteca de Mesoamérica. *Esplendor del México Antiguo vol. 2*, coordinated by Carmen Cook and Raúl Noriega, pp. 1019–1108. Centro de Investigaciones Antropológicas de México, Editorial del Valle de México, Mexico City.

Kabata, Shigeru
2010 La Dinámica Regional entre el Valle de Toluca y las Áreas Circundantes: Intercambio antes y después de la caida de Teotihuacan. Doctoral thesis. Universidad Nacional Autónoma de México, Mexico City.

Kelley, John C.
1976 Alta Vista: Outpost of Mesoamerican Empire on the Tropic of Cancer. *Las Fronteras de Mesoamerica, XVI Mesa Redonda de la Sociedad Mexicana de Antropología*, pp. 21–40. Mexico City.

Kubler, George
1980 Eclecticism at Cacaxtla. *Third Palenque Round Table 1978*, edited by Merle. G. Robertson, pp. 163–226. University of Texas Press, Austin.

Lazcano Arce, Jesús Carlos and Marianne Sallum
2015 Patrón de Asentamiento de los Grupos que Habitaron el Valle Puebla-Tlaxcala, México durante el Periodo Epiclasico (650-950 AD). Fase de recorrido de superficie. *Revista do Museu de Arqueologia e Etnologia*, Num. 21: 45–60.

Litvak King, Jaime
1970 Xochicalco en la caída del Clásico. Una hipótesis. *Anales de Antropología*, Vol. 7: 131–144.
1971 Investigaciones en el Valle de Xochicalco 1569–1970. *Anales de Antropología*, Vol. 8: 101–24.

López Austin, Alfredo and Leonardo López Luján
1996 *El pasado indígena*. El Colegio de México & Fondo de Cultura Económica, Mexico City.
1999 *Mito y realidad de Zuyuá: Serpiente Emplumada y las transformaciones mesoamericanas del clásico al posclásico*. El Colegio de México & Fondo de Cultura Económica, Mexico City.

López Luján, Leonardo
1995 El Epiclásico: el caso del Valle de Morelos. *Historia Antigua de México. Volumen II. El horizonte Clásico*, edited by Linda Manzanilla and Leonardo López, pp. 261–293. Universidad Nacional Autónoma de México & Instituto Nacional de Antropología e Historia, Mexico City.

López Pérez, Claudia and Claudia Nicolás Careta
2023 La cerámica epiclásica de los túneles. *El Inframundo de Teotihuacán: ocupaciones posteotihuacanas en los túneles al este de la Pirámide del Sol, Tomo II*, edited by Linda Manzanilla, pp.1023–1240. Instituto de Investigaciones Antropológicas, Dirección General de Asuntos del Personal Académico, Universidad Nacional Autónoma de México, Mexico City

Manzanilla, Linda
2003 The Abandonment of Teotihuacan. *The archaeology of settlement abandonment in Middle America*, edited by Takeshi Inomata and Ronald Webb, pp. 90–101. University of Utah Press, Salt Lake City.
2005 *Reacomodos demográficos del Clásico al Posclásico en el centro de México*. Instituto de Investigaciones Antropológicas, Universidad Nacional Autónoma de México, Mexico City.

Manzanilla, Linda, Claudia López and AnnCorinne Freter
1996 Dating results from excavations in quarry tunnels behind the pyramid of the Sun at Teotihuacan. *Ancient Mesoamerica*, Vol. 7 (2): 245–266.

Marcus, Joyce
1989 From Centralized Systems to City-States: Possible Models for the Epiclassic. *Mesoamerica after the Decline of Teotihuacan A.D. 700–900*, edited by Richard A. Diehl and Janet C. Berlo, pp. 201–208. Dumbarton Oaks Research Library and Collection, Washington, D.C.

Martin, Simon
2013 El Templo Rojo y los Mayas: arte, mitología y contactos culturales en las pinturas de Cacaxtla. *La Pintura Mural Prehispánica en México V, Cacaxtla, Tomo III,* edited by María Teresa Uriarte Castañeda and Fernanda Salazar Gil, pp. 169–197. Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México, Mexico City.

Melgar, Emiliano, Reyna Solís, Hervé Monterrosa, M. Jesús Puy and J. Carlos Meléndez
2021 Presencia de lapidaria de estilo maya fuera de la región maya. *Revista Española de Antropología Americana*, Vol. 51: 11–32. DOI: 10.5209/reaa.70773

Millon, René
1981 Teotihuacan: City, State, and Civilization. *Supplement to the Handbook of Middle American Indians, Volume 1*, edited by Victoria Reifler and Jeremy Sabloff, pp. 198–243. University of Texas Press, Austin.
1988 The Last Years of Teotihuacan Dominance. *The Collapse of Ancient States and Civilizations*, edited by Norman Yoffee and George. L. Cowgill, pp. 102–164. University of Arizona Press, Tucson.

Moore, Jerry
1996 *Architecture and power in the Ancient Andes. The archaeology of public buildings*. Cambridge University Press, Cambridge.

Morehart, Christopher T., Angela Huster, Abigail Meza-Peñaloza and Sofía I. Pacheco-Forés
2023 Pax Tolteca? Collapse, Conflict, and the Formation of the Tula State. *The Legacies of the Basin of Mexico*, edited by Carlos E. Cordova and Christopher T. Morehart, pp. 316–347. University Press of Colorado, Denver.

Morehart, Christopher T., Abigail Meza, Carlos Serrano, Emily McClung and Emilio Ibarra.
2012 Human Sacrifice During the Epiclassic Period in the Northern Basin of Mexico. *Latin American Antiquity*, Vol. 23 (4): 426–48.

Moreno, Luz María, Lino Espinoza and Pedro Ortega
2005 Cacaxtla: mural glifo conquista. *La Pintura Mural Prehispánica en México. Boletín informativo*, Núm. 22: 54–58.

Nagao, Debra
1989 Public Proclamation in the Art of Cacaxtla and Xochicalco. *Mesoamerica after the Decline of Teotihuacan A.D. 700–900*, edited by Richard A. Diehl and Janet C. Berlo, pp. 83–105. Dumbarton Oaks Research Library and Collection, Washington, D.C.
2014 An Interconnected World? Evidence of Interaction in the Arts of Epiclassic Cacaxtla and Xochicalco, Mexico. PhD dissertation. Columbia University, New York

Nelson, Ben
2003 A Place of Continue Importance. The Abandonment of Epiclassic La Quemada. *The Archaeology of Settlement Abandonment in Middle America*, edited by Takeshi Inomata and Ronald W. Webb, pp. 77–89. University of Utah Press, Salt Lake City.

Nelson, Ben and Debra L. Martin
2015 Symbolic bones and interethnic violence in a frontier zone, northwest Mexico, ca 500–900 C.E. *Proceedings of the National Academy of Sciences*, Vol. 112 (30): 9196–9201.

Nelson, Ben, Andrew Darling and David Kice
1992 Mortuary Practices and the Social Order at La Quemada, Zacatecas, Mexico. *Latin American Antiquity*, Vol. 3 (4): 298–315.

Nicholas, Linda, Gary M. Feinman and Mark Golitko
2022 Changing Patterns of Obsidian Procurement in Highland Oaxaca, Mexico. *Obsidian Across the Americas. Compositional Studies Conducted in the Elemental Analysis Facility at the Field Museum of Natural History*, edited by Gary M. Feinman and Danielle J. Riebe, pp. 58–75. Archaeopress, London.

Nichols, Deborah
2015 Teotihuacan. *Journal of Archaeological Research*, Vol. 24 (1): 1–74.
2020 City, State, and Hinterlands: Teotihuacan and Central Mexico. *Teotihuacan: The World beyond the City*, edited by Kenneth Hirth, David Carballo and Bárbara Arroyo, pp. 227–275. Dumbarton Oaks Research Library and Collection, Washington, D.C.

Nielsen, Jesper
2019 Hearts and Torches: Possible Teotihuacan Military Entradas in North-Central and Western Mesoamerica. *Seeking Conflict in Mesoamerica: Operational, Cognitive, and Experiential Approaches*, edited by Shawn G. Morton and Meaghan Peramauki-Brown, pp. 145–165. University Press of Colorado, Boulder.

Nielsen, Jesper and Christophe Helmke
2015 Bellicose Relations between Cacaxtla and Xochicalco in the Epiclassic Period. Paper presented at *Reconsidering the "Epic" in the Epiclassic Period of Mesoamerica*. Society for American Archaeology 80th Annual Meeting, San Francisco, April 16th.
2023 La Pirámide de las Serpientes Emplumadas. Nuevos acercamientos. *Arqueología Mexicana*, Vol. 29 (179): 34–39.

Nielsen, Jesper, Claudia I. Alvarado León and Christophe Helmke
2021 The Stuccoed and Painted Benches of Xochicalco, Morelos, Mexico. *Ancient Mesoamerica*, Vol. 32 (2): 249–268. DOI: 10.1017/S0956536120000012.

Nieto Hernández, Rubén, Jean-François Cuenot, Claudia I. Alvarado León and Juliette Testard
forthcoming Comunicación interregional entre Xochicalco y Teotenango: aportaciones desde la arqueología y el SIG. *Xochicalco y Teotenango (650-1150 d.C.): dos ciudades sobre cerros. Estudio comparativo*, coordinated by Geneviève Lucet and Claudia I. Alvarado León. Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México, Mexico City.

Noguera, Eduardo
1945 Exploraciones en Xochicalco. *Cuadernos Americanos*, Vol. 19 (1): 119–57.

Pacheco-Forés, Sofía, Christopher T. Morehart, Jane E. Buikstra, Gwyneth W. Gordon and Kelly K. Knudson
2021 Migration, violence, and the "other": A biogeochemical approach to identity-based violence in the Epiclassic Basin of Mexico. *Journal of Anthropological Archaeology*, Vol. 61: 101263. DOI: 10.1016/j.jaa.2020.101263

Pacheco-Forés, Sofía, Christopher M. Stojanowski and Christopher T. Morehart
2023 Migration and biological continuity in central Mexico during the Classic-Epiclassic transition. *American Journal of Biological Anthropology*, Vol. 182 (2): 264–278. DOI: 10.1002/ajpa.24819

Palincaş, Nona
2017 Radiocarbon dating in archaeology: interdisciplinary aspects and consequences (an overview). *AIP Conference Proceedings*, Num. 1852: 060006-1–060006-11.

Parsons, Lee A.
1969 *Bilbao, Guatemala: an archaeological study of the Pacific coast Cotzumalhuapa region 2.* Milwaukee Public Museum, Publications in Anthropology 12, Milwaukee.
Parsons, Jeffrey
1989 Arqueología regional en la Cuenca de México: una estrategia para la investigación futura. *Anales de Antropología*, Vol. 26 (1):157-257.
Parsons, Jeffrey and Yoko Sugiura
2012 Teotihuacan and the Epiclassic in Central Mexico. *The Oxford Handbook of Mesoamerican Archaeology*, edited by Deborah L. Nichols and Christopher A. Pool, pp. 309–323. Oxford University Press, New York.
Parsons, Jeffrey, Elizabeth Brumfiel, Mary Parsons and David Wilson
1982 *Prehispanic Settlement Patterns in the Southern Valley of Mexico: The Chalco-Xochimilco Region*. Museum of Anthropology, University of Michigan, Ann Arbor.
Pasztory, Esther (ed)
1978 Historical Synthesis of the Middle Classic Period. *Middle Classic Mesoamerica: A.D. 400–700,* pp. 3–22. Columbia University Press, New York.
Peñafiel, Antonio
1890 *Monumentos del arte mexicano antiguo*, Vol. I. A. Asher & Co., Berlin.
Pereira, Grégory, Gérald Migeon and Dominique Michelet
2005 Transformaciones demográficas y culturales en el centro-norte de México en vísperas del Posclásico: Los sitios del Cerro Barajas (suroeste de Guanajuato). *Reacomodos demográficos del Clásico al Posclásico en el centro de México*, edited by Linda Manzanilla, pp. 123–136. Instituto de Investigaciones Antropológicas, Universidad Nacional Autónoma de México, Mexico City.
Pijoan, Carmen and Josefina Mansilla
1990 Evidencias rituales en restos humanos del norte de Mesoamérica. *Mesoamérica y Norte de México. Siglo IX–XII*, edited by F. Sodi, pp. 467–478. Museo Nacional de Antropología, Instituto Nacional de Antropología e Historia, Mexico City.
Pijoan, Carmen, Josefina Mansilla and Silvia Garza
2003 Pórtico I4 de Xochicalco, Morelos, México. Análisis tafonómico cultural de los restos óseos. *Antropología y Biodiversidad, Vol. 1*, edited by María P. Aluja, Asunción Lagosa and Ramón Nogués, pp. 414–420. Bellaterra, Barcelona.
Piña Chán, Román
1967 Un complejo Coyotlatelco en Coyoacán, México, D. F. *Anales de Antropología*, Vol. 4 (1): 141–160.
1972 Teotenango. *Primer Informe de Exploraciones Arqueológicas. Enero a septiembre de 1971*. Dirección de Turismo, Estado de México, State of Mexico.
1975 *Teotenango. El antiguo lugar de la muralla*. Dirección de Turismo, Gobierno del Estado de México, State of Mexico.
Rattray, Evelyn C.
1991 Fechamiento por radiocarbono en Teotihuacan. *Arqueología*, Núm. 6: 3–18.
2001 *Teotihuacan: cerámica, cronología y tendencias culturales*. Instituto Nacional de Antropología e Historia & University of Pittsburgh, Mexico City.
Reimer, Paula J., William Austin, Edouard Bard, Alex Bayliss, Paul Blackwell, Christopher Bronk Ramsey, Martin Butzin, Hai Cheng, Lawrence Edwards and Michael Friedrichet
2020 The IntCal20 northern hemisphere radiocarbon agecalibration curve (0–55 cal kBP). *Radiocarbon*, Vol. 62 (4): 725–757. DOI: 10.1017/RDC.2020.41
Reyes V., Virgilio
1975 Arquitectura y Poblamiento. T*eotenango. El antiguo lugar de la muralla, Tomo I*, coordinated by Román Piña, pp.118–152. Dirección de Turismo, Gobierno del Estado de México, State of Mexico.
Salomón Salazar, Ma. Teresa
2006 Cerámicas del Epiclásico en el Valle de Puebla-Tlaxcala: reflexiones desde El Cerro Zapotecas. *El fenómeno Coyotlatelco en el centro de México: tiempo, espacio y significado*, edited by Laura Solar Valverde, pp. 345–359. Consejo Nacional para la Cultura y las Artes & Instituto Nacional de Antropología e Historia & Coordinación Nacional de Arqueología, Mexico City.
2010 Nuevos datos para entender la transición del Clásico al Posclásico en el Cerro Zapotecas. *Arqueología*, Núm. 43: 99–114.
Salomón, Ma. Teresa and Silvia Garza Tarazona
1994 Accesos y pórticos de Xochicalco. *Memoria III Congreso Interno del Centro INAH Morelos*, pp. 45–50. Centro INAH Morelos, Cuernavaca.
Sánchez, Jesús E.
2013 *Para comprender el Epiclásico en el centro de México. Problemas y propuestas teórico-metodológicos*. Instituto Nacional de Antropología e Historia, Mexico City.
Sanders, William T.
2006 Late Xolalpan-Metepec/Oxtotipac-Coyotlatelco; Ethnic succession or changing patterns of political economy: A reevaluation. *El fenómeno Coyotlatelco en el centro de México: tiempo, espacio y significado,* edited by Laura Solar Valverde, pp. 183–200. Consejo Nacional para la Cultura y las Artes & Instituto Nacional de Antropología e Historia & Coordinación Nacional de Arqueología, Mexico City.
Sanders, William T., Jeffrey Parsons and Robert Santley
1979 *Basin of Mexico: Ecological Processes in the Evolution of a Civilization*. Academic Press, New York.
Schortman, Edward, Patricia Urban and Marne Ausec
2001 Politics with Style: Identity Formation in Prehispanic Southeastern Mesoamerica. *American Anthropologist*, Vol. 103 (2): 3.

Serra Puche, Mari Carmen and Jesús Carlos Lazcano Arce
2005 El Epiclásico en el valle Puebla-Tlaxcala y los sitios de Cacaxtla-Xochitécatl-Nativitas. *Reacomodos demográficos del Clásico al Posclásico en el centro de México*, edited by Linda Manzanilla, pp. 287–301. Instituto de Investigaciones Antropológicas, Universidad Nacional Autónoma de México, Mexico City.
2011 *Vida Cotidiana Xochitécatl-Cacaxtla*. Instituto de Investigaciones Antropológicas, Universidad Nacional Autónoma de México, Mexico City.
Smith, Virginia
2000 The Iconography of Power at Xochicalco. The Pyramid of the Plumed Serpent. *The Xochicalco Mapping Project, Vol. 2*, edited by Kenneth Hirth, pp. 57–82. University of Utah Press, Salt Lake City.
Solar Valverde, Laura
2002 Interacción Interregional en Mesoamérica. Una Aproximación a la Dinámica del Epiclásico. Doctoral thesis. Escuela Nacional de Antropología e Historia, Mexico City.
2003 *Dinámica Cultural del Valle del Mezquital Durante el Epiclásico*. FAMSI. http://www.famsi.org/reports/00074es/00074esSolarValverde01.pdf
2006 El Fenómeno Coyotlatelco en el Centro de México: Consideraciones en torno a un debate académico. *El fenómeno Coyotlatelco en el centro de México: tiempo, espacio y significado,* edited by Laura Solar Valverde, pp. 1–29. Consejo Nacional para la Cultura y las Artes & Instituto Nacional de Antropología e Historia & Coordinación Nacional de Arqueología, Mexico City.
2023 The Epiclassic and Early Postclassic Mesoamerican Weave: Multiregional Warp, Ideological Weft. *When East Meets West. Chichen ltza, Tula, and the postclassic Mesoamerican world, Volume II*, BAR S3134, edited by Travis W. Stanton, Karl A. Taube, Jeremy D. Coltman and Nelda I. Marengo, pp. 793–826. BAR Publishing, Oxford.
Soler-Arechalde, Ana, Cecilia Caballero-Miranda, Ma. Luisa Osete-López, Verónica López-Delgado, Avto Goguitchaichvili, Alan Barrera-Huerta and Jaime Urrutia-Fucugauchi
2019 An updated catalog of pre-hispanic archaeomagnetic data for north and central Mesoamerica: Implications for the regional paleosecular variation reference curve. *Boletín de la Sociedad Geológica Mexicana*, Vol. 71 (2): 497–518.
Stanton, Travis W., Karl A. Taube and Jeremy D. Coltman
2023 Social Mobility in the City of the Sun: The Legacy of Chichén Itzá at the Turn of the Postclassic Period. *When East Meets West. Chichen ltza, Tula, and the postclassic Mesoamerican world, Volume I*, BAR S3134, edited by Travis W. Stanton, Karl A. Taube, Jeremy D. Coltman and Nelda I. Marengo, pp. 3–30. BAR Publishing, Oxford.
Stark, Barbara L. and John K. Chance
2008 Diachronic and Multidisciplinary Perspectives on Mesoamerica Ethnicity. *Ethnic Identity in Nahua Mesoamerica*, edited by Frances F. Berdan, John K. Chance, Alan R. Sandstrom, Barbara Stark, James Taggart and Emily Umberger, pp. 1–37. University of Utah Press, Salt Lake City.
Sugiura, Yoko
1990 El Clásico y el Valle de Toluca. Estudio de Patrón de Asentamiento. Doctoral thesis. Universidad Nacional Autónoma de México, Mexico City.
1996 El Epiclásico y el problema del Coyotlatelco vistos desde el valle de Toluca. *Arqueología Mesoamericana. Homenaje a W. T. Sanders* vol I, edited by Alba G. Mastache, Jeffrey Parsons, Robert S. Santley and Maricarmen Serra, pp. 233–255. Instituto Nacional de Antropología e Historia & Arqueología Mexicana, Mexico City.
2001 La zona del Altiplano central en el Epiclásico. *Historia Antigua de México. El horizonte Clásico*, Vol. II, edited by Linda Manzanilla and Leonardo López, pp. 347–390. Porrúa, Mexico City.
2005a Reacomodo demográfico y conformación multiétnica en el valle de Toluca durante el Posclásico: una propuesta desde la arqueología. *Reacomodos demográficos del Clásico al Posclásico en el centro de México*, edited by Linda Manzanilla, pp. 175–202. Instituto de Investigaciones Antropológicas, Universidad Nacional Autónoma de México, Mexico City.
2005b *Y atrás quedó la Ciudad de los Dioses. Historia de los asentamientos en el valle de Toluca*. Instituto de Investigaciones Antropológicas, Universidad Nacional Autónoma de México, Mexico City.
2006 ¿Cambio gradual o discontinuidad en la cerámica? Discusión acerca del paso del Clásico al Epiclásico, visto desde el valle de Toluca. *El fenómeno Coyotlatelco en el centro de México: tiempo, espacio y significado*, edited by Laura Solar Valverde, pp. 127–162. Consejo Nacional para la Cultura y las Artes & Instituto Nacional de Antropología e Historia & Coordinación Nacional de Arqueología, Mexico City.
Sugiura, Yoko and Rubén Nieto Hernández
2016 Desarrollo histórico de las sociedades prehispánicas de la cuenca del Alto Lerma, a partir de los hallazgos arqueológicos. *La cuenca del Alto Lerma: ayer y hoy. Su historia y su etnografía*, coordinated by Yoko Sugiura, José A. Álvarez and Elizabeth Zepeda, pp. 21–72. El Colegio Mexiquense A.C. & Gobierno del Estado de México, Zinacantepec.
Sugiyama, Saburo
1989 Burials dedicated to the Old Temple of Quetzalcoatl at Teotihuacan, Mexico. *American Antiquity*, Vol. 54 (1): 323–346.
1993 Worldview materialized in Teotihuacan, México. *Latin American Antiquity*, Vol. 4 (2): 103–129.

2005 *Human Sacrifice, Militarism, and Rulership*. Cambridge University Press, Cambridge.

Sugiyama, Saburo and Nawa Sugiyama

2020 Interaction between Ancient Teotihuacan and the Maya World. *The Maya World Vol.1*, edited by Scott R. Hutson and Traci Ardren, pp. 689–711. Routledge, London.

Sugiyama, Nawa, Saburo Sugiyama, Clarissa Cagnato and Courtney A. Hofman

2022 Earliest evidence of primate captivity and translocation supports gift diplomacy between Teotihuacan and the Maya. *Proceedings of the National Academy of Science*, Vol. 119 (47): e2212431119 DOI: 10.1073/pnas.221243111

Testard, Juliette

2014 Transformations des representations corporelles durant l'Épiclassique mésoaméricain (600 à 900 apr. J.-C.). *Ateliers d'anthropologie*, Vol. 40.

2018 Intercambiar en Mesoamérica durante el Epiclásico (600 a 900 d.C.): poder, prestigio y alteridad. Un análisis de la cultura material de Puebla-Tlaxcala y Morelos (México). *Journal de la Societe des americanistes, Société des américanistes* 104 (2): 153–201 hal-01996766.

2019 Secuencias Performativas y Destrucción Ritual de Esculturas en Mesoamérica. Algunas Hipótesis desde Cacaxtla, Xochicalco y Cholula (México) durante el Epiclásico (600 a 900 d. C.). *Americae*, Núm. 4: 71–90.

2021 Strategies of legitimization in Mesoamerica. Uses of greenstone figurative plaques during the Epiclassic (AD 600–900). *Anthropology and Aesthetics*, Núms. 75/76: 118–136. DOI: 10.1086/717940

2023 *La Fábrica del Prestigio en Mesoamérica*. Archaeopress Publishing Ltd, Oxford.

Testard, Juliette and Alvarado León, Claudia I.

forthcoming La cultura material y visual de Xochicalco y Teotenango: aproximaciones para su comparación. *Xochicalco y Teotenango (650-1150 d.C.): dos ciudades sobre cerros. Estudio comparativo*, edited by Geneviève Lucet and Claudia I. Alvarado León. Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México, Mexico City.

Togno, Juan B.

1979 *Xochicalco, Estudio Topográfico y Técnico Militar de sus Ruinas*. Editorial Innovación, Mexico City.

Turner, Andrew

2016 Cultures at the Crossroads: Art, Religion, and Interregional Interaction in Central Mexico, AD 600–900. PhD dissertation. University of California, Riverside.

2019 The Murals of Cacaxtla. Monumental Art as Evidence of Migration. *Migrations in Late Mesoamerica*, edited by Christopher Beekman, pp. 205–240. University Press of Florida, Gainesville.

Turner, Andrew and Cynthia Kristan-Graham

2023 Tula and the Origins and Characteristics of an Epiclassic-Early Postclassic Art Tradition. *When East Meets West. Chichen ltza, Tula, and the postclassic Mesoamerican world, Volume I*, BAR S3134, edited by Travis W. Stanton, Karl A. Taube, Jeremy D. Coltman and Nelda I. Marengo, pp. 427–478. BAR Publishing, Oxford.

Uruñuela Ladrón de Guevara, Gabriela and Patricia Plunket Nagoda

2023 Cholula 's Decline and Regeneration in the Post-Teotihuacan World. *When East Meets West. Chichen ltza, Tula, and the postclassic Mesoamerican world, Volume II*, BAR S3134, edited by Travis W. Stanton, Karl A. Taube, Jeremy D. Coltman and Nelda I. Marengo, pp. 515–533. BAR Publishing, Oxford.

Van der Wal, K.S.

2021 *Looking into contamination in wood samples for radiocarbon analysis using FTIR*. https://fse.studenttheses.ub.rug.nl/24451/1/Report%20research%20project%20DEF.pdf

Wiesheu, Walburga

2002 De Ciudades y Fortificaciones: la Función de las Murallas en los Asentamientos Urbanos Tempranos. *Dimensión Antropológica*, Núm. 26: 1–5.

Zacarías, Patricia

1975 Estudio sobre los enterramientos y la osteología de la población prehispánica de Teotenango. T*eotenango. El antiguo lugar de la muralla, Tomo II*, coordinated by Román Piña, pp. 364–463. Dirección de Turismo, Gobierno del Estado de México, State of Mexico.

# Chapter 2
# Closing a Cycle: Rethinking the Epiclassic for Teotihuacan

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## Introduction

The purpose of this text is to present a state-of-the-art of the Epiclassic at Teotihuacan, which I hope will serve to establish what perspectives on this period remain within the purview of future research. In the specific case of the study of the Epiclassic in the urban centre of Teotihuacan, several context-specific causal factors are identified that need to be considered. *A great city deserves a great end*. This could very well be the epitaph of the end of Teotihuacan's classical greatness, a familiar theme in Mesoamerican archaeology and one that continues to attract the attention of researchers and the public alike. Not surprisingly, the events that follow the collapse of centralised governance at Teotihuacan mark a change in the cycle, both temporally and conceptually. Bearing in mind that this text is to be understood within the framework of the symposium dedicated to the discussion of the Epiclassic, in which I have been asked to provide a general framework based on my doctoral thesis: *Dinámica del cambio cultural en Teotihuacan durante el Epiclásico (650–900 d.C.)* (Moragas Segura 2003), I have decided to present a historiographical point of view, to create a general framework prior to the advances made on this topic at Teotihuacan and beyond by other colleagues.

However, considering that the time that has elapsed since the appearance of thesis and that some of the ideas have been presented in some articles (Moragas Segura 2005, 2009), it is inevitable that other research has appeared on the topic in the past two decades, as well as additional ideas about the processes involved, taking away some of the burden of being the next stage after the renowned collapse of Teotihuacan.

This is not an exhaustive text and certainly not all the research that has been undertaken on the subject, but I hope it will serve to provide an overview of this pivotal phase in Teotihuacan archaeology.

## From the Collapse to the Epiclassic at Teotihuacan

It could be said that even before the development of scientific archaeology, there was always a perception that the city of Teotihuacan had come to a dramatic end. Several elements may have allowed this perception. A first aspect to consider is the fact that Teotihuacan was never really abandoned by the indigenous population but witnessed a constant process of transformation and ruralisation of the built environment. Fray Bernardino de Sahagún emphasized the fact that the remains of the burial mounds or mounds can still be seen (Sahagún 1981: 672–673). At the end of the seventeenth century, in connection with the inauguration (*toma de posesión*) of the cacique of San Juan Teotihuacan, documents mention the existence of ruined *tecpans* and palaces (Archivo General de la Nación 1682: fol. 149r-153r). An old acquaintance of Teotihuacan archaeology took an active part in this *toma de posesión*: Don Carlos de Sigüenza y Góngora. The new cacique, Don Fernando de Alva Ixtlixochitl, a contemporary of Sigüenza, tailored the narration of events of the past according to his interests, but also reflects a way of understanding history from the point of view of the indigenous nobility (Alva Ixtlilxochitl 1977, 2012; Brian *et al.* 2015; Ward 2011). The proximity of Teotihuacan to the Mexican capital, first of the viceroyalty and later of independent Mexico would welcome writers, travellers and the first researchers who would write the first lines of archaeology in central Mexico (Gallegos Ruíz 1997). An excellent summary is provided by the work of Roberto Gallegos Ruíz (1997), which allows us to see the most well-known descriptions of the city.

Teotihuacan is also the place where the main currents of archaeological theory were first implemented, as well as the first advances in archaeological techniques in the field, from the first topographies to the current LiDAR. Finally, in more contemporary times, the discursive use of invasive models as mechanisms of cultural change and transformation common to other historical processes of antiquity taking place elsewhere on the planet. To my knowledge, the analogies that can be drawn at the narrative level with other similar historical processes have not been sufficiently considered, probably because such approaches remain uncommon.

Although it seems to be a topic far away from the subject in question, I think it might be of interest to contextualise not only what is written, but also

the moment in which it was written. One of the consequences of the globalisation that began in the sixteenth century was not only the movement of people, raw materials, and manufactured goods, but also the movement of ideas, not only political and social, but also academic (Gómez Álvarez 2011; Márquez Macías 2014). The very development of scientific disciplines, as well as the organisation of academia itself, facilitated specialisation, but also the sharing of subjects. It may seem strange to refer to the Manila Galleon in a text about the Epiclassic in Teotihuacan, but it should be remembered that the first scholars and intellectuals of the time were already firmly rooted in conceptual structures, mainly in the Greco-Roman and Christian traditions, and this applies to the writing and interpretation of some of the initial interpretations. On the other hand, it should not be forgotten that the establishment of archaeology as a methodology finds its origins in a Western perspective.

The formation of elites in the viceroyalty, together with the interest in re-evaluating certain aspects of their indigenous history, must have contributed to the maintenance of models that make certain peoples the narrative actors of their own making (Gradie 2017). It should not be forgotten that colonial writers such as Ixtlilxochitl were trained and lived as "a livelihood in the burgeoning colonial bureaucracy of New Spain" (Brian *et al.* 2015: 1). In our case, the role of the so-called Chichimeca as agents of change and their role as initial agents of the collapse of Teotihuacan and architects of the end of Classicism in the Basin of Mexico form an important part of the narrative of the Basin of Mexico and, in a sense, of the oral tradition of explaining events of cultural change.

The progressive implementation of scientific archaeology has also generated its own dynamics, including the way it fits into the academic structures of teaching and research, which consciously or unconsciously influence the approach to certain problems. In this sense, and beyond research methods, we are the product of our time and the academic circumstances and personal biases in which we conduct our research.

The impact of the collapse of Teotihuacan has undoubtedly defined the entire Epiclassic period. It is difficult to ignore the fact that this period was marked by a series of violent events and that it marked the rupture of the centralised power that had shaped the socio-cultural, political and economic dynamics not only of the Valley and Basin of Mexico, but also of a large part of what we know today as Mesoamerica. Nor should we forget that, in the context of archaeology itself, these periods have their appeal both academically and in the mass media. Academically, because they allow us to think about the process of change and transformation of societies and to consider concepts such as resilience and adaptation as applied to ancient societies, as well as the concept of collapse itself (Redman 2005; Tainter 2016; Tainter and Taylor 2014).

## Teotihuacan and the Epiclassic: A complex relationship

In 1959, Wigberto Jiménez Moreno defined a new period that he called the Epiclassic, with which he sought to identify and characterise the socio-political changes that took place after the fall of Teotihuacan. In doing so, he opened a new chronological and cultural period in Mesoamerica in which the migratory movements generated in Teotihuacan were significantly modified and in which there was a profound change in the cultural orientation of the classical centres (Jiménez Moreno 1966: 49).

It should be remembered that at that time, the idea that the governmental system of the classical centres was inherently theocratic and that the mechanisms of cultural change were characterised by diffusionism as the executing agent was still very strong. The truth is that it is difficult to turn back the clock when a period as convulsive as the one that followed the fall of Teotihuacan is given an identity and a name. For this reason, especially since the second half of the twentieth century, there has been a series of debates about the viability of this period and how to define it more precisely. It is not surprising that this debate develops from the second half of the twentieth century, since it is much better understood in the historical context of the archaeology of the Basin of Mexico in particular.

It is well known that, since the second half of the nineteenth century, the archaeology of Teotihuacan went hand in hand with the constitution of the Mexican nation-state before and after the Mexican Revolution (Gamio 1979; Gándara 1992; Reynoso 2013), but also with the development of archaeology as a scientific discipline in Mexico itself. It was here that the first planimetries were made (Almaraz 2014), the first photographs (Mongne 2019) and the first multidisciplinary studies of the valley's population (Gamio 1979). In the same way, the successive projects carried out in the first half of the twentieth century made it possible to refine the chronological sequences of the city, which were also extrapolated to other areas of the Basin of Mexico and vice versa, creating the sequential bases that are still followed today and in which the post-Teotihuacan phases, in the broadest sense, began to be identified (Armillas 1950; Linné 1942; Vaillant 1932). In the 1970s and 1980s, the results of three major long-term research projects developed in the 1960s began to be published: the Teotihuacan Mapping Project (Millon

*et al.* 1973), the Basin of Mexico Project (Sanders *et al.* 1979) and the Teotihuacan Project 60–62 conceived by Ignacio Bernal and Jorge Acosta (Bernal 1963, 1966; Medina-González and Ortega Cabrera 2020, 2021). These three macro-projects made it possible to establish the general dynamics and basic chronological sequences of the Basin of Mexico and the role of Teotihuacan as the great guiding centre of these dynamics in the Basin and the Central Highlands. To study Teotihuacan is to understand the megalopolis of Mesoamerica in terms of size and influence, but it also leads us to reflect on how the inhabitants of Teotihuacan constructed their own discourse, in which monumental architecture was an essential part of a long process (Torras Freixa 2019).

Considering that Teotihuacan archaeology also shows the debate on the emergence of state societies (Gándara 1992, 2012), the sudden dissolution of the centralised society is a challenge in both approach and conceptual shift in what was thought to be or not the cultural evolution of Teotihuacan.

With a certain nineteenth-century classicist touch, Séjourné notes that the existence of post-Teotihuacan ceramics in general and Coyotlatelco in particular, implied the "unwelcome presence of forms, decorations and pottery that, according to academic teaching, a classical building should have ignored" (Séjourné 1966: 14). Obviously, Teotihuacan would not be a stranger to the discussions about the Epiclassic as a period and the Coyotlatelco pottery as its main axis. It would soon be discussed whether the Epiclassic was a cultural period (Piña Chán 1975, 1990), a change in the spheres of cultural interaction, a transformation of religious doctrines (López Luján 1995: 262), a drastic change in the settlement pattern (Hicks and Nicholson 1964), or a breakup of centralised systems (Marcus 1989). The vacuum left by Teotihuacan in the control of long-distance trade and the collapse of theocratic systems meant an increase in militarism and conflict between newly emerging centres (Hirth 1995: 247; Webb 1978). However, not all scholars seem to agree in understanding militarism as an Epiclassic phenomenon but see evidence already in the Classic period (Berlo 1989: 210, Cohodas 1989: 224–225, Pasztory1988). In this "Teotihuacano-centric" perspective of the Epiclassic period, it is inevitable that until 1988 the contrast between theocratic society and militarism is a constant. In 1988, however, Cabrera and Cowgill's excavations at the ancient Temple of the Feathered Serpent transcendently changed the model of Teotihuacan society and the perception of violence and militarism in the Classic period (Cabrera *et al.* 1989; Sugiyama 1993).

Another aspect that characterised these early perceptions of the Epiclassic is related to the tripartite model of the chronology of the Precolumbian period: Preclassic-Classic-Postclassic. In this sense, the Epiclassic, in this "Teotihuacano-centric" view, fit well into the period immediately after the collapse of Teotihuacan and before the emergence of Tula as a new regional centre. However, it was not a term universally accepted by Mesoamericanists. Since the 1990s, for example, the existence or not of an Epiclassic stage in the Maya highlands divided Maya scholars, as well as scholars from northern Mexico and the Gulf Coast (for a more detailed discussion see Moragas Segura 2003: 294–297). What did not seem to generate any doubt was that while the existence of an Epiclassic period was clearer in areas more closely linked to Teotihuacan, it was less so in areas outside the orbit of Teotihuacan power. In this way, one could subdivide the chronologically watertight phases, "stretching" or shortening the earlier and later periods.

However, the idea of watertight chronological periods remained quite firm as a constant narrative element. Some very important works in the Basin of Mexico, according to the data of the time, maintained this evolutionary sequence of regionalization versus fragmentation periods as a constant in the archaeology of the Basin of Mexico (Nichols and Charlton 1997). Terms such as "balkanization" became popular to refer to the process of territorial fragmentation following the collapse of centralised power. However, a new element was to mark not only the temporality of this period, but also the very conception of the cultural dynamics of central Mexico.

The relationship between Epiclassic and Coyotlatelco deserves another symposium. In the first decades of the twentieth century, Linné, Vaillant, and Acosta identified and published the first, but not the only, descriptions of the Coyotlatelco ceramics for Teotihuacan. Piña Chán proposes that Teotihuacan would be a significant site for this ceramic complex, suggesting a coexistence between coyotlatelcos and teotihuacanos, affirming that the former will be enriched by the Teotihuacan culture, creating the seeds of the future Legend of the Fifth Sun and Toltec culture (Piña Chán 1967: 147–148).

First Séjourné and later Müller presented a general sequence of Coyotlatelco pottery in which both types and possible areas of interaction beyond the Basin of Mexico itself began to be defined (Dumond and Müller 1972; Müller 1978; Séjourné 1966). In contrast, Bennyhoff found no evidence for areas of interaction and considered this pottery to be of local origin and distribution (Bennyhoff 1966). Meanwhile, Rattray developed her Coyotlatelco typology (Rattray 1966, 1972) and Obermeyer developed his ceramic typology based on excavations at Huexoctoc Cave in Oxtotipac, identifying a new ceramic complex (Good and Obermeyer 1986; Obermeyer 1963).

There has been much discussion about the existence or not of the Oxtotipac-Xometla sequence versus those who see a Coyotlatelco complex as a whole or with an early and late stage. In any case, it should be kept in mind that the Teotihuacan Basin Project advocated a model different from the usual Preclassic-Classic-Postclassic sequence and that its typology was based primarily on the excavation of a context outside the urban area of the city.

The progressive generalization of analytical techniques would also reach the Coyotlatelco ceramics. In 1991, Rattray published her radiocarbon dating, which redefined the chronological character of Classic Teotihuacan ceramics (Rattray 1991), but other publications would also contribute, indirectly, to the revaluation of the Epiclassic period within the Basin of Mexico. In 1993, the results of radiocarbon dating led to consider that these watertight periods and their linearity were not so much the case (Parsons *et al.* 1996). In 1995, García Chávez presented his master's thesis on the variability of Epiclassic ceramics in the Basin of México, taking as a starting point the numerous salvage excavations carried out mainly in the southern area of the Basin of Mexico, but also in other areas and updating the regional perspective that was held at that time of the different Coyotlatelco complexes, associating them with the political entities previously identified by Sanders (García Chávez 1995). Manzanilla, however, argued that there was a true epiclassic complex that incorporated the remains of previous phases and in which local stylistic variants of each site could be defined (Manzanilla 2005: 263–264).

The 1990s will provide a great impetus for the study of the post-collapse phases in the urban area of Teotihuacan. On the one hand, Linda Manzanilla and her team developed a research project in the "caves that are no caves", that is, in the tunnels built around the Pyramid of the Sun. Recently, Manzanilla published the results of this project and of the research carried out by the interdisciplinary team she coordinated (Manzanilla 2023). Around the same time, Eduardo Matos developed his research in the U-shaped platform surrounding the Pyramid of the Sun, discovering a series of post-Teotihuacan stage rooms and temples on its northern side (Matos Moctezuma 1995). The macro-project Teotihuacan Especial 92–94 generated more data of post-collapse phases as a natural consequence of the numerous excavations developed inside and outside the current archaeological zone.

On the other hand, the Department of Salvage of the archaeological zone supervised the excavation of another cavity near the Astronomical Cave, previously studied in the framework of the Teotihuacan 80–82 project (Moragas Segura 1994). Luis Manuel Gamboa, from this Department, worked in the populated areas outside the monumental area, which allowed him to identify Coyotlatelco ceramics in the most peripheral areas of the ancient city (Gamboa Cabezas 1998). His results show that there is a situation that is not well resolved in the understanding of the final stages of Xolalpan-Metepec for the periphery of the city, allowing instead to observe a Coyotlatelco presence, while in the centre of the city a reoccupation of previously open spaces is observed (Moragas Segura 2013: 189). Meanwhile, Rubén Cabrera initiated another salvage project that quickly became the well-known La Ventilla project, which will also identify a Coyotlatelco occupation at the site (Cabrera 1996, 1998).

The twenty-first century opened the stage for the maturation of theoretical models, to overcome prejudices and little by little the Epiclassic is shown as a stage with its own dynamics. The results of the excavations in the caves and tunnels east of the Pyramid of the Sun began to be presented, clarifying the sequence and typology of the Coyotlatelco ceramics in a very specific context, but now with absolute chronologies (López Pérez 2003). The implementation of new analytical techniques allows us to clarify the circuits of distribution and interaction between ceramic complexes (Crider *et al.* 2007; Ontalba Salamanca *et al.* 2000), complex statistical analyses (Clayton 2020), as well as the provenance and mobility of individuals (Manzanilla 2005).

A special mention should be made of the symposium on Coyotlatelco held in 2005 under which, in addition to several days of intense debate resulted in an excellent publication coordinated by Laura Solar Valverde (2006). This allowed us to study the different projects discussed at the time, with a particularly interesting transcription of the debates, in which the different perspectives derived from the formal presentations that make up the chapters of the publication were made clear (Solar Valverde 2006: see Appendix: 443-484). This publication reflects very well not only the different positions of the speakers that constitute a history of the Coyotlatelco complex itself, but also the complexity of defining these periods with such heterogeneous processes. The proposed co-existence of two societies—the Teotihuacan and the Coyotlatelco—within the same urban space (Moragas Segura 2003: 506, 2005) presents a complex picture. These groups occupied markedly different stages of cultural development: the Teotihuacan society, characterised by a declining sociopolitical model, and the more recently emerging Coyotlatelco, with temporally and spatially overlapping

presence. Interpreting this context through the archaeological record poses significant analytical challenges.

## The Epiclassic inside the city of Teotihuacan: A proposal

Some years ago, Professor Matos said to me: "Con los años, uno ve que escribe cada cosa..." and in the same spirit I can apply this phrase to myself. In accordance with previous conversations and in the general framework of this seminar, what I am going to present here is a review of what I presented at that time and certain doubts that I still do not find an easy way to resolve. In 2003, I hoped that what I had wrote at that time would be considered in the future as the historical background of the Epiclassic at Teotihuacan, because it would indicate that progress had been made in the knowledge of the Epiclassic society at Teotihuacan. Undoubtedly, much progress has been made in terms of knowledge of the material culture and the identification of sites with a Coyotlatelco presence, but there has been little progress in the socio-economic characterization of this group in the urban area of Teotihuacan.

One of the usual problems when we try to make a state of the question or a "history of the history of ...." is to bring together the different labels that have developed over time. Some are easier to resolve, or at least to update, especially if they have graphic apparatus. Others are particularly ambiguous, being defined in a vague way as post-Teotihuacan. Throughout the twentieth century, the question of the Epiclassic in Teotihuacan seemed to be reduced to the identification of materials that would allow us to prove the existence of an occupation after the collapse and that would indirectly validate the various theories about the collapse of the city, especially those that refer to the violence of its end. The Epiclassic period was perceived, with a few exceptions, as that which took place after the fall of the Teotihuacan culture and in which no cultural continuity was perceived. Sanders advocated a more sequential model, but one of the arguments was that his excavations did not correspond to the urban space of the city, but to the cave of Huexoctoc in Oxtotipac (Good 1972; Good and Obermeyer 1986). Consequently, on the outskirts of the centre of power of Teotihuacan. At the time, there was no publication that brought together all that was known or could be consulted about this period in a single document that would put the various proposals into dialogue, even if they came from opposing positions. In a way, the Epiclassic was defined as the presence of Coyotlatelco ceramics in Teotihuacan and in what happened after the collapse.

In 1988, Millon published *The Last Years of Teotihuacan Dominance*, a text written with academic maturity that, in addition to being an excellent state of the question, made two key points for revising the collapse (Millon 1988). This chapter was part of the work coordinated by Cowgill and Tainter on the collapse of ancient states, a publication that was a reference at the time (Yoffee and Cowgill 1988). The data were incontrovertible. Millon reported 147 burnt buildings, to which 31 more must be added with possible evidence of fire (Millon 1988: 149). However, in this text he reformulated the idea of some elements that suggest an internal social crisis, such as secularization and militarization (Millon 1988: 145). According to Millon (1976: 224), the remodelling and compartmentalization of spaces could be interpreted as an increase in antagonism and tension between elites. This forces us to better understand Teotihuacan society in the generations immediately preceding the collapse as active agents and not merely passive spectators of a violent event. As Millon mentions, destruction and reconstruction take on a ritual character (Millon 1988: 157) because, urbanistically speaking, Teotihuacan was very difficult to conquer (Millon 1974: 347) and, I would add, the teotihuacanos would have something to say about it.

For this reason, rethinking the period immediately before the collapse is key to understanding the survival and transformations that took place after the collapse, including other elements beyond ceramic typology. Some ideas and approaches are gradually being put forward by different researchers. Traditionally, the wall paintings of the Metepec period were a time of technical and iconographic consolidation, which is why they nourished the idea of a society on the rise. Some authors see in these paintings an intensification of warfare (Millon 1973), while other observe a change in the increase of anthropomorphic figures over time, perhaps connected with the glorification of their rulers (Pasztory 1988: 64–67). It must be remembered that at this time, the Teotihuacan elites were still perceived as essentially theocratic, so the recognition of the militarization of these elites still had the component that made the Postclassic an essentially violent stage. Today, this assumption has been completely superseded, although it is important to evaluate militarism in different cultural and temporal contexts. In this sense, Storey (1992) noted that, at least in the case of Tlajinga, there was a general impoverishment of the grave goods identified by the reuse of some objects. On the other hand, the research carried out in the so-called ethnic neighbourhoods shows that their influence was not permanent, as there is evidence of the abandonment of commercial relations. This also implies a re-evaluation of migratory movements within and outside the city. García Chávez suggests that the expansion of Teotihuacan that he observes does not correspond to a model of expansion of the Teotihuacan state, but rather to a population leaving

the city to settle in the Basin of Mexico (García Chávez 1998: 490).

The original idea of: "One has the impression that it was a time of great activity and some prosperity for at least part of the city's population. Some of the finest murals in the city were painted then and fine ceramics were still being made" (Millon *et al.* 1973: 60) begins to be overtaken by the need to reassess all the information in a more complex and multifaceted context.

**An understanding of the Epiclassic in Teotihuacan from my point of view**

As I have mentioned throughout this text, in order to understand the Epiclassic at Teotihuacan, it is necessary to have an understanding of the construction of knowledge, the terminology used and the context of the excavation itself. All the researchers and scholars have their own history of how they began their projects. Since the 1990s, a great impetus has been given to this period, whether for circumstantial reasons or not.

Although it may seem obvious, we are starting from an urbanised, densely populated context with a multicultural population that is hierarchised, at least theoretically, in terms related to the power associated with their lineage and their role within it. Some recent proposals suggest that inequality in Teotihuacan society reached an intermediate state as a guarantee of balancing social tensions, which would explain the apparent stability of the system. This forces us to consider that the reactions and attitudes of the different components of Teotihuacan society are affected in different ways. While crises affect an entire society, the effects of a crisis are felt in different ways. The recent COVID epidemic has taught us that in this case the social and economic consequences were very different depending on the place of origin, the policies applied and the economic status, including in this last point the impact according to the type of work.

There seems to be a consensus that the cause of the collapse of Teotihuacan has a clear internal component and is directly related to the power and elites of the city. Therefore, the impact of the Teotihuacan crisis will have different consequences depending on the level of integration and dependence of the individual/collective on the power of the city's ruling elites.

Multiculturalism is not an exclusive prerogative of the Classic period but must be considered as part of the dynamics of the later stages, with new actors arriving in this changing territory. Early Coyotlatelco ceramic chronologies should not be considered in a strict, homogeneous and uniform way that applies equally throughout the territory. Today, there is a consensus in backdating the chronology of the Coyotlatelco presence in both the Basin of Mexico and Teotihuacan, but this does not mean that the impact is immediate. I have already proposed a coexistence between the teotihuacanos and the coyotlatelcos before the final crisis, perhaps occupying the most peripheral areas of the city. At the same time, perhaps we can consider a centripetal movement of population toward the centre of the city, which would explain, for example, the occupation of the streets of the city in the neighbourhood of the Ventilla for late Xolalpan/Metepec. On the other hand, the presence of Coyotlatelco ceramics on the floors of Xolalpan, which Gamboa discovered in the periphery of the city. It was not a new idea, but one that had been somewhat eclipsed by the weight of the continuity versus discontinuity discourses that dominated much of the twentieth century.

In any case, there was a need to bring together different ideas in order to provide a plausible starting hypothesis for future research. Recent work on the Ventilla also allows us to modulate the process of abandonment and reoccupation of this site by modifying the initial interpretations (Buckley *et al.* 2023: 620).

If there was a progressive loss of centralised control, the periphery could be a good place for groups unaware of the population dynamics established in previous phases to settle in these places. Angulo's suggestion that the iconography of Atetelco should be interpreted as an association of Teotihuacan merchants accompanied by a foreign bodyguard, who would have the coyote as their totemic animal, is suggestive but difficult to confirm, but it fuels the idea of new groups arriving in the city (Angulo 1998: 119–120). The question is: what could the new groups—let us call them coyotlatelcos—bring to the Teotihuacanos? Labor? New loyalties? The opening of possible new networks of exchange? Much work remains to be done on the relationship between the Teotihuacanos and their northern frontier, in contrast to the research linking the Teotihuacanos to the Gulf Coast, Oaxaca, and the Maya region.

If these early Coyotlatelco populations were not integrated into the state structures at the time of the collapse and especially if they were not dependent on the elites of Teotihuacan for advancement, it is possible that the events of violence did not affect them in the same way as the population that had lived cohesively under their own system for generations. This is not to say that they did not participate in and at some point, even instigate, the violent events and looting that took place over a short period of time, but at the same time the status quo that articulated urban society within the city was broken and a reinvention was now imposed under new models in which these new actors would take the initiative.

The noise of the built space must be taken into account when interpreting the dynamics of Coyotlatelco's occupation and presence. What is seen and what is not seen must also be considered. While it is true that there are episodes of violent destruction, it cannot be said that this was done systematically and homogeneously in all places, even within the same complexes, considering the excavated and unexcavated spaces. In this context, we must consider the possibility that the Coyotlatelcos could have observed the remains of this constructed space and, with it, the remains of the mural painting itself. If we review the descriptions of the occupations in the so-called palaces, we can observe different processes in the same complex. In the case of Tetitla, fire, abandonment, and reoccupation can be observed in some areas, but also reoccupation without abandonment or looting.

## And now...?

Certainly, there is a need to reflect on the role of the Epiclassic in the urban area of Teotihuacan, the valley and the basin of Mexico itself. One of the points I am trying to make in this text is that the Epiclassic should not be defined as a minor period or as that which occurs between the fall of Teotihuacan and the rise of Tula. It is necessary to reflect on the weight that the study of the collapse has and the consequences it has on the previous assumptions about this stage that we consciously or unconsciously construct about this period. Undoubtedly, the Teotihuacan Epiclassic has often been defined by what is missing or lost, as well as by the need to identify types and forms of its material culture. However, the Epiclassic period is also a time of reorganization and adaptation to new ways of living in changing socio-political contexts, which opens new possibilities for incorporating new research topics. Concepts such as adaptability and resilience can be much better observed in these contexts, bringing us closer to more contemporary issues (Feinman and Carballo 2018; McAnany and Yoffee 2010, Redman 2005) or questioning the viability of this concept in archaeology (Rashidian 2021). Loss of globality, disintegration, ruralisation are terms that need to be reevaluated in our case study. The application of the processes that occur in the urbanised area (fascinating, by the way) cannot be applied in the same way to the valley of Teotihuacan and the Basin of Mexico. Much less for more remote areas. Least of all is it necessary to consider that Coyotlatelco is synonymous with Epiclassic. These aspects have been discussed and agreed upon, but more work needs to be done in this direction. What for one area is a period of abandonment and decadence (a term I do not like) is for other areas the moment of brilliance in their own history.

One of the great problems (and privileges) of Teotihuacan archaeology is the large amount of data that has been generated for more than a hundred years. In the context of twenty-first century archaeology, this issue requires teotihuacanists to reflect on where they want to take the research and, above all, how they want to do the research.

Archaeology as a discipline has matured and made interdisciplinarity a fundamental part of its practice, but although it has found its place in dialogue with other disciplines in the field of physical and chemical sciences, it needs to re-evaluate its relationship with disciplines in the humanistic tradition. We have already mentioned the "disturbance" that the built space represents for understanding the processes of habitability in an area partially affected by the events of the collapse. The research around the Pyramid of the Sun shows us that space is being reinvented under new symbolic models, but similar themes have also been found in other areas such as La Ventilla (Núñez Escandón 2015). Structures such as the *temascales*, which are more clearly identified in this phase, indicate not only a clearer identification of this structure, but also a differentiated use of this element over time (Ortega Cabrera 2008; Romero Contreras 2001). Following the idea of the "noise or disturbance" that the constructed space implies, we must also consider other aspects such as the permanence and visibility of some spaces that maintain key elements of classical Teotihuacan power. Rereading the stratigraphic descriptions suggests a diversity of occupations: Coyotlatelco materials on Xolalpan floors, successive sequences, spaces with long periods of abandonment and destroyed spaces. Some of these spaces correspond to elite zones with associated mural painting, seen by at least two different societies: those of the Teotihuacan tradition and those of the Epiclassic tradition. Two cultural traditions that coexist, at least for a certain time, in an urban space that is being redefined not only in terms of urban planning, but also in terms of symbolism. The transformation of this cultural landscape under new interpretations deserves a joint reflection not only from the perspective of archaeology, but also from the perspective of research in the history of art and the history of beliefs.

Another aspect that the Epiclassic can help us understand is the line of research on maintenance activities, a concept that goes beyond domestic archaeology or the study of women (Alarcón García 2010; González Miranda 2022; Montón Subías and Sánchez Romero 2008). The process of ruralisation tells us that everyday activities have to be carried out in a new framework. I suggested at the time that it was probably the less specialised groups that initially

adapted better to the power vacuum. This gives us the opportunity to better understand such activities.

Finally, it should be remembered that the Precolumbian phase of the Valley of Teotihuacan is not limited to the Classic period. Temporally, the post-fall stages of Teotihuacan cover a wider chronological arc than the Classic stage itself and involve different cultural dynamics that deserve to be considered as an integral part of a story to be told.

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**References cited:**

Archivo General de la Nación
1682 *Vínculos*, Vol. 232, Exp. 1. Mexico City.

Alarcón García, Eva
2010 Arqueología de las actividades de mantenimiento: Un nuevo concepto en los estudios de las mujeres en el pasado. *Arqueología y Territorio,* Núm. 7: 195–210.

Almaraz, Ramón
2014 *Memoria de los trabajos ejecutados por la Comisión Científica de Pachuca en el año de 1864*. Miguel Ángel Porrúa, Mexico City.

Alva Ixtlilxochitl, Fernando de
1977 *Obras Históricas*. Instituto de Investigaciones Históricas, Universidad Nacional Autónoma de México, Mexico City.
2012 *Visión de la conquista*. McGraw-Hill Interamericana, Mexico City.

Angulo, Jorge
1998 El desarrollo sociopolítico como factor del cambio cronológico cultural. *Los ritmos del cambio en Teotihuacan: reflexiones y discusiones de su cronología*, coordinated by Rubén Cabrera and Rosa Brambila, pp. 103–128. Colección Científica 366, Instituto Nacional de Antropología e Historia, Mexico City.

Armillas, Pedro
1950 Teotihuacan, Tula y los Toltecas: Las culturas postarcaicas y pre-aztecas del centro de México: Excavaciones y estudios. *Runa*, Vol. 3: 37–70.

Bennyhoff, James A.
1966 Chronology and periodization: Continuity and change in the ceramic tradition. *Teotihuacan XI Mesa Redonda*, Vol. 1: 19–29. Sociedad Mexicana de Antropología, Mexico City.

Berlo, Janet
1989 The concept of the Epiclassic: A Critique. *Mesoamerica after the Decline of Teotihuacan, A.D. 700–900*, edited by Richard A. Diehl and Janet C. Berlo, pp. 209–210. Dumbarton Oaks Research Library and Collection, Washington, D.C.

Bernal, Ignacio
1963 *Teotihuacan*. Instituto Nacional de Antropología e Historia, México.
1966 *Proyecto Teotihuacan. Informe de los trabajos realizados en la Zona Arqueológica de Teotihuacan en 1966*. Unpublished Report. Archivo de la Coordinación Nacional de Arqueología del Instituto Nacional de Antropología e Historia, Mexico City.

Brian, Amber, Bradley Benton and Pablo García Loaeza
2015 *The Native Conquistador: Alva Ixtlilxochitl's Account of the Conquest of New Spain*. Penn State University Press, University Park.

Buckley, Gina, Sarah Clayton, Sergio Gómez Chávez, Rubén Cabrera Castro, Laurie Eccles, Brendan Culleton and Kennett J, Douglas
2023 Refining ceramic chronology and epiclassic reoccupation at La Ventilla, Teotihuacan using trapezoidal bayesian modeling. *Radiocarbon,* Vol. 65 (3): 617–641. DOI: 10.1017/RDC.2023.21

Cabrera Castro, Rubén
1996 Las excavaciones en La Ventilla. Un barrio teotihuacano. *Revista Mexicana de Estudios Antropológicos*, Vol. 62: 5–31.
1998 El urbanismo y la arquitectura en la Ventilla. Un barrio en la ciudad de Teotihuacan. *Antropología e Historia del Occidente de México*, pp. 1523–1547, Sociedad Mexicana de Antropología & Universidad Nacional Autónoma de México, Mexico City.

Cabrera, Rubén, George Cowgill and Saburo Sugiyama
1989 El proyecto Templo de Quetzalcoatl. *Arqueología*, Núm. 5: 51–80.

Clayton, Sarah
2020 The collapse of Teotihuacan and the regeneration of Epiclassic societies: a Bayesian approach. *Journal of Anthropological Archaeology,* Vol. 59: 101203. DOI: 10.1016/j.jaa.2020.101203

Cohodas, Marvin
1989 The Epiclassic Problem: A review and Alternative Model. *Mesoamerica after the Decline of Teotihuacan, A.D. 700–900*, edited by Richard A. Diehl and Janet C. Berlo, pp. 219–239. Dumbarton Oaks Research Library and Collection, Washington, D.C.

Crider, Destiny, Deborah Nichols, Hector Neff and Michael D. Glascock
2007 In the Aftermath of Teotihuacan: Epiclassic Pottery Production and Distribution in the Teotihuacan Valley, Mexico. *Latin American Antiquity*, Vol. 18 (2): 123–143.

Dumond, Donald and Florencia Müller
1972 Classic to Postclassic in Highland Central Mexico. *Science*, Vol. 175 (4027): 1208–1215.

Feinman, Gary and David Carballo
2018 Collaborative and competitive strategies in the variability and resiliency of large-scale societies in Mesoamerica. *Economic Anthropology*, Vol. 5 (1): 7–19.
Gallegos Ruíz, Roberto
1997 *Antología de documentos para la historia de la arqueología de Teotihuacán*. Instituto Nacional de Antropología e Historia, Mexico City.
Gamboa Cabezas, Luis Manuel
1998 La distribución de la cerámica de la fase Coyotlatelco en el Valle de Teotihuacan. Licentiate thesis. Escuela Nacional de Antropología e Historia, Mexico City.
Gamio, Manuel
1979 [1922] *La población del Valle de Teotihuacan*. Instituto Nacional Indigenista, Mexico City.
Gándara, Manuel
1992 *La Arqueología oficial mexicana: causas y efectos*. Instituto Nacional de Antropología e Historia, Mexico City.
2012 A Short History of Theory in Mesoamerican Archaeology. *The Oxford Handbook of Mesoamerican Archaeology*, edited by Deborah Nichols and Christopher Pool, pp. 31–46. Oxford University Press, New York.
García Chávez, Raúl Ernesto
1995 Variabilidad cerámica en la Cuenca de México durante el Epiclásico. Master thesis. Universidad Nacional Autónoma de México, Mexico City.
1998 Evidencias teotihuacanas en Mesoamérica y su posible significado para la cronología de Teotihuacan. *Los ritmos de cambio en Teotihuacan: reflexiones y discusiones de su cronología,* edited by Rubén Cabrera and Rosa Brambila, pp. 477–503. Colección Científica 366, Instituto Nacional de Antropología e Historia, Mexico City.
Gómez Álvarez, Cristina
2011 *Navegar con libros: el comercio de libros entre España y Nueva España: una visión cultural de la Independencia (1750-1820)*. Trama Editorial. Madrid.
González Miranda, Andrea
2022 Arqueología y reproducción social: elementos teóricos de la economía política de la vida. *Boletín Antropológico*, Vol. 1 (103): 60–82. DOI: 10.53766/ba/2022.01.103.04
Good, Kenneth
1972 Terminal Classic period at Oxtotipac, Teotihuacan Valley: A ceramic analysis. MA thesis. Pennsylvania State University, Philadelphia.
Good, Kenneth and Gerald Obermeyer
1986 Excavations at Oxtotipac (TT82). *The Toltec, Period Occupation of the Valley, PART 1. Excavations and Ceramic*, edited by William T. Sanders, pp. 195–265. Pennsylvania State University, Philadelphia.
Gradie, Charlotte
2017 Discovering the Chichimecas. *The Americas*, Vol. 74 (2): 67–88.
Hicks, Frédéric and Henry B. Nicholson
1964 The transition from Classic to Posclassic at Cerro Portezuelo, Valley of Mexico. *XXXV Congreso Internacional de Americanistas*, Vol. 1: 493–509, Mexico City.
Hirth, Kenneth
1995 Urbanism, Militarism and Architectural Design. An Analysis of Epiclassic Sociopolitical Structure at Xochicalco. *Ancient Mesoamerica*, Vol. 6 (2): 251–258.
Jiménez Moreno, Wigberto
1959 Síntesis de la Historia Pretolteca de Mesoamérica. *Esplendor del México Antiguo vol. 2*, coordinated by Carmen Cook and Raúl Noriega, pp. 1019–1108. Centro de Investigaciones Antropológicas de México, Editorial del Valle de México, Mexico City.
1966 Mesoamerica before the Toltecs. *Ancient Oaxaca. Discoveries in Mexican Archaeology and History*, edited by John Paddock, pp. 1–83. Stanford University Press, Stanford.
Linné, Sidvald
1942 *Mexican highland cultures: Archaeological Researches at Teotihuacan, Calpulalpan, and Chalchicomula in 1934-1935*. The Humanistic Foundation of Sweden, Stockholm.
López Luján, Leonardo
1995 El Epiclásico del valle de Morelos. *Historia Antigua de México, Vol. II: El Horizonte Clásico*, coordinated by Linda Manzanilla and Leonardo López Luján, pp. 261–293. Instituto Nacional de Antropología e Historia & Universidad Nacional Autónoma de México & Editorial Porrúa, Mexico City.
López Pérez, Claudia María
2003 Análisis cerámico de las áreas de actividad en la Cueva de las Varillas, Teotihuacan. Licentiate thesis. Escuela Nacional de Antropología e Historia, Mexico City.
Manzanilla, Linda (ed)
2005 Migrantes epiclásicos en Teotihuacan. Propuesta metodológica para el análisis de migraciones del Clásico al Posclásico. *Reacomodos demográficos del Clásico al Posclásico en el centro de México*, pp. 261–275. Instituto de Investigaciones Antropológicas, Universidad Nacional Autónoma de México, Mexico City.
2023 *El inframundo de Teotihuacan. Ocupaciones posteotihuacanas en los túneles al este de la Pirámide del Sol, Vols. I-II*, Instituto de Investigaciones Antropológicas, Universidad Nacional Autónoma de México, Mexico City.
Marcus, Joyce
1989 From Centralized Systems to City-States. Possible Models for Epiclassic. *Mesoamerica after the Decline of Teotihuacan, A.D. 700–900,* edited by Richard A. Diehl and Janet C. Berlo, pp. 201–208. Dumbarton Oaks Research Library and Collection, Washington, D.C.

Márquez Macias, Rosario
2014 Comercio de Libros con América en el Siglo XVIII. *Clío América*, Vol. 4 (7): 151–182.
Matos Moctezuma, Eduardo
1995 *La Pirámide del Sol, Teotihuacan*. Antología. Artes de México para el Instituto Cultural Domecq & Instituto Nacional de Antropología e Historia, Mexico City.
McAnany, Patricia and Norman Yoffee (eds)
2010 *Questioning collapse: human resilience, ecological vulnerability, and the aftermath of empire*. Cambridge University Press, Cambridge.
Medina-González, José and Verónica Ortega Cabrera
2020 Exploraciones y reconstrucciones en Teotihuacan 1960-1962: intervenciones previas al "Proyecto Teotihuacan". *Figuras. Revista Académica de Investigación*, Vol. 2 (1): 24–64.
2021 Reconstruyendo el "Proyecto Teotihuacan" del INAH, 1962-1964. *Figuras. Revista Académica de Investigación,* Vol. 2 (3): 44–132.
Millon, Clara
1973 Painting, Writing, and Polity in Teotihuacan, Mexico. *American Antiquity*, Vol. 38 (3): 294–314.
Millon, René
1974 The Study of Urbanism at Teotihuacan, Mexico. *Mesoamerican Archaeology: New Approaches*, edited by Norman Hammond, pp. 335–361. Centre of Latin American Studies, University of Cambridge, London.
1976 Social Relations in Ancient Teotihuacan. *Studies in Pre-Hispanic Ecology and Society* (Advanced Seminar Series), edited by Eric Wolf, pp. 205–248. University of New Mexico Press, Albuquerque.
1988 The Last Years of Teotihuacan Dominance. *The Collapse of Ancient States and Civilizations*, edited by Norman Yoffee and George Cowgill, pp. 102–164. Arizona University Press, Tucson.
Millon, René, George Cowgill and Bruce Drewitt
1973 *Urbanization at Teotihuacán, Mexico, Vol. 1: The Teotihuacán Map*. University of Texas Press, Austin.
Mongne, Pascal
2019 Désiré Charnay y la imagen fotográfica de México. *Los americanistas del siglo XIX*, edited by Leoncio López Ocón, Jean-Pierre Chaumeil and Ana Verde Casanova, pp. 41–64. Iberoamericana Vervuert, Madrid.
Montón Subías, Sandra and Margarita Sánchez Romero (eds)
2008 *Engendering social dynamics: the archaeology of maintenance activities*. BAR International Series 1862. British Archaeological Reports, Oxford.
Moragas Segura, Natalia
1994 *Salvamento realizado en la Puerta 5: Cueva II, Cueva III, Cala II. Informe técnico*. Unpublished Report. Archivo de la Coordinación Nacional de Arqueología del Instituto Nacional de Antropología e Historia, Mexico City.
2003 *Dinámica del cambio cultural en Teotihuacan durante el Epiclásico (650–900 d.C.).* Doctoral thesis. Universitat de Barcelona, Barcelona. http://diposit.ub.edu/dspace/handle/2445/42620
2005 Sobreviviendo al colapso: teotihuacanos y coyotlatelcos en Teotihuacan. *Revista Española de Antropología Americana*, Vol. 35: 33–50.
2009 Colapso: algunas cuestiones para Teotihuacan. *Revista del Instituto Mexiquense de Cultura*, Vol. 35: 20–31.
2013 Sociedades en colapso: la transición del clásico al epiclásico en Teotihuacán. *Diálogo Andino*, Núm. 41: 185–197.
Müller, Florencia
1978 *La cerámica del centro ceremonial de Teotihuacan*. Secretaría de Educación Pública & Instituto Nacional de Antropología e Historia, Mexico City.
Nichols, Deborah and Thomas Charlton
1997 *The archaeology of city-states: cross-cultural approaches*. Smithsonian series in Archaeological Inquiry, Smithsonian Institution Press, Washington.
Núñez Escandón, Elide Rosario
2015 *El Frente 6, un estudio de caso en el sistema urbano de la Ventilla, Teotihuacan*. Licentiate thesis. Escuela Nacional de Antropología e Historia, Mexico City.
Obermeyer, Gerald
1963 A Stratigraphic trench and settlement pattern survey at Oxtotipac, Mexico. MA thesis. Pennsylvania State University, Philadelphia.
Ontalba Salamanca, María Ángeles, José Luis Ruvalcaba-Sil, Lauro Bucio and Linda Manzanilla
2000 Ion beam analysis of pottery from Teotihuacan, Mexico. *Nuclear Instruments and Methods in Physics Research B*, No. 161–163: 762–768.
Ortega Cabrera, Verónica
2008 Dos temazcales aztecas en el área urbana de la antigua ciudad de Teotihuacán. *Arqueología,* Núm. 38: 65–81.
Parsons, Jeffrey, Elizabeth Brumfiel and Mary Hodge
1996 Developmental implications of earlier dates for early Aztec in the Basin of Mexico. *Ancient Mesoamerica*, Vol. 7 (2): 217–230.
Pasztory, Esther
1988 A Reinterpretation of Teotihuacan and Its Mural Painting Tradition. *Feathered Serpents and Flowering Trees: Reconstructing the Murals of Teotihuacan,* edited by Kathleen Berrin, pp. 45–77. The Fine Arts Museum of San Francisco & University of Washington Press, Seattle.
Piña Chán, Román
1967 Un complejo Coyotlatelco en Coyoacán, México, D.F. *Anales de Antropología*, Un complejo coyotlatelco en Coyoacan, México, D.F. Vol. 4 (1): 141–160.
1975 *El Estado de México antes de la Conquista*. Instituto de Investigaciones Históricas, Universidad Nacional Autónoma de México, Mexico City
1990 Comentarios en torno al período Epiclásico. *Mesomérica y el norte de México, siglos IX-II*, coordinated

by Federica Sodi Miranda, pp. 11–13. Instituto Nacional de Antropología e Historia, Mexico City.

Rashidian, Elnaz

2021 The resilience concept in Archaeology; a critical consideration. *Academia Letters*. DOI: 10.20935/al362 [accessed May 15, 2024].

Rattray, Evelyn

1966 An Archaeological and Stylistic Study of Coyotlatelco Pottery. *Mesoamerican Notes*, No. 7–8: 87–211.

1972 El complejo cultural Coyotlatelco. Teotihuacán. *Teotihuacán, XI Mesa Redonda*, pp. 201–209. Sociedad Mexicana de Antropología, Mexico City.

1991 Fechamientos por radiocarbono en Teotihuacan. *Arqueología*, Núm. 6: 3–18.

Redman, Charles

2005 Resilience Theory in Archaeology. *American Anthropologist,* Vol. 107 (1): 70–77.

Reynoso, Jaime Irving

2013 Manuel Gamio y las bases de la política indigenista en México. *Andamios*, Vol. 10 (22): 333–355.

Romero Contreras, Alejandro Tonatiuh

2001 Visiones sobre el temazcal mesoamericano: un elemento cultural polifacético. *Ciencia Ergo Sum*, Vol. 8 (2): 133–144.

Sahagún, Fray Bernardino de

1981 *El México Antiguo (Selección y reordenación de la Historia General de las Cosas la Nueva España de Fray Bernardino de Sahagún y de los informantes indígenas)*. Biblioteca Ayacucho, Caracas.

Sanders, William T., Jeffrey R. Parsons and Robert S. Santley

1979 *The Basin of Mexico: Ecological Processes in the Evolution of a Civilization*. Academic Press, New York.

Séjourné, Laurette

1966 *Arqueología de Teotihuacán: la cerámica*. Fondo de Cultura Económica, Mexico City.

Solar Valverde, Laura (ed)

2006 *El fenómeno Coyotlatelco en el centro de México: tiempo, espacio y significado*. Consejo Nacional para la Cultura y las Artes & Instituto Nacional de Antropología e Historia & Coordinación Nacional de Arqueología, Mexico City.

Storey, Rebecca

1992 *Life and Death in the Ancient City of Teotihuacan: A Modern Paleodemographic Synthesis*. Alabama University Press, Tuscaloosa.

Sugiyama, Saburo

1993 Worldview Materialized in Teotihuacan, Mexico. *Latin American Antiquity*, Vol. 4 (2): 103–129.

Tainter, Joseph

2016 Why Collapse is so Difficult to Understand. *Beyond collapse: archaeological perspectives on resilience, revitalization, and transformation in complex societies*, edited by Ronald K. Faulseit, pp. 48–61. Southern Illinois University Press, Carbondale.

Tainter, Joseph and Temis Taylor

2014 Complexity, problem-solving, sustainability and resilience. *Building Research and Information,* Vol. 42 (2): 166–181.

Torras Freixa, Maria

2019 La construcción de una ciudad antigua en el Centro de México: planificación urbana y transformación social en Teotihuacan (1-250 d.C.). Doctoral thesis. Universitat de Barcelona, Barcelona.

Vaillant, George

1932 Stratigraphical Research in Central Mexico. *Proceedings of the National Academy of Sciences*, Vol. 18 (7): 487–490.

Ward, Thomas

2011 Alva Ixtlilxochitl, Civilization, and the Quest for Coevalness. *Studies in American Indian Literatures,* Vol. 23 (1): 96–125, 142.

Webb, Malcolm

1978 The significance of the "Epiclassic" Period in Mesoamerican Archaeology. *Cultural Continuity in Mesoamerica*, edited by Lewis Browman, pp. 155–178, Mouton Publishers, The Hague.

Yoffee, Norman and George Cowgill

1988 *The Collapse of Ancient States and Civilizations*. Arizona University Press, Tucson.

# Chapter 3
# Diverse Approaches to the post-Teotihuacan World: The Epiclassic in the Toluca Valley, Central Mexican Highlands

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## An approach to the Epiclassic in Central Mexico

As is well known in Mexican archaeology, it was Jiménez Moreno who coined the term "Epiclassic" in 1959 (1979) to denote that the end of Teotihuacan's hegemony and the beginning of the Postclassic world were not simply defined by drastic transformations in the political, social and cultural spheres. Nevertheless, the collapse of the pan-Mesoamerican state caused ruptures and transformations in certain cultural and stylistic canons that had survived under its hegemony for centuries. The previous orders in the political, social, and cultural spheres were disarticulated, leading to the development of new patterns that preserved certain elements of the Teotihuacan legacy. The end of the Teotihuacan world did not necessarily mark the end of all that had previously prevailed. Nor did the Epiclassic imply the emergence of a completely new social, cultural and ideological order. Rather, the Epiclassic is understood as a transitional period in which the processes of decay and consolidation were complexly interwoven.

It should be noted that long before Jiménez Moreno's proposal, during the first third of the last century, archaeologists such as Gamio (1912) and Vaillant (1938) had already considered that the decline of the great state of Teotihuacan did not imply a categorical break leading to the configuration of the Postclassic, but a complex process that remains unclear. During the three centuries during which the consolidation of the Postclassic took place, the Pan-Mesoamerican state, which for centuries had controlled a large part of the Mexican territory, gradually disintegrated and resisted the imminent collapse. At the same time, another world was emerging, one wherein a powerful force became the protagonist of the new political-cultural scenario of Mesoamerica. Thus, in order to give greater relevance to this brief but complex historical period, archaeologists proposed what they termed the Proto-Postclassic. Since then, more than six decades have passed, during which numerous seminars, roundtables, academic meetings, and conferences have brought together numerous scholars who have discussed a wide variety of topics related to this transitional period, such as its definitions, characterisations, origins, and meanings, to name just a few. A large number of essays, articles, and books have also been published, from different theoretical approaches, on various topics pertaining to the Epiclassic. Of course, through intense discussions, debates and dialogues, some aspects have been clarified, whereas new questions, data and interpretations emerge, as in this roundtable.

One of the central topics of the Epiclassic is the problem of population dynamics caused by the decline of Teotihuacan. It was to be expected that the destabilisation and subsequent disintegration of the Teotihuacan macrosystem must have had profound effects on the Mesoamerican societies that remained under its dominion for centuries.

In this regard, and in order to fully understand the intricate web of historical upheavals of the Epiclassic period, we must approach it through varied scales of analyses and perspectives according to each specific case (Chapman 1996). In some regions, such as the Valley of Mexico, the direct impact of the decline of Teotihuacan is manifested in the discontinuity and deconfiguration of settlement patterns, while in other areas the same phenomenon is expressed in very different ways "*according to their role and position within the macrosystem and the nature of their links with the metropolis, but also according to the degree of internal development of each region*" (Sugiura 2006: 128, translation and emphasis by the authors).

However, its effects and consequences cannot be summarised in just a few words, nor can they be expressed vaguely (Nalda 2002; Solar Valverde 2006; Sugiura 2002, 2006). One example is the Toluca Valley, a neighbour of the Mexico Basin that was always part of the internal "hinterland" of the Teotihuacan system and played an important role as a region that supplied the megalopolis with staple grains and other agroforestry products. In the Toluca Valley, the end of the hegemonic state did not, as might be expected,

cause a discontinuity in the settlement pattern, but on the contrary, there was a tendency toward continuity from the Classic to the Epiclassic. The opposite seems to be the case in the Tula-Hidalgo region, which is also considered a "hinterland" of Teotihuacan, where a marked discontinuity in population distribution is evident.

On the other hand, the so-called "city-states" of Cacaxtla or Xochicalco, which have been used to represent the post-Teotihuacan period, cannot be generalised as typical, for to all regions. Rather, a more precise definition or characterisation of this term and its historical implications is required. In this sense, the identification of exogenous materials in the region could be used to understand the interregional relations between states that developed toward the end of the Classic and had an impact on the current instability. In this regard, and subject to further study, it could be summarised that in the Epiclassic the complexity and extent of long-distance exchange was more limited than in the Late-Terminal Classic. It is likely that each regional state, with its more circumscribed sphere of influence, interacted more closely with adjacent regions.

Another relevant topic of the Epiclassic in the Central Highlands of Mexico concerns Coyotlatelco ceramics, which are considered the indicator *par excellence* of the post-Teotihuacan period, to the extent that they are often used as synonymic horizon markers in Mesoamerican archaeology. In a scenario in which several complex processes interact, the appearance and sudden diffusion of ceramics of this complex allows us to clarify some central aspects of the Epiclassic (Sugiura1996, 2001, 2005b). Following Tozzer's pioneering study published in 1921, many archaeologists reported the presence of this pottery at several sites in the central highlands of Mexico. Perhaps Rattray was the first archaeologist to follow Jiménez Moreno's suggestion and publish the first detailed work on Coyotlatelco ceramics in 1966, based on her excavations at the Cerro Tenayo site in Azcapotzalco. Since then, archaeologists such as Acosta (1972), Diehl and Berlo (1989), and Solar Valverde (2006), among many others, have addressed the problems of the Coyotlatelco and Epiclassic in their publications. These have led to arduous and heated discussions from the most elementary aspects such as its origin or origins, its chronology, its fundamental characterisation, its spatial distribution, its regional diversity, as well as its political and ideological implications.

There have been several proposals about the origin of the Coyotlatelco complex (Piña Chán 1967; Rattray 1966; Sugiura 2005a, 2013; Solar Valverde 2006). To date, however, no particular region has been recognised as its definite cradle and the general consensus is that the Coyotlatelco was a cohesive product of several regions, each claiming the right to its own production. One could infer that the regional variations suggest that the Coyotlatelco phenomenon actually reflects a shared state of fragmentation, a term that does not necessarily imply instability or political confrontation. Furthermore, given that the search for the origin or origins of any issue or problem is potentially fruitless, and lacking inherent efficacy, it may not be worthwhile to address this issue.

Regarding the distribution of the Coyotlatelco, there is a consensus that it includes a large area of the Central Plateau of Mexico and that a greater presence coincides with the regions where the ceramic materials of the Teotihuacan legacy have been identified, such as the region of Hidalgo, the Valley of Toluca, west of the Valley of Bravo and the Basin of Mexico. On the contrary, the Epiclassic in the Puebla-Tlaxcala region has been characterised by the scarcity of Coyotlatelco (Lombardo *et al.* 1986) and has even been considered as the possible eastern limit of its distribution (Parsons 2006; Salomón 2006; Serra Puche 1998). Perhaps the phenomenon observed in this region could be closely related to the eruptive event of the Popocatepetl volcano or to the accelerated pace of urbanisation that endured at post-Teotihuacan settlements (Jesús Carlos Lazcano, pers. comm. 2023). Moving south from the Basin of Mexico, into Morelos, it has been pointed out that, with the exception of the eastern region (Canto 2006; Hirth and Angulo 1981), it was not part of the Coyotlatelco sphere, especially the site of Xochicalco (Cyphers 1980; Garza Tarazona and González Crespo 2007). It should be noted, however, that regional diversity during the Epiclassic in central Mexico does not seem to be as evident as that of the Early and Middle Postclassic, which is characterised by a very clear regionalism (Sugiura 2005b, 2022).

Related to the issue of Coyotlatelco distribution, there has been a growing interest in studying the diversity of decorative motifs in order to identify their regional variations. Considerable progress has been made in this area, particularly in the Basin of Mexico and the Toluca Valley (Crider *et al.* 2007; Pérez Ortíz de Montellano 2011, 2017; Pérez Ortíz de Montellano *et al.* 2019; Rattray 1966; Stoner *et al.* 2021). However, the analyses of the decorative motifs and the compositional features observed in the ceramic specimens proves to be extremely complex, since in most cases we are working with fragments instead of complete vessels and these are characterised by a remarkable variation. In any case, further analytical studies are needed to make progress on this front. Perhaps the application of innovative technologies with greater analytical capacity will shed light on information that remains hidden to the eyes of archaeologists.

The wide distribution of Coyotlatelco, which covered most of central Mexico, especially in places with Teotihuacan presence or influence, was replaced by a regional diversity of ceramic materials during the Postclassic period. It is recognised that in this period there was a sharp break, especially in the forms and motifs of vessels, which had endured during the Epiclassic, even after the decline of the hegemonic state of Teotihuacan. Indeed, in the Postclassic, the purely Teotihuacan motifs such as snails, shells, starfish, four-petalled flowers, the reptile eye in figurines, or incense burners and braziers, elements that had prevailed in the materials of Coyotlatelco, were no longer used. All of the above could confirm the idea that the Epiclassic heralds, signalled the end of the Teotihuacan legacy on the one hand, as well as the preamble to the Postclassic on the other, at a time that led to the regional consolidation of different ethno-linguistic groups (Sugiura 1998, 2005b).

## The Epiclassic of the Toluca Valley: Settlement patterns

As already mentioned, the fall of the great pan-Mesoamerican state provoked waves of displacement of some sectors of the population from the metropolis itself. The evidence of this can be seen in the significant changes in the configuration of the settlement patterns of the Basin of Mexico. The effects of this great event, as already mentioned, were manifested in different ways in the surrounding regions. In the case of the city of Teotihuacan itself, the phenomenon of decline is expressed in a radical way, although we are still far from

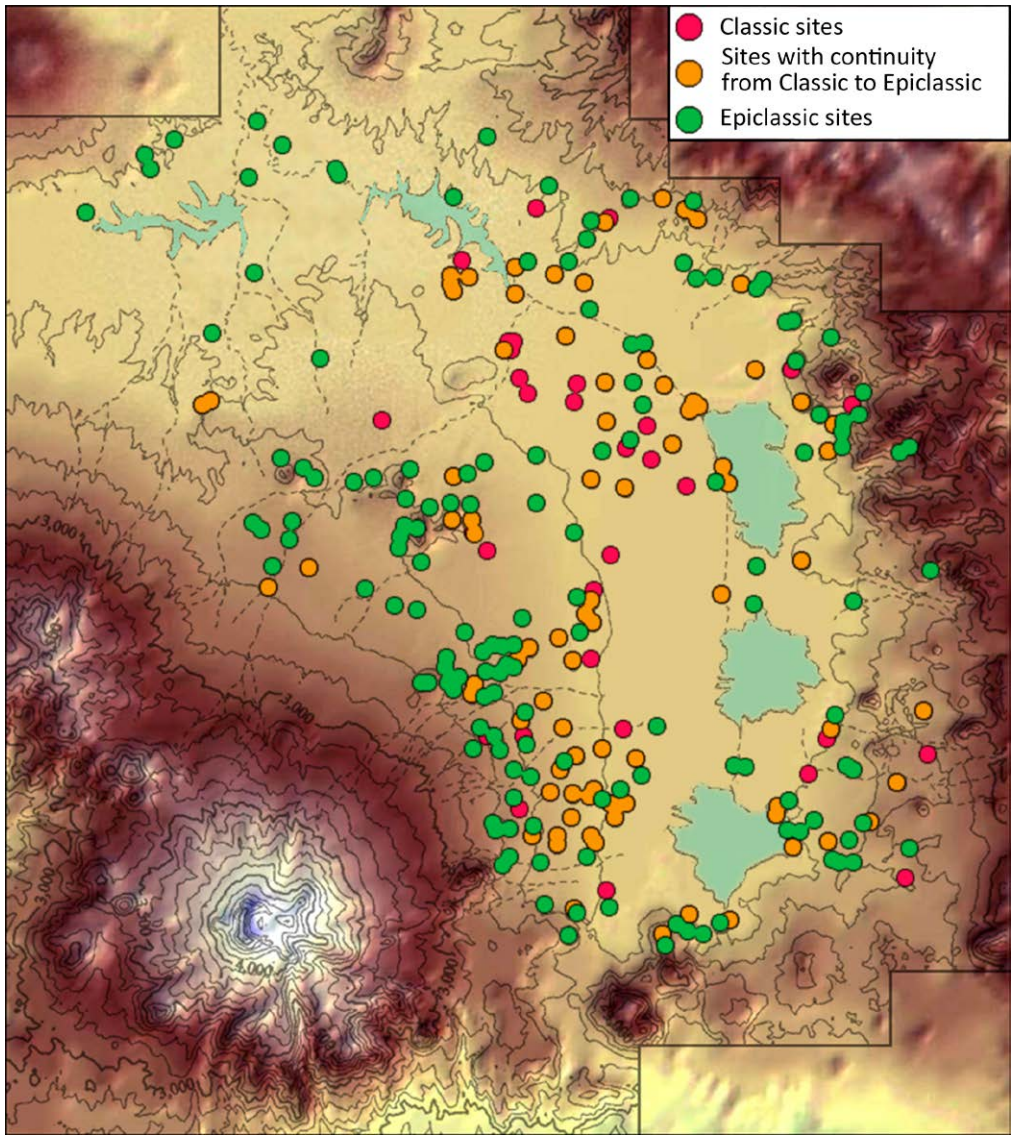


**Figure 3.1:** Distribution of Classic and Epiclassic sites in the Toluca Valley that reflect unbroken settlement patterns (map by Yoko Sugiura, Proyecto Arqueológico del valle de Toluca 1979).

clarifying what happened in the so-called "Oxtotipac" phase, a short post-Teotihuacan phase in the Basin of Mexico (Clayton 2021; William Sanders, pers. comm. 2004).

In contrast to what happened in the Basin of Mexico and other nearby areas, the Toluca Valley did not show a radical change in settlement patterns, maintaining its basic rural character despite the presence of several regional centres (Sugiura 1998, 2005a, 2006, 2013). In fact, there was an apparent continuity in the occupation of Late-to-Terminal Classic settlements with those of the Early Epiclassic (Figure 3.1), as manifested in several regional centres such as Ojo de Agua-Tenango del Valle (Vargas 1978), Santa Cruz Atizapan (Sugiura 2009) and Santa Cruz Azcapotzaltongo (González de la Vara 1998; Nieto Hernández 1998; Sugiura 1998), among others.

In fact, there is no clear cut threshold that can be attributed to before or after the end of Teotihuacan: the centres located on the aluvial plain continued to function even after the decline of the great city. Moreover, most of the Late-to-Terminal Classic sites were located in the lower part of the Upper Lerma Basin. Accordingly, the panorama that prevailed in the Toluca Valley region does not coincide with the widespread idea of a post-Teotihuacan scenario characterised by instability and political conflict (González de la Vara 1998). However, it is worth mentioning those Epiclassic sites which exhibit evidence of Postclassic materials, especially of the Matlatzinca tradition but without the presence of Classic ceramics, as in the case of Teotenango (Piña Chán 1975). It is proposed that the latter corresponds to a late Epiclassic phase, characterised by location on high altitude sectors of the Valley of Toluca. Given the

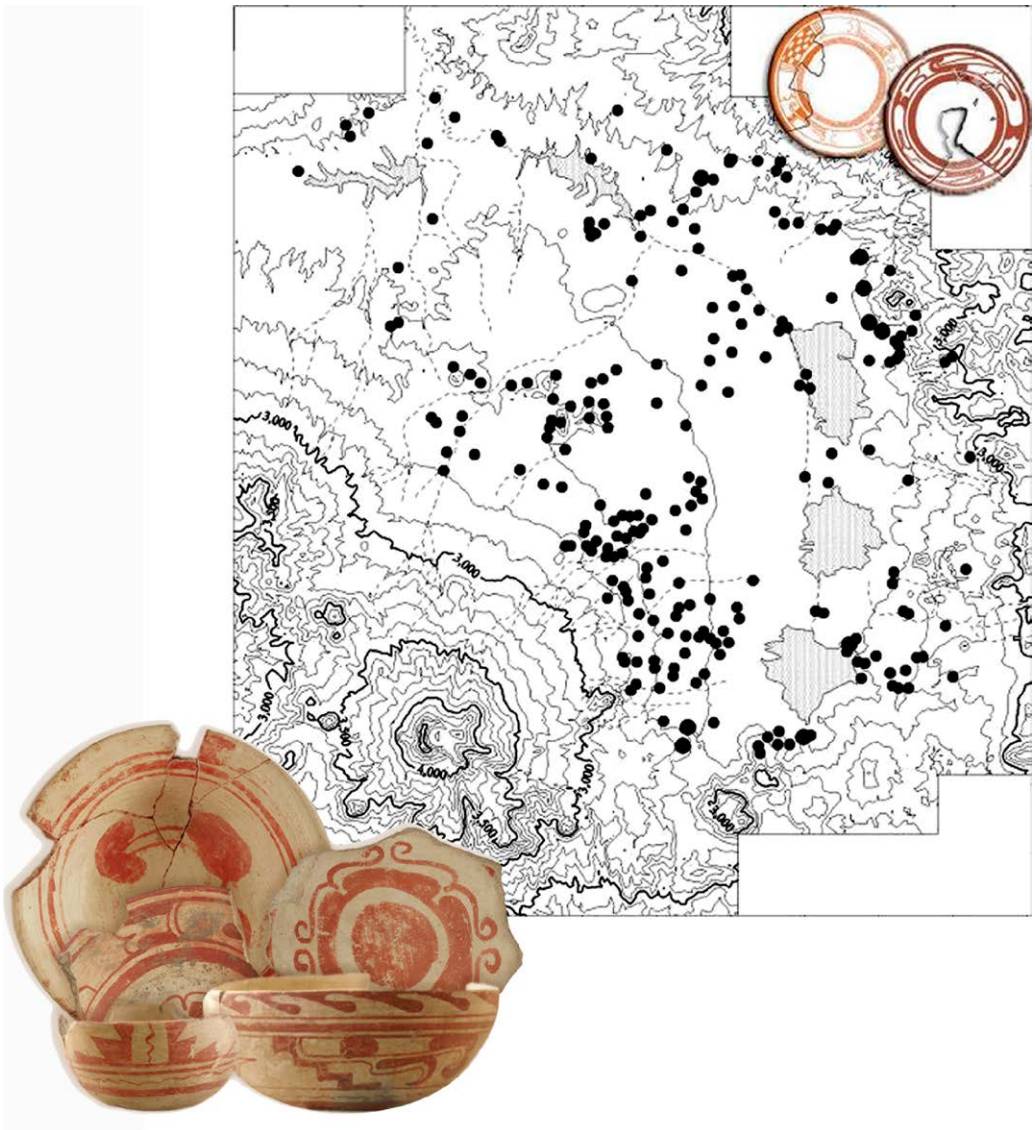


**Figure 3.2:** Population growth and the presence of Coyotlatelco ceramics in the Toluca Valley (map by Yoko Sugiura, Proyecto Arqueológico del valle de Toluca 1979).

topographic conditions, it seems likely that the main reason for their foundation was related to defensive factors, perhaps because they were founded in unstable political situations (Sugiura 2005a, 2006). On the basis of data from surface surveys from the Toluca Valley (González de la Vara 1999; Sugiura 2005a), it is feasible to propose that the widespread idea of political fragmentation and its concomitant consequence of instability, which has been said to have prevailed during the Epiclassic, must be a much more complex reality that may vary depending on the region. On the other hand, it is important to stress that Epiclassic sites associated with Postclassic ceramic materials are predominantly located in areas of higher topographic elevation, as is the case of Teotenango.

Regarding the emergence and development of the concept of the city-state, it has been suggested that it is one of the causes of socio-political instability in the post-Teotihuacan period (Litvak 1972). However, this suggestion should be taken with some caution, since the Epiclassic phenomenon and its significance can vary greatly from region to region. In the case of the Toluca Valley, for example, the scale of the provincial centres that existed during the early Epiclassic did not reach the level of the centralised "city-state", in addition to the fact that the complexity within these, as well as their sphere of dominance as provincial centres, was limited. Perhaps this category of settlements could be applied to the Late Epiclassic, when centres such as the so-called Northern System of Teotenango were founded.

## The Epiclassic of the Toluca Valley: Coyotlatelco as the first manifestation of regional splendour

It could be said that the splendour of the Toluca Valley, whose history began with the appearance of some scattered villages about three millennia ago, occurred during the Epiclassic. However, compared to the neighbouring Valley of Mexico, the process of social and political complexity in the Toluca region was slower. Surface survey data from the Alto Lerma region suggest that after a marked trend of population decline from the Late Formative to the Early Classic, the number of settlements increased from the Late-to-Terminal Classic onward. In the subsequent post-Teotihuacan period, the number of sites more than doubled (Figure 3.2).

Because the extent of the Toluca Valley is much smaller than the adjacent basin, the estimated density of sites belonging to the Epiclassic appears to be much higher in the upper Lerma than in the Valley of Mexico (Sugiura 2005a; Sugiura and Nieto 2016). It should be noted that, although the region retained a rural character, a number of provincial centres—without defining these as "city-states"—developed near the Lerma River and in the southern area of the Toluca Valley, connecting with other southern regions such as Ocuilan, Malinalco, and Xochicalco, among others.

As in the neighbouring Basin of Mexico, the archaeological indicator par excellence of the Epiclassic in the Toluca Valley is the presence of Coyotlatelco pottery, which occurs throughout almost the entire Toluca region (Sugiura 2005a) (Figure 3.2). It should be noted that in the Valley of Toluca this ceramic complex exhibits distinctive characteristics. The ceramics are characterised by materials that combine elements attributable to both the Classic heritage and the Coyotlatelco tradition, similar to that of the Oxtotipac phase from the neighbouring Valley of Mexico. This suggests that the Coyotlatelco did not originate in the Valley, but was a tradition introduced into the Toluca region, probably from the Serranía de Guadalupe area in the western part of the Basin of Mexico. Later, through internal processes, it was consolidated as a diagnostic element of the transitional period in the Toluca region.

However, to corroborate the origin of Coyotlatelco ceramics in the Toluca Valley, we performed neutron activation analysis on a sample of 175 fragments of this pottery at the University of Missouri Research Reactor (MURR) laboratory (Stoner and Glascock 2013, 2014; Stoner *et al.* 2021). The results indicate that most of the production of these ceramics, with the exception of a small number of materials of possible foreign origin, was locally produced. Furthermore, the results suggest that there was not only one centre of production and distribution, but several local centres with low production volumes that distributed Coyotlatelco to the interior of the Toluca Valley, as was also observed in the Valley of Mexico.

Another relevant aspect for determining whether a distinct Toluca style existed concerns the decorative motifs of the pottery. Despite important efforts in the analysis of the motifs (Pérez Ortíz de Montellano 2017; Pérez Ortíz de Montellano *et al.* 2019), the subject is quite problematic, since in addition to the complexity and diversity of the decorative motifs, the studies are based only on fragments of vessels with few complete specimens. Although progress has been gradual, we have been able to identify some motifs that are apparently exclusive to the region and others that are shared with other regions of the Coyotlatelco sphere, especially with materials from the Guadalupe Mountains of the Valley of Mexico (Rattray 1966). Nevertheless, we consider it necessary to have some technological alternatives capable of responding to the particular typological and stylistic difficulties exhibited by the assemblage.

**Interactions: The Toluca Valley and its connections with other regions in the Late Classic and Epiclassic periods**

Presumably, the presence and development of regional centres in the Toluca region are related, on the one hand, to its proximity to the neighbouring Basin of Mexico, especially to the Serranía de Guadalupe region, which seems to have played an important role since the Late Classic and during the Epiclassic (Davies 1977; Sander *et al.* 1979). On the other hand, its location at the beginning of the Lerma-Chapala-Santiago basin, where the great Lerma River, the most important waterway in Mexico, originates and flows. Through it, a great number of goods, peoples and ideas circulated among the Mesoamerican regions, including the routes of interaction between the Valley of Toluca and the southern regions.

Certainly, throughout history, the Upper Lerma Basin has been considered a strategic region through which goods of different origins circulated. However, it is also important to consider that the extent and intensity of the interactions between this region and others varied according to political, economic and social circumstances. The materials recovered in the archaeological explorations suggest that the greatest diversity of allochthonous products entering the Toluca Valley occurred during the Late Classic period, when the region was under the "direct" control of Teotihuacan. It is possible to conclude that the establishment of extensive exchange networks of the Toluca Valley with other Mesoamerican regions was due to the connection facilitated by the system that Teotihuacan had interwoven through large parts of the Mesoamerican territory.

Before the demise of Teotihuacan world, objects made of metamorphic rocks, probably from the region of the eastern basin of Puebla, entered in the Alto Lerma region (Oralia Cabrera, pers. comm. 2000), in the form of small Mezcala-style figurines, as well as raw materials such as slate, probably from the region of San Miguel Ixtapan, in the State of Mexico. Through neutron activation analysis we have identified six sources of obsidian. The main deposits include Ucareo-Zinapecuaro, Michoacan, Sierra de las Navajas, Hidalgo and Otumba, State of Mexico (Jaimes Vences 2011; Kabata 2010; Sugiura *et al.* 2018). Another equally important material for the production of projectile points is chert and rhyolite, which are found in the southern region of the State of Mexico. Slate, used for ritual purposes, was obtained from the region of San Miguel Ixtapan, State of Mexico, and mica was probably introduced from the Mixteca region.

For the ceramics, X-ray fluorescence (XRF) and X-ray diffraction (XRD) analyses were performed to determine the origin of some foreign materials. For example, in the case of the abundant Mica group, we identified its probable origin in the Mixteca Baja and the Granular Rosa group was probably introduced from the Amatzinac River, Morelos. There were cases where it was not possible to identify their origin, such as the diluted orange slip and the foreign red slip. Of course, we include the iconic Thin Orange from Teotihuacan (Jaimes *et al.* 2021). Simply put, the interactions between the Toluca Valley and other regions were very strong, resulting in the possibility of obtaining different kinds of raw materials and finished goods that were used for daily activities and for specific ones during special celebrations.

With the onset of the Epiclassic period, this panorama of intense interregional relations is drastically reduced. To date, only a few foreign materials have been identified in the Upper Lerma Basin that continued to circulate. For example, the obsidian from Ucareo-Zinapecuaro represented an overwhelming majority that entered this region, while sources such as the Sierra de las Navajas, Hidalgo, ceased to enter during the Epiclassic. As for the obsidian from Otumba, it seems to have entered only sporadically (Sugiura *et al.* 2018). The archaeological data obtained from the lacustrine sites of the Chignahuapan and Chimaliapan marshes—on the Upper Lerma—suggest that the final destination of obsidian arriving from the Michoacán region was Santa Cruz Atizapan, a provincial centre located on the eastern edge of the Chignahuapan marshlands, where the Great Lerma River, which flows into Lake Chapala, begins. This centre may have functioned as a point of redistribution of obsidian not only to the southern region of the Toluca Valley, but also to the southern region of the Central Mexican Highlands. At the southeastern corner of the Toluca Valley is a narrow corridor leading to the great centre of Xochicalco, where the presence of Ucareo-Zinapecuaro obsidian has been identified within Epiclassic contexts (Hirth *et al.* 2006). Aside from obsidian, the only foreign ceramic material introduced into the Toluca Valley is the so-called Thick Orange slip (Sugiura and Nieto 1987; Sugiura *et al.* 2019; Sugiura *et al.* 2021; Vargas 1975), which probably originated in the area of Tonatico and Ixtapan de la Sal, State of Mexico (Figure 3.3). It has been proposed that these ceramics were used as containers to transport salt from these areas, which have been known for their salt production since Precolumbian times. It is worth mentioning that this pottery has also been identified at Xochicalco (Hirth and Cyphers 1988), which suggests that its distribution covered a vast area that included both the Toluca Valley, the southern area of the State of Mexico as far as Xochicalco and the western region of Morelos.

One of the main causes that led to this panorama of interactions could be attributed, in part, to the


**Figure 3.3:** *Ollas* exhibiting thick orange slip (Engobe Naranja Grueso) surface treatment (photographs and drawing Yoko Sugiura, Proyecto Arqueológico del valle de Toluca 1979).

disintegration of the Teotihuacan system that connected vast Mesoamerican regions during the Classic period and to the development of several small "states" with correspondingly reduced spheres of influence in central Mexico, which may have contributed to political instability, as well as to the concomitant contraction of their political domain.

In this new Epiclassic scenario, interactions between the Toluca Valley and Xochicalco were activated, as evidenced by the presence of obsidian from the Ucareo-Zinapecuaro source, which must have been transported along the route linking the centre of Santa Cruz Atizapan with the emblematic site of Morelos. In this context, it is worth mentioning the presence of a red on pale cream flat bottom vase with typical Toluca-Coyotlatelco design at Xochicalco site (Silvia Garza pers. comm. 2010).

A link between the Toluca Valley and Xochicalco is found at Teotenango, specifically in the northern system. The Teotenango Project identified evidence of influence of the powerful centre in Morelos on architectural styles and motifs depicted on stelae (Piña Chán 1975). It is possible that the influence of Xochicalco was limited to a level of stylistic and ideological information, which contrasts with the ceramic materials whose attributes indicate that the Toluca Valley was not part of the same cultural sphere. It is also interesting to note the absence of Xochicalco material culture at Teotenango and Santa Cruz Atizapan. If there were contacts or interactions between both powerful political centres, it would be possible through connecting routes via Tenancingo, and from there crossing the valley of Malinalco to Xochicalco (Jaramillo Luque and Nieto Hernández 2017: 127; Nieto Hernández *et al.* forthcoming). Another alternative may have been the route currently used by pilgrims to Chalma, along which several sites are located throughout the Malinalco Valley; however, it is possible that an alternative route existed, leading to Xochicalco via Ocuilan. Thus, the nature of the alleged influence of Xochicalco in Teotenango, which is often commented on, is still far from understood.

## The Epiclassic: The end of Teotihuacan's cultural legacy

Despite the changes observed in the configuration of the settlement patterns at the end of the Classic, the Epiclassic period did not represent a total break with the world of Teotihuacan. On the contrary, the characteristics of the ceramic materials showed the unmistakable legacy of the cultural tradition of the legendary city, which for centuries maintained its hegemonic status in the vast Mesoamerican region. In the Toluca Valley, elements of the Teotihuacan cultural tradition continued to be present, most notably in Coyotlatelco ceramics which display motifs such as the

**Figure 3.4:** Ceramic specimens showing features of the Teotihuacan tradition (photographs by Yoko Sugiura, Proyecto Arqueológico del valle de Toluca 1979).

four-petalled flower and the reptile eye motif. Finishing techniques are also noteworthy, as vessels forms, such as theatre-type censers, and braziers decorated with ornaments reminiscent of the Teotihuacan tradition.

As mentioned earlier, it is worth reiterating that the decorative motifs on Coyotlatelco ceramics (Pérez Ortíz de Montellano 2017; Pérez Ortíz de Montellano *et al.* 2019) are an important aspect that should be recognised in order to better understand the problem and the enormous complexity of the Coyotlatelco phenomenon. In general, some motifs seem to be new and do not share elements of Classic Teotihuacan, while others reveal the persistence of formal canons of the great city. In the case of the Toluca Valley, it is striking at first glance that some ceramics show undeniable similarities with the motifs outlined by Rattray (1966) in the materials from Cerro Tenayo, Azcapotzalco, while others share elements with those widely identified in the Central Highlands. It is worth emphasizing, however, that some motifs in the Coyotlatelco ceramics of the Toluca Valley have been identified as exclusive to that area. These include the decoration symbolising the "four directions" or the so-called "mushrooms" identified in the Toluca Valley Project, which may be related to Mesoamerican cosmovision. These decorations are painted in red and can appear in different parts of the vessel, either on the top or on the back. Studies of materials of the Toluca Valley consider the "mushroom" motif as one of the most representative of the region. Tripod vessels, probably made using the same mould, have been found bearing the same motif painted on their bases. On the other hand, it is worth noting that a Coyotlatelco Red-on-buff vessel decorated with a "mushroom" motif found at Xochicalco is identical to examples recovered from Epiclassic contexts at the site of Santa Cruz Atizapan. Although it seems that this vessel was imported to Xochicalco through an exchange with Santa Cruz Atizapan, as is suspected with the obsidian from Zinapecuaro, it would not be possible to confirm this until we have a more conclusive analysis.

The continuity from Classic to Epiclassic can also be seen in the style of figures wearing headdresses and clothing similar to those of Teotihuacan, as well as in the anthropomorphic decorations and motifs of shells, snails or starfish that adorn the incense burners and braziers of the great city. It could be concluded that the use of these elements would imply that the ideological charge of the great Mesoamerican state still prevailed in Epiclassic thought (Figure 3.4).

## Reflections on the Epiclassic: Its implications in the Central Mexican Highlands

Based on what has been discussed in this paper, the implications of the Epiclassic could be summarised as follows:

The Epiclassic, like any historical transitional stage, refers to a period in which various old and new trends are complexly interwoven. Although the Epiclassic period in

the Toluca Valley was relatively short, it is nevertheless possible to propose—from the perspective of settlement patterns—a division into two phases: an early phase and a later one. Even though the Coyotlatelco ceramics were found in large parts of the Central Highlands, not all the territories of this region belonged to the same sphere, rather, as in the case of Xochicalco and the western region of Morelos, these areas witnessed the appearance of distinct political-cultural entities. However, this regionalism is less pronounced in comparison to the later period. In fact, at the beginning of the Postclassic period, ethnic-linguistic diversity was consolidated, as was the case in the Toluca Valley, where the three groups derived from Otomí roots separated: the Otomí, the Mazahua, and the Matlatzinca. Today, the available evidence suggest that the Epiclassic represents the final stage preceding the consolidation of multiethnic processes in the Toluca region.

Likewise, it is important to emphasize that the Epiclassic did not escape from the recognised cultural and ideological canons of the previous period but maintained a certain coexistence with the Teotihuacan world. This characteristic, which distinguishes it as a transitional stage, disappears at the beginning of the Postclassic, when the most representative signs of Teotihuacan culture cease to be useful and, in their place, new codes appear that serve to reaffirm this new identity. Thus, the rupture between the Epiclassic and Postclassic periods is more pronounced than in the Classic.

**References cited:**


Acosta, Jorge R.
1972 El Epiclásico de Teotihuacan. *Teotihuacan, XI Mesa Redonda de la Sociedad Mexicana de Antropología*, pp. 149–156.

Canto, Giselle
2006 La cerámica del Epiclásico de Morelos. *El fenómeno Coyotlatelco en el centro de México: tiempo, espacio y significado*, edited by Laura Solar Valverde, pp. 361–374. Consejo Nacional para la Cultura y las Artes & Instituto Nacional de Antropología e Historia & Coordinación Nacional de Arqueología, Mexico City.

Chapman, R. W.
1996 Problems on Scale in the Emergence of Complexity. *Emergent Complexity: The Evolution of Intermediate Societies*, edited by Jeanne E. Arnold, pp. 35–49. Archaeological Series 9. International Monographs in Prehistory, Ann Arbor.

Clayton, Sarah
2021 Coalescence at Chicoloapan, Mexico. Migration and the Making of a Post-Collapse Community. *Mobility and Migration in Ancient Mesoamerican Cities*, edited by Marie-Charlotte Arnauld, Christopher Beekman, and Grégory Pereira, pp. 189–207. University Press of Colorado, Boulder.

Crider, Destiny, Deborah L. Nichols, Hector Neff and Michael D. Glascock
2007 In the Aftermath of Teotihuacan: Epiclassic Pottery Production and Distribution in the Teotihuacan Valley, Mexico. *Latin American Antiquity*, Vol. 18 (2): 123–143.

Cyphers, Ann
1980 Una secuencia preliminar para el valle de Xochicalco. *Anales de Antropología*, Núm. 17: 33–52.

Davies, Nigel
1977 *The Toltecs: until the fall of Tula*. University of Oklahoma Press, Norman.

Diehl, Richard A. and Catherine C. Berlo (eds)
1989 *Mesoamerica after the Decline of Teotihuacan: A.D. 700–900*. Dumbarton Oaks Research Library and Collection, Washington, D.C.

Gamio, Manuel
1912 Arqueología de Azcapotzalco, D.F. México. *Cuadernos Americanos*, Núm. 18: 180–187.

Garza Tarazona, Silvia and Norberto González Crespo
2007 La cerámica de Xochicalco. *La producción alfarera en el México Antiguo*, *Vol. II*, edited by Beatriz Merino and Ángel García Cook, pp. 125–160. Instituto Nacional de Antropología e Historia, Mexico City.

González de la Vara, Fernán
1998 Historia prehispánica del valle de Toluca. *Historia General del Estado de México, t. 1: Geografía y Arqueología*, coordinated by Yoko Sugiura, pp. 163–205. Gobierno del Estado de México & El Colegio Mexiquense A.C., Mexico City.
1999 *El valle de Toluca hasta la caída de Teotihuacan 1200 a.C.-750 d.C.: Análisis de dos procesos de desarrollo locacional*. Serie Arqueológica 380. Instituto Nacional de Antropología e Historia, Mexico City.

Hirth, Kenneth G. and Jorge Angulo
1981 Early State Expansion in Central México: Teotihuacan in Morelos. *Journal of Field Archaeology*, Vol. 8 (2): 135–150.

Hirth, Kenneth G. and Ann Cyphers
1988 *Tiempo y asentamiento en Xochicalco.* Serie Monografía no.1. Instituto de Investigaciones Antropológicas, Universidad Nacional Autónoma de México, Mexico City.

Hirth, Kenneth G., Andrew Bradford and Jeffrey Flenniken
2006 Technological Analysis of Xochicalco Obsidian Blade Production. *Obsidian Craft Production in Ancient Central Mexico*, edited by Kenneth G. Hirth, pp. 62–95. The University of Utah Press, Salt Lake City.

Jaimes Vences, Gustavo
2011 *La industria de obsidiana de San Mateo Atenco y su relación con el entorno lacustre durante el Clásico Tardío y el Epiclásico*. Centro Universitario, Universidad Autónoma del Estado de México, Tenancingo.

Jaimes, Gustavo, Yoko Sugiura, José G. Pérez, Guillermo Acosta and Rosa A. Nava
2021 Bienes de otras regiones introducidos al valle de Toluca: la cerámica foránea de Santa Cruz Atizapán vista a través de análisis por activación de neutrones (AAN), fluorescencia de rayos X portátil (FRXP) y difracción de rayos X (DRX). *El estudio de la cerámica cotidiana del valle de Toluca desde una perspectiva arqueométrica*, edited by Yoko Sugiura, Gustavo Jaimes, María C. Pérez and Rubén Nieto. pp. 51–70. El Colegio Mexiquense, A.C., Zinacantepec.

Jaramillo Luque, Ricardo and Rubén Nieto Hernández
2017 Valle de Malinalco. *Historia General Ilustrada del Estado de México*, *tomo 1, Geografía y Arqueología*, edited by Yoko Sugiura, pp. 113–133. Colección Mayor, Biblioteca Mexiquense del Bicentenario, Gobierno del Estado de México & El Colegio Mexiquense A.C., Zinacantepec.

Jiménez Moreno, Wigberto
1979 [1959] Síntesis de la Historia Pretolteca de Mesoamérica. *Esplendor del México Antiguo vol. 2*, coordinated by Carmen Cook and Raúl Noriega, pp. 1019–1108. Centro de Investigaciones Antropológicas de México, Editorial del Valle de México, Mexico City.

Kabata, Shigeru
2010 La dinámica regional entre el valle de Toluca y la áreas circundantes: Intercambio antes y después de la caída de Teotihuacan. Doctoral thesis. Universidad Nacional Autónoma de México, Mexico City.

Litvak, Jaime
1972 Las relaciones externas de Xochicalco: una evaluación de su posible significado. *Anales de Antropología*, Núm. 9: 53–76.

Lombardo, Sonia, Diana López de Molina, Daniel Molina Feal, Carolyn Baus de Czitrom and Oscar Polaco
1986 *Cacaxtla, el lugar donde muere la lluvia en la tierra.* Gobierno del Estado de Tlaxcala & Instituto Nacional de Antropología e Historia & Consejo Tlaxcalteca de Cultura, Mexico City.

Nalda Hernández, Enrique
2002 El Epiclásico: una noción restrictiva. *Arqueología mexicana, historia y esencia siglo XX. Reconocimiento al Dr. Román Piña Chan*, *México*, edited by Enrique Nalda, pp. 199–208. Instituto Nacional de Antropología e Historia, Mexico City.

Nieto Hernández, Rubén
1998 Excavaciones en el valle de Toluca. Propuestas sobre su secuencia cultural. Licentiate thesis. Escuela Nacional de Antropología e Historia, Mexico City

Nieto Hernández, Rubén, Jean-François Cuenot, Claudia I. Alvarado León and Juliette Testard
forthcoming Comunicación interregional entre Xochicalco y Teotenango: aportaciones desde la arqueología y el SIG. *Xochicalco y Teotenango (650-1150 d.C.): dos ciudades sobre cerros. Estudio comparativo*, coordinated by Geneviève Lucet and Claudia I. Alvarado León. Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México, Mexico City.

Parsons, R. Jeffrey
2006 A regional Perspective on Coyotlatelco in the Basin of Mexico: Some new thoughts about old data. *El fenómeno Coyotlatelco en el centro de México: tiempo, espacio y significado*, edited by Laura Solar Valverde, pp. 83–96. Consejo Nacional para la Cultura y las Artes & Instituto Nacional de Antropología e Historia & Coordinación Nacional de Arqueología, Mexico City.

Pérez Ortíz de Montellano, María del C.
2011 Reflexiones en torno al estilo decorativo Coyotlatelco: el caso de la cerámica de Santa Cruz Atizapan. Master thesis. Universidad Nacional Autónoma de México, Mexico City.
2017 La cerámica Coyotlatelco en el valle de Toluca: un análisis morfo-funcional y estilístico. Doctoral thesis. Universidad Nacional Autónoma de México, México.

Pérez Ortíz de Montellano, María del C., Héctor Cuevas and Yoko Sugiura
2019 Elaboración de la base de datos para el registro de atributos decorativos de la cerámica Coyotlatelco. *Acercamiento a un sitio lacustre: métodos, técnicas e interpretaciones de un mundo prehispánico en la cuenca del Alto Lerma*, edited by Yoko Sugiura, María del C. Pérez, Elizabeth Zepeda and Gustavo Jaimes, pp. 179–193. Instituto de Investigaciones Antropológicas, Universidad Nacional Autónoma de México, Mexico City.

Piña Chán, Román
1967 Un complejo Coyotlatelco en Coyoacan, México, D.F. *Anales de Antropología*, Vol. 4 (1): 141–160.
1975 *Teotenango. El antiguo lugar de la muralla.* Dirección de Turismo, Gobierno del Estado de México, State of Mexico.

Rattray, Evelyn C.
1966 An Archaeological and Stylistic Study of Coyotlatelco Pottery. *Mesoamerican Notes*, No. 7–8: 87–211.

Salomón, María Teresa
2006 Cerámica del Epiclásico en el valle de Puebla-Tlaxcala: Reflexiones desde el Cerro Zapotecas. *El fenómeno Coyotlatelco en el centro de México: tiempo, espacio y significado,* edited by Laura Solar Valverde, pp. 345–360. Consejo Nacional para la Cultura y las Artes & Instituto Nacional de Antropología e Historia & Coordinación Nacional de Arqueología, Mexico City.

Sanders, William T., Jeffrey R. Parsons and Robert S. Santley
1979 *The Basin of Mexico: Ecological Process in the Evolution of a Civilization*. Academic Press, New York.

Serra Puche, Maricarmen
1998 *Xochitecatl*. Gobierno del Estado de Tlaxcala, Tlaxcala.

Solar Valverde, Laura (ed)
2006 *El fenómeno Coyotlatelco en el centro de México: tiempo, espacio y significado.* Consejo Nacional para la Cultura y las Artes & Instituto Nacional de Antropología e Historia & Coordinación Nacional de Arqueología, Mexico City.

Stoner, Wesley and Michael Glascock
2013 Neutron Activation Analysis of Coyotlatelco from the Toluca Valley and the Basin of Mexico. Technical Report, Archaeometry Laboratory Research Reactor Center, University of Missouri, Columbia.
2014 Neutron Activation Analysis of Coyotlatelco from the Toluca Valley and the Basin of Mexico. Addendum to 2013 Technical Report, Archaeometry Laboratory Research Reactor Center, University of Missouri, Columbia.

Stoner, Wesley, Yoko Sugiura and María del Carmen Pérez
2021 Cerámica Coyotlatelco del valle de Toluca: producción, intercambio local y de larga distancia, Análisis por Activación neutrónica (AAN). *El estudio de la cerámica cotidiana del valle de Toluca desde una perspectiva arqueométrica, Zinacantepec, México*, edited by Yoko Sugiura, Gustavo Jaimes Vences, María del Carmen Pérez and Rubén Nieto Hernández, pp. 71–97. El Colegio Mexiquense, A.C., Zinacantepec.

Sugiura, Yoko
1996 El Epiclásico y el problema del Coyotlatelco vistos desde el valle de Toluca. *Arqueología Mesoamericana: Homenaje a William Sanders, Tomo I*, coordinated by Alba G. Mastache, Jeffrey Parsons, Robert Santley and Maricarmen Serra, pp. 233–256. Universidad Nacional Autónoma de México, Mexico City
1998 Desarrollo histórico en el valle de Toluca antes de la conquista española: proceso de conformación pluriétnica. *Estudios de cultura otopame*, Núm. 1: 99–122.
2001 Historia de la Alfarería. *Gran Historia de México Ilustrada*, edited by Lorenzo Ochoa, pp. 1–20. Editorial Planeta de Agostini & CONACYT & Instituto Nacional de Antropología e Historia, Mexico City.
2002 Después de Teotihuacan. Epiclásico del Valle de Toluca; caos y orden, dos caras de una moneda. *Arqueología mexicana, historia y esencia siglo XX. Reconocimiento al Dr. Román Piña Chan, México*, edited by Enrique Nalda, pp. 209–222. Instituto Nacional de Antropología e Historia, Mexico City.
2005a *Y atrás quedó la Ciudad de los Dioses: Historia de los asentamientos en el valle de Toluca*. Instituto de Investigaciones Antropológicas, Universidad Nacional Autónoma de México, Mexico City.
2005b Reacomodo demográfico y conformación multiétnica en el valle de Toluca durante el Posclásico: una propuesta desde la arqueología. *Reacomodos demográficos del Clásico al Posclásico en el Centro de México*, edited by Linda Manzanilla, pp. 175–202. Instituto de Investigaciones Antropológicas, Universidad Nacional Autónoma de México, Mexico City.
2006 ¿Cambio gradual o discontinuidad en la cerámica?: discusión acerca del paso del Clásico al Epiclásico, visto desde el valle de Toluca. *El fenómeno Coyotlatelco en el centro de México: tiempo, espacio y significado. Problemáticas Regionales*, edited by Laura Solar Valverde, pp. 127–162. Consejo Nacional para la Cultura y las Artes & Instituto Nacional de Antropología e Historia & Coordinación Nacional de Arqueología, Mexico City.
2009 *La gente de la ciénega en tiempos antiguos: La historia de Santa Cruz Atizapán*. El Colegio Mexiquense A.C. & Instituto de Investigaciones Antropológicas & Universidad Nacional Autónoma de México, Mexico City.
2013 Reflexiones en torno a los problemas del Epiclásico y el Coyotlatelco. *Tradiciones cerámicas del Epiclásico en el Bajío y regiones aledañas: Cronología e interacción*, edited by Chloé Pomédio, Grégory Pereira and Eugenia Fernández-Villanueva, pp. 105–114. BAR Internacional Series 2519. British Archaeological Report, Oxford.
2022 El Posclásico medio y su complejidad regional. Visto desde el valle de Toluca. *Estudios cerámicos*, Núm. 3: 57–78.

Sugiura, Yoko and Rubén Nieto
1987 La cerámica con engobe Naranja Grueso: un indicador del intercambio en el Epiclásico. *Homenaje a Román Piña Chan*, edited by Barbro Dahlgren, Carlos Navarrete, Lorenzo Ochoa, Maricarmen Serra and Yoko Sugiura, pp. 455–466. Universidad Nacional Autónoma de México, Mexico City.
2016 Desarrollo histórico de las sociedades prehispánicas de la Cuenca del Alto Lerma, a partir de los hallazgos arqueológicos. *La cuenca del Alto Lerma: Ayer y Hoy: su historia y su etnografía*, edited by Yoko Sugiura, José A. Álvarez y Elizabeth Zepeda, pp. 21–75. Gobierno del Estado de México & El Colegio Mexiquense, A.C., Zinacantepec.

Sugiura, Yoko, Gustavo Jaimes, Shigeru Kabata and Michael Glascock
2018 Obsidiana como bien de intercambio entre el valle de Toluca y sus regiones circunvecinas durante el Clásico. *Anales de Antropología*, Vol. 52 (2): 55–69.

Sugiura, Yoko, Gustavo Jaimes and Rubén Nieto
2019 El grupo Engobe naranja grueso: una cerámica de intercambio en el Epiclásico (ca.650 - 900/1000 d.C.). *Cerámica y vida cotidiana en la sociedad lacustre del Alto Lerma en el Clásico y el Epiclásico (ca. 500-950 d.C)*, edited by Yoko Sugiura, Gustavo Jaimes, María del Carmen Pérez y Kenia Hernández, El Colegio Mexiquense, A.C., Zinacantepec.

Sugiura, Yoko, Gustavo Jaimes Vences, María C. Pérez and Rubén Nieto Hernández (eds)
2021 *El estudio de la cerámica cotidiana del valle de Toluca desde una perspectiva arqueométrica*. El Colegio Mexiquense, A.C., Zinacantepec.

Tozzer, Alfred M.
1921 *Excavation of a site at Santiago Ahuizotla, D. F., México.* Bulletin 74, Bureau of American Ethnology, Smithsonian Institute, Washington.

Vaillant, George
1938 A correlation of Archaeological and Historical Sequences in the Valley of Mexico. *American Anthropologist*, Vol. 60: 535–573.

Vargas, Ernesto
1975 La cerámica Teotenango. *Teotenango. El antiguo lugar de la muralla, Tomo I,* coordinated by Román Piña, pp. 191–265. Dirección de Turismo, Gobierno del Estado de México, State of Mexico.
1978 Transición del Clásico al Posclásico a través de Ojo de Agua y Teotenango. Licentiate thesis. Escuela Nacional de Antropología e Historia, Mexico City.

# Chapter 4
# New Approaches to the Epiclassic Period in the Tula Region, Mexico

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Escuela Nacional de Antropología e Historia

In this chapter we focus on the Tula region and in particular on the Pottery District of the Mezquital Valley. To support a model that is based on the approaches of World Systems theory, which allows us to know long-term population dynamics in Precolumbian times, we start with the empirical evidence, that is, from the following hard data: a) settlement pattern and demography; b) radiocarbon dating; c) worldview and funerary customs; d) ceramic typology; e) architecture; f) genetic studies using deoxyribonucleic acid (DNA) analysis; g) instrumental neutron activation analyses of obsidian samples; and h) instrumental analyses of neutron activation of ceramic samples. There are two case studies: the Epiclassic settlement of Chapantongo and the Early Postclassic settlement of Cerro Magoni. The results of the research indicate that it is not possible to continue to support hypotheses about northern migrations or migrations from the Bajío, in order to understand the Precolumbian developments in the study region.

**By way of introduction**

Wallerstein's theory of world systems proposes that world-economies are divided into central states and peripheral areas (Wallerstein 2007: 492). A world system is a social order that possesses boundaries, structures, groups, members, rules of legitimation and coherence (Wallerstein 2007: 489). A social system encompasses a number of characteristics and levels of interaction. In fact, this theory has been applied to several areas and temporalities of Precolumbian Mexico as a study of interaction networks (Harding 2013: 391). No region in Mesoamerica can be understood in isolation (Jimenez Betts 2018: 1), so that the cultural and social relations of different sites can be explained regionally as a global microsystem; that is, where there are governing or nuclear centres that maintain control over peripheral sites. By integrating these localised studies on a broad geographic scale, interregional interaction can be addressed based on the global system (Jimenez Betts 2018: 3). Within the peripheries of contact, there is a dynamic interaction between two World Systems with cultural differences and changes over time (Carlson 2012: 87). Thus, it is possible to understand the interactions between the peripheries, semi-peripheries and the nuclei through various mechanisms of material, ideological and personal exchanges and all that this entails.

For hundreds of years, Teotihuacan was the nucleus of the world system in the central Mesoamerican valleys. The dismantling of the Teotihuacan system at the end of the sixth century AD, a process that began around AD 350 (Manzanilla 2009) led to the strengthening of several of the former peripheries and the formation of world microsystems, as occurred in the Tula region, part of the Mezquital Valley, around AD 600, that is, at the beginning of the Epiclassic period, a period that has been mistakenly interpreted as the result of migrations.

Since Robert H. Cobean's doctoral thesis in 1978 and its publication in 1990 by Instituto Nacional de Antropología e Historia, the "provisional" phase and chronology for the Tula area was established, which was refined or modified in a convenient way and without justification by Cobean himself as well as by Alba Guadalupe Mastache. Some rather *ad hoc* changes appear in the 2002 book by Mastache, Cobean and Healan (Mastache *et al.* 2002), without taking into account the adjustments presented by George J. Bey (1986) in his doctoral thesis, a case analogous to the date of the Palacio Quemado reported by Osvaldo Sterpone in 2000 in his "Chimera de Tula" (Sterpone 2000–2001). In 2021, Dan Healan presented new adjustments to that chronology and integrated multiple radiocarbon dates from various investigations, taking into account mean dates and two standard deviations, which in previous studies was uncommon. What is synthesized by Healan (2021) has an impact on both rearrangements of the Epiclassic and Early Postclassic phases in the region of interest. Finally, as far as the time scale is concerned, the chronology of the Tula region has been confusing and has undergone several modifications in the publications, with or without foundation, which generated confusion and a tremendous disorder that

have affected the subsequent studies, following what was proposed by Cobean and his collaborators.

Regarding the spatial scale, based on the total coverage area surveys carried out by the Mezquital Valley Pottery District Project (PDA), for 8 years we detected multiple sites beyond the boundaries recognised by Mastache, Cobean and Healan (2002) for the region, both to the north and to the east. These are sites with monumental architecture or what we call concentrations, characterised by the absence of architecture but by the abundant presence of ceramic, lithic and even malacological materials, which indicate that in the past there were residences built with perishable materials, such as the typical houses made of maguey leaves of the vernacular architecture of the Mezquital Valley. We start from the redefinition following Kantner (2008: 41) of what this "area" is by considering it as an archaeological region, that is, "a space where significant relationships can be defined between human behaviour, the material traces left by past peoples and/or the diverse and dynamic physical and social contexts in which human activity occurred". Our demarcation requires referring to the twentieth century in what was the Pottery District of the Mezquital Valley, which covers about 600 km$^2$ and is located approximately between 99° 15' and 99° 30' west longitude and 20° 06' and 20° 21' north latitude, covering the municipalities of Alfajayucan, Chapantongo, Tepetitlan, the western half of the municipality of Tezontepec de Aldama and the northern portion of the municipality of Tula de Allende. It should be noted that the work of Mastache and his collaborators in 2002 was largely based on the doctoral thesis of Alba Guadalupe Mastache (1996) which, in turn, was based on the joint work with Ana María Crespo entitled *La ocupación prehispánica de Tula, Hgo.* (Mastache and Crespo 1974), within the framework of the Tula project directed by Eduardo Matos Moctezuma, which generated pioneering studies although without total coverage in surface surveys. Perhaps calling it an "area" at that time prevented defining the borders of the Tula region according to its

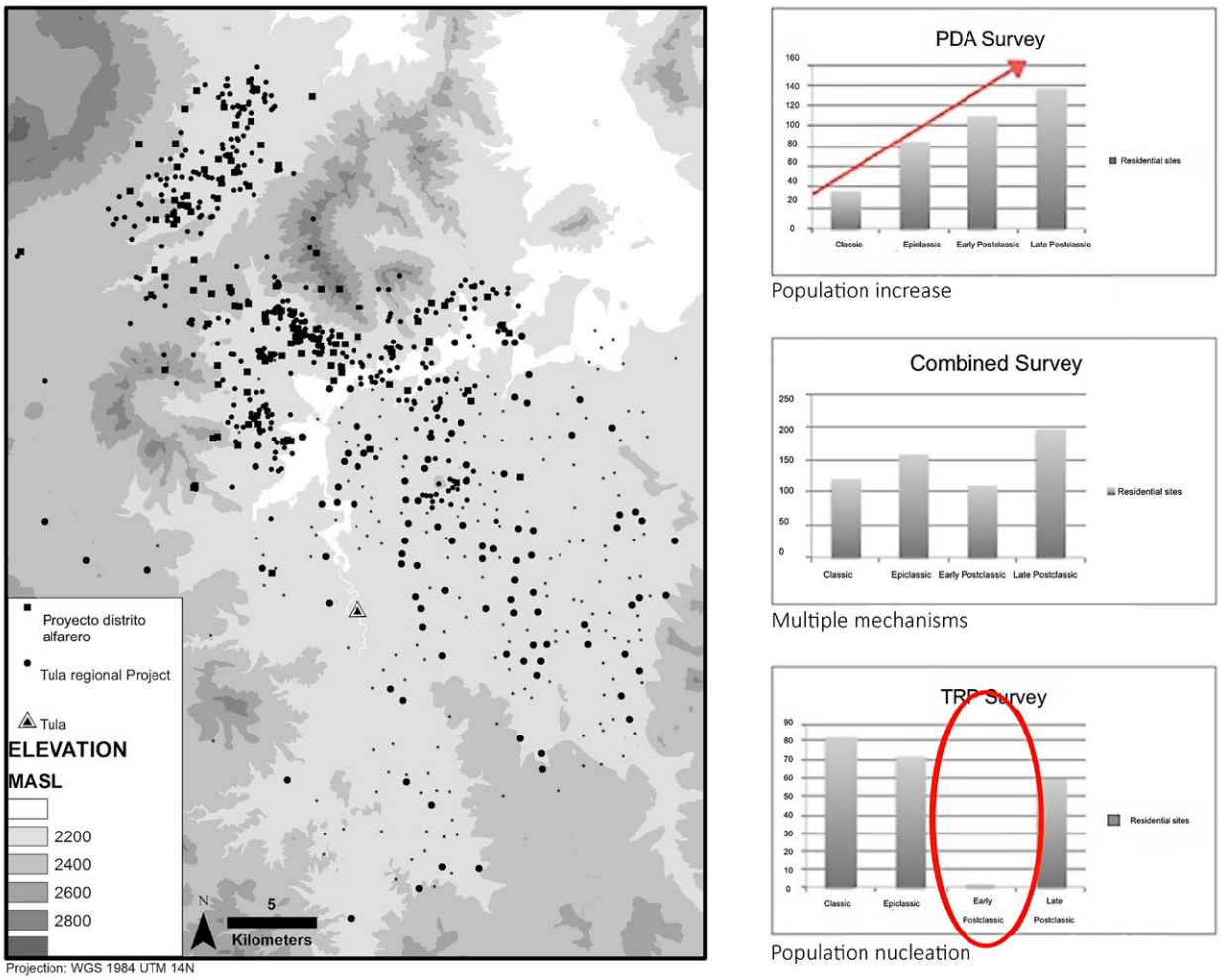


**Figure 4.1:** Settlement patterns and demographic changes over time in the Tula region (after Castillo and Fournier 2017: Figs. 1 and 12).

physiographic and social characteristics in the heyday of Precolumbian human occupations. However, by 2002 Mastache and colleagues (2002) refer to the former area as a region. According to surface investigations of a total of 610 Precolumbian residential occupations have been located (Castillo and Fournier 2017) without taking into account those of the Formative and Late Postclassic in this essay, thus far 20 sites and 36 concentrations have been reported by the PDA for the Classic period, while the Tula Project accounted for 52 sites and 62 concentrations. For the Epiclassic, the PDA detected 23 sites and 84 concentrations, to which 31 sites and 57 concentrations are added by the Tula Project. In relation to the Early Postclassic, 34 sites and 109 concentrations were found in the framework of the PDA (Figure 4.1), but the Tula Project only considered a single site.

## The Epiclassic (AD 600–850)

To re-evaluate the Precolumbian developments of the Otomí of the Tula region, we are faced with inherited problems of demarcation of the region as well as weakly held dogmas, the main one being the migrationist explanation; the impact of Jiménez Moreno's work (1941) in his avant-garde period is undeniable, distinguishing Teotihuacan from Tula and constructing the periodisation of Classic, Epiclassic (Otomí) and Early Postclassic, based on available archaeological sources and data. However, later the uncritical use of written sources led to shaping the empirical evidence on an ad hoc basis and the migrationist model emerged: the Epiclassic was then viewed as a development brought about by northern migrants who were thought to have arrived in the central valleys of Mesoamerica after the disarticulation of the Teotihuacan system (Mastache *et al.* 2002). Jiménez Moreno's (1941, 1959) proposals went from a dogma to an absolute truth. In other words, the impact of Jiménez Moreno's ideas transcended generations such as Rattray (1966), Davies (1977), Braniff (1972), Manzanilla (2005), Cowgill (2013), Hernández and Healan (2019), as well as Anderson and his collaborators (2016), to mention a few who perpetuated the migrationist model. A major milestone were the contributions that make up the volume coordinated by Laura Solar Valverde in 2006, which are based on data that set aside the dogmas derived from ethnohistorical sources, adequately delimiting the area of the presumed population movements, discarding the northern periphery of Mesoamerica, but outside of what was exposed in the volume, by elimination, the Bajeños are credited with the Epiclassic developments in the central valleys of Mesoamerica (Solar Valverde 2006). From the contributions included in that volume, attention shifted from the northern periphery of Mesoamerica to the Bajío as the place of origin of the migrants, bearers of the Coyotlatelco ceramic complex/culture. But the Bajío remains somehow mysterious archaeologically, so we are facing an empirical gap, there are also doubts about how this area is delimited, what

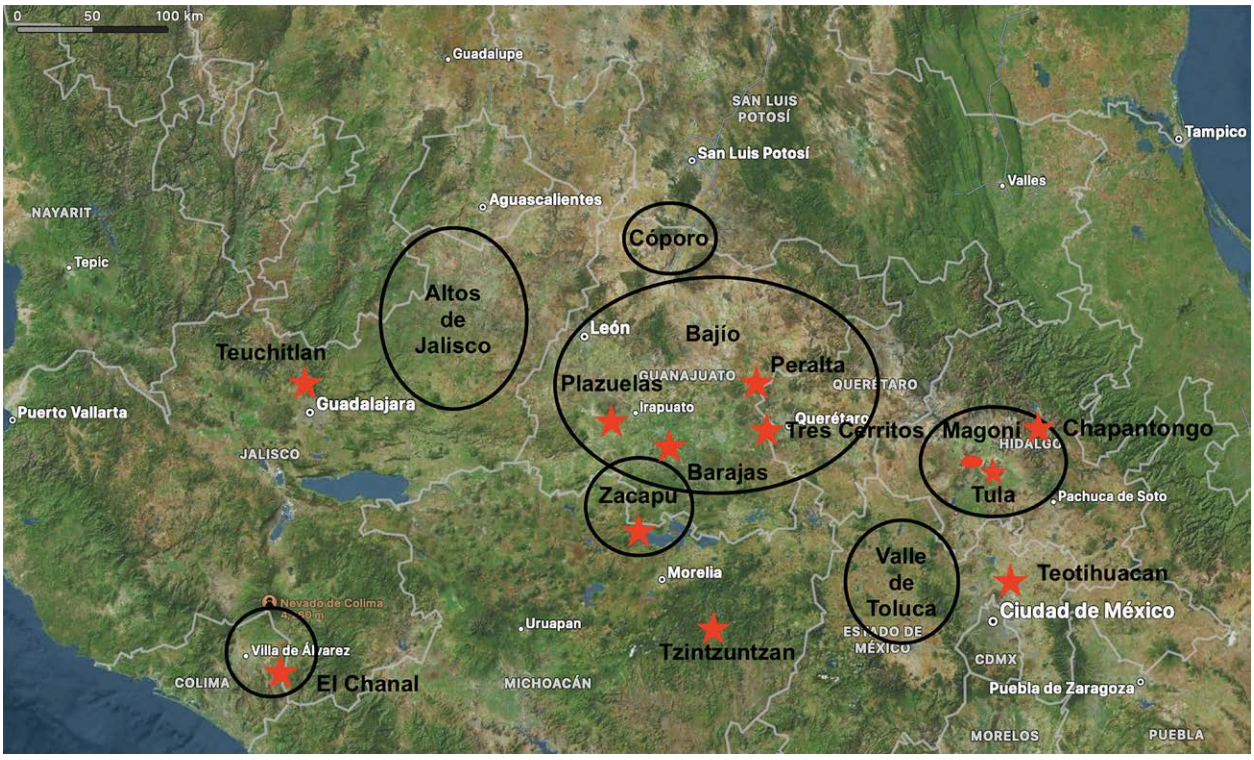


**Figure 4.2:** The Bajío and the location of Tula
(adapted from Morales Monroy 2011: 27; Pomédio 2015: 227; Pomédio *et al.* 2013: 4).

is known about the archaeology of the Bajeños for the Classic and Epiclassic periods, is there archaeological evidence that the Coyotlatelco ceramic complex may have originated there, obviously, without resorting to the Chupicuaro Red-on-buff, or the Cantinas Red-orange. Another problem is the lack of dating, excavated sites, typologies and well-supported ceramic sequences to support processes of depopulation-emigration. Therefore, we are faced with more doubts than inferences based on empirical evidence. We refer the reader to the map (Figure 4.2) with the demarcation of the Bajío based on several publications as referenced.

But what if there was a demographic increase in the region of origin of the bearers of the Coyotlatelco culture? If so, it would be paradoxical that, despite the fact that there are several authors who attribute to the Bajío the affiliation of different cultural traits alien to the centre or west of Mexico and see that region as a starting point for the migrations that occurred in the Epiclassic and Postclassic, the knowledge of the societies that could have been responsible for these changes is very limited "[apparently] the Epiclassic[is] the period of demographic apogee of the region" (Pomédio *et al.* 2013: 3–4; translated by authors). However, based on detailed palaeoclimatic analyses, this period is characterised by droughts (e.g. Lachniet *et al.* 2017; Metcalfe and Davies 2007; Stahle *et al.* 2011; Stahle *et al.* 2016) in central Mesoamerica and even Zacatecas, the so-called northern periphery of Mesoamerica. In the aforementioned volume, coordinated by Solar Valverde (2006), the location of archaeological sites with red-on-buff pottery (*rojo sobre bayo*) associated with the Coyotlatelco was documented, resulting in three areas or regions: the Toluca Valley, the Tula Region/Mezquital Valley and the Basin of Mexico. Our

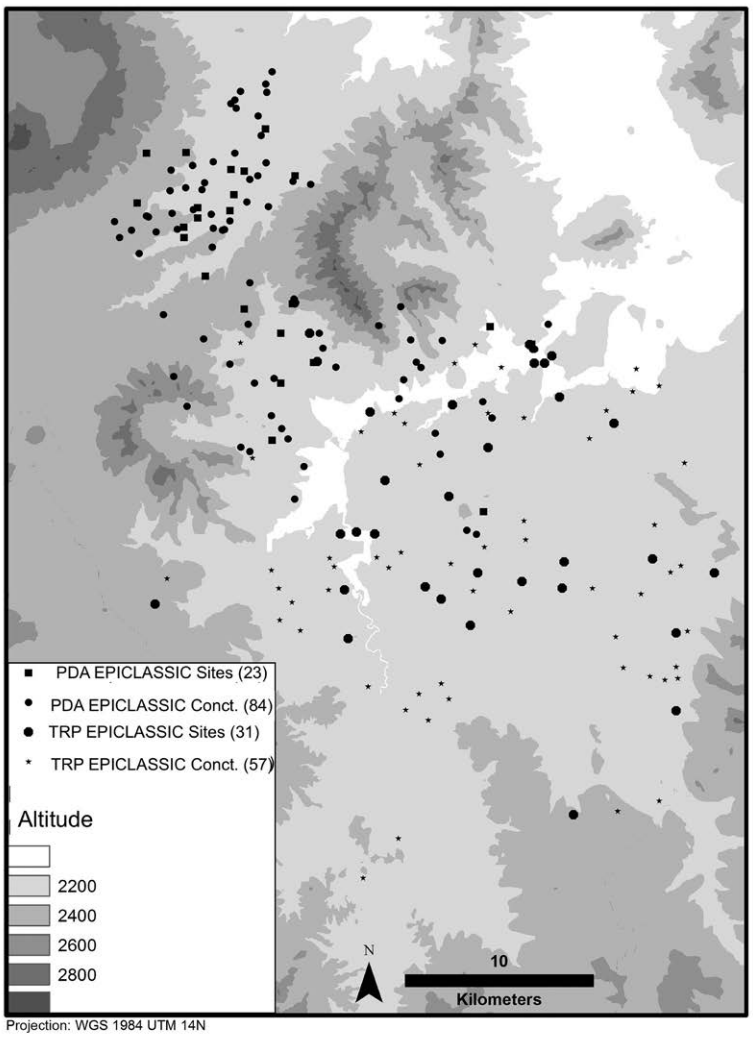


**Figure 4.3:** Location of Epiclassic settlements in the Tula region based on aerial surveys, Mezquital Valley Pottery District (PDA) and Tula projects (after Castillo and Fournier 2017: Fig. 9).

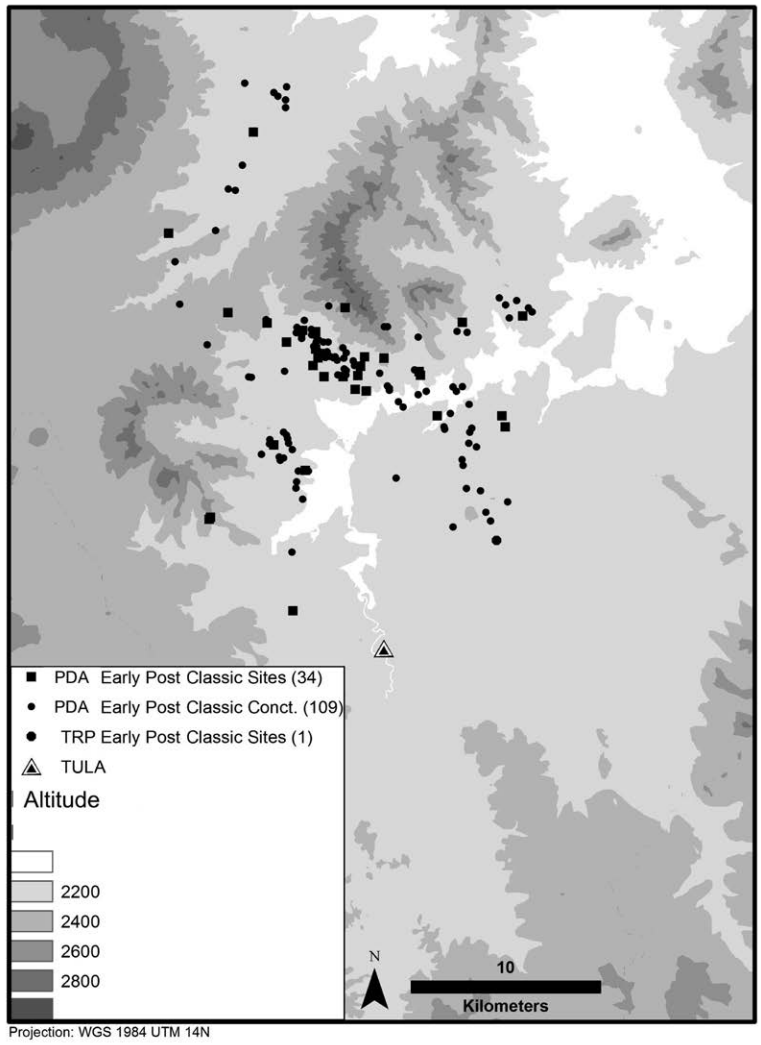


**Figure 4.4:** Location of Early Postclassic settlements in the Tula region based on area surveys, Mezquital Valley Pottery District (PDA) and Tula projects (after Castillo and Fournier 2017: Fig. 10).

interest is focused on the Tula region and in particular, as already indicated, on the Pottery District of the Mezquital Valley.

We start from what has been defined from intensive research in the Epiclassic settlement of Chapantongo (Fournier 2007; Fournier and Bolaños 2007) based on empirical evidence, e.g. the following hard data: a) settlement patterns and demography; (b) radiocarbon dating; (c) worldview and funerary customs; (d) ceramic typology; (e) architecture; (f) genetic studies using deoxyribonucleic acid analysis (DNA); (g) instrumental neutron activation analyses of obsidian samples; and (h) instrumental neutron activation analyses of ceramic samples.

Using ArcMap 10.4 and digital elevation models based on INEGI cartography and thanks to total cover area surveys (Figure 4.1), it was possible to appreciate the temporal differences in the distribution of settlements at the different altitudinal levels in the study region (Castillo and Fournier 2017) (Figures 4.3 and 4.4), also including the sites reported by the Tula project according to Mastache and colleagues (2002).

Based on these analyses, models are not based on population movements, but rather on demographic trends that show slight increases and decreases (Figure 4.1).

Regarding radiocarbon ($^{14}C$) dating, most were processed in Beta Analytic. Taking into account the average dates of 14C, the Epiclassic is demarcated in Chapantongo between AD 600 and 805, although it should be noted that the deposits where excavations were carried out were extremely eroded in the superficial layers and the


**Figure 4.5: a)** Clara Luz Black incised and **b)** Chapantongo Red (photographs by Patricia Fournier).

carbon was contaminated by roots, so it is feasible that at least 30 or even 50 years of the terminal occupational epoch is not represented in our dating. Therefore, we propose that the Sinana phase, pure Coyotlatelco from Chapantongo and probably from other sites in the Tula region, spans from around AD 600 to 835 (Fournier 2007). In Chapantongo we found that ceramic types from both the Prado and the Corral Tula phases are associated with funerary offerings, so that we place them in the Sinana phase and not in two different ones, another limitation inherited from speculations derived from previous studies (e.g. Mastache *et al.* 2002). Types such as Clara Luz Black incised (Figure 4.5a) have been identified and it should be noted that their designs are analogous to those of parietal representations, as in the case of a rock shelter in Chapantongo (Fournier and Vigliani 2007), which evidence elements of the Epiclassic worldview in the region. The constant for primary burials is that the individuals were placed in a flexed lateral decubitus and the offerings of ceramic pieces and even figurines were positioned in front of the subjects' torso. But the question arises as to whether they were migrants or native inhabitants of the Mezquital Valley. Strontium isotope analyses (three individuals) (Price *et al.* 2000) and oxygen (40 individuals) indicate that there were interregional movements throughout the lives of the subjects, most of whom were from Chapantongo (Spence *et al.* 2011).

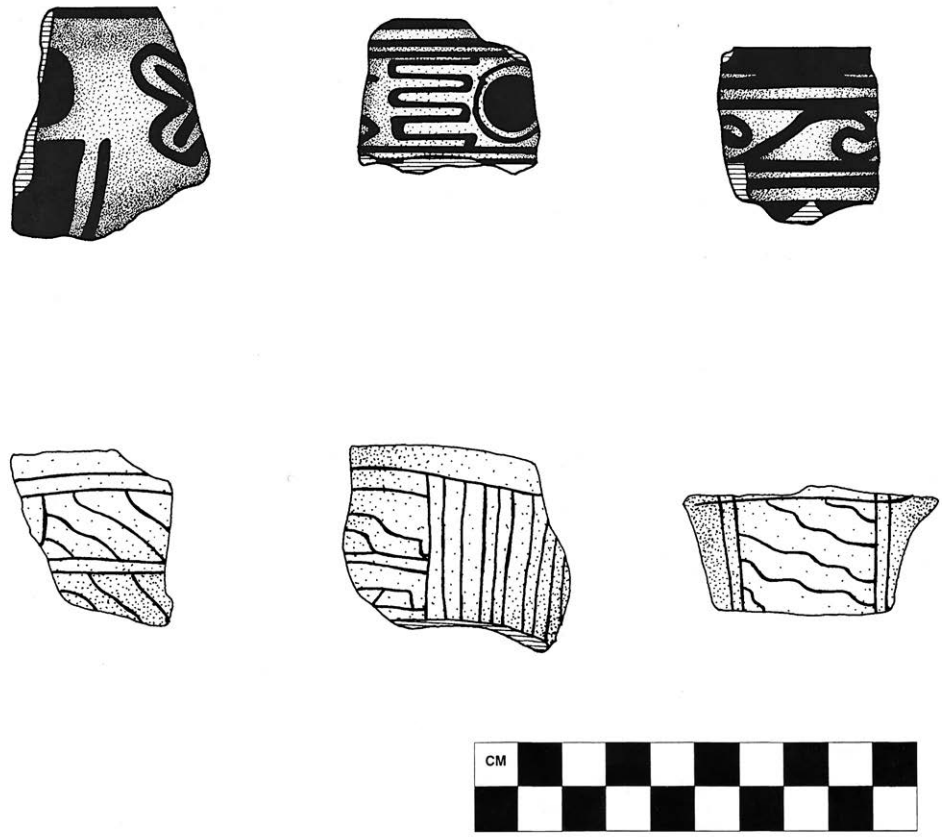


**Figure 4.6:** Coyotlatelco Red-on-brown, examples of decorative patterns, bowls (drawings by Patricia Fournier).

The "altar of skulls" that was excavated from a platform in the southeast sector, which consists of four stages of deposition of eight skulls, some placed on articulated feet, evidence ritual performative activities that are linked to the Otomi worldview that has been extensively studied by Jacques Galinier (1990). The arrangement and orientation of several of the skulls refer to the divinity *Taskwa* "great rotten foot", lunar deity of the Otomi, also known as "Lord of the World" and identified with the full or last quarter moon. The moon itself in one of its phases was called *Taskwa Zana*, "moon of the great rotten foot (rabbit)." According to Pedro Carrasco (1987), the Otomi God of pulque, *Yo Khwa*, also makes reference in his name to bone-feet or two rabbit-feet, which is the same calendrical name as *Ome Tochtli*, the Mexica deity of pulque. The presence of a pair of amputated feet at the base of three of the skulls of the offering is perhaps a metaphorical allusion to this lunar god of pulque (Fournier 2007). Ceramic types for the Sinana phase in Chapantongo include Ana María Red-on-brown, Guadalupe Red incised, Clara Luz Black incised (Figure 4.5a), Rito Red, Zúñiga Gadrooned, Chapantongo Red (Figure 4.5b), *ollas* Mogotes Polished brown, Cañones Red-on-brown jars, Coyotlatelco Red-on-brown (Figure 4.6), Coyotlatelco Red-on-brown Resist, censers with white slip on part of their surfaces, braziers with spikes, plates and pipes with applications of anthropomorphic faces (Fournier 2007) that have also been identified in the region of Huichapan-Río San Juan (Castañeda Gómez 2015) in sites of the so-called Culture of Las Mesas, although with formal variants; as far as figurines are concerned, the same classes were found at the sites of Chapantongo, El Xithi and El Águila, as some have rear supports reminiscent of Teotihuacan's examples.

In the Los Cerritos sector of Chapantongo, the architecture is also reminiscent of styles from the Classic period, as in the case of the structure with a *talud-tablero*. There are circular structures and under their gravel floors, in some cases human and dog burials were deposited. One of the rectangular structures had two steps to access it and its roof was supported by two rectangular columns; under its floors, eight primary burials and three multiple secondary burials were deposited, one consisting of an articulated pelvis. To the north of this building there was a circular building in the centre of which were piled stones, probably building materials that were no longer used at the time of the abandonment of the settlement. Another altar

was found with a cornice talus in which three skulls and two vessels were deposited (Fournier and Bolaños 2007).

A complex with civic-administrative functions consists of a chamber with an area of more than 20 $m^2$ with a niche in one of the walls. This space was accessed through a portico with rectangular columns on whose walls with mud plaster there was mural painting, with simple linear geometric elements in red. To the west of it there was a smaller room with a bench on its north side. To reach the portico it was accessed through a slightly sunken courtyard. To the east of these rooms, at least two small areas were built. This whole complex was covered in a probably final construction stage in the settlement with a base of at least four meters high, of which only the constructive caissons and the fillings of rocks of considerable dimensions and weight were preserved. The earliest date of Chapantongo corresponds to coal from a first construction stage, covered by the ensemble and associated with a circular structure (Fournier 2007; Fournier and Bolaños 2007). Genetic analysis (DNA) was carried out with samples from burials in the Carretera sector, where we carried out an archaeological rescue due to the remodelling of the Chapantongo-Alfajayucan highway, as well as burials in the Los Cerritos sector (Fournier and Vargas 2002). DNA extraction was successful in the case of 25 individuals, including one of the males on the altar of the skulls who had dental mutilation. Blood samples from Otomi from the Mezquital Valley were included in the analyses. The results were compared with DNA analysis from two sectors of the Precolumbian settlement of Tula that is La Malinche and Plaza Charney, finding strong genetic affinities. Thus, it is difficult to substantiate migrationist models and ethnobiological differences in different sectors of both Epiclassic settlements, but these errors were perpetuated and misinterpreted by several researchers (e.g. Anderson *et al.* 2016; Beekman 2015; Paredes Gudiño 2005). Consequently, DNA demonstrates the biolinguistic continuity of the Otomi from around AD 600 to the present, a case analogous to that of the Toluca Valley (Sugiura *et al.* 2015), although Otomian DNA was detected in that region since the end of the Classic period.

The lithic industry on obsidian in Chapantongo is basically on prismatic knives. The results of neutron activation analyses, carried out at the Missouri reactor, show a main source of volcanic glass, Ucareo (Michoacan) (Fournier and Martínez 2010), the one with the greatest distribution during the Epiclassic in central and southern Mesoamerica (Healan 1997) and a secondary one that is underrepresented, Fuentezuelas (Queretaro) (Fournier and Pastrana 2009). The Epiclassic lithic industry of the Toluca Valley is analogous (Kabata 2011). Strictly speaking, the Ucareo deposit is not extremely far from Chapantongo. The Huichapan-Río San Juan region may have been the intermediary in the exchange networks between the south of Michoacan and the north of the Tula region. Other materials include basalt, a raw material that was mainly used to carve scrapers, which are multifunctional and may have been used on agave stalks (see for example Sánchez Miranda 1999). By scanning microscopy, the remains of *ayates*—woven with maguey fibre—were identified. In addition, shell ornaments from freshwater mussels, marine mussels and bone objects were found. But it is questionable where the Epiclassic pottery of Chapantongo was produced, including Xajay Red incised.

Neutron activation analyses provide a basis for answering this question based on 238 samples (Fournier *et al.* 2014). Statistical significance tests with a confidence level of 95% allowed us to define four compositional groups, the first with a high number of samples that include ceramic types of the Sinana phase; only one group of imported materials, i.e. the Amoladeras Fine type, made in the south of San Luis Potosí (Michelet 1996), evidence of interaction with that area, in particular Río Verde, directly or through networks that crossed the Sierra Gorda. Thus, the populations of Chapantongo were largely self-sufficient in terms of supplying most of the ceramic tools they used in everyday and even ceremonial activities.

According to Anderson and colleagues (2016: 441):

> "... the presence of Xajay ceramics provides additional grounds for the premise that the settlements of the La Mesa phase were predominantly populated by migrants from the Bajío. If so, the common practice of locating a site on a hill in northwestern Mexico suggests that these immigrant populations were accustomed to subsisting in marginal landscapes... their most likely place of origin appears to have been the dry Bajío region to the northwest, suggesting that they were well adapted to arid habitats."

But perhaps this underpins the model. We reiterate the doubt about whether these are Bajeño migrants who settled on the tops of hills, for example in Cerro Magoni and were carriers of the early Coyotlatelco ceramic style, or if the Xajay Red incised is a marker of their intrusion into the Tula/Mezquital Valley Region during the La Mesa phase (*c.* AD 550–650) according to Anderson and colleagues (2016). During the Corral phase, these populations abandoned the mesas/hills to settle in valleys, as in the case of Tula Chico; we may but wonder what happened in Chapantongo—which is not on a summit—and El Águila, contemporaries of Magoni and La Mesa. We will try to answer these questions.

The Cerro Magoni site was originally recorded through the surface surveys made by Mastache and Crespo (1974), which were key in the history of archaeological research in the Tula area. These studies revealed the sequence of settlement patterns in the area on a large scale, beginning with the first substantial peoples in the Classic period, the sharp changes in settlement patterns during the Epiclassic and the heyday of the Toltec state. Thanks to the excavations carried out in 2016, it was possible to register three different levels of stucco floors on the northern terraces of the hill (Soler and Sánchez Aldana 2016). These stucco floors are associated with a large platform upon which several buildings are erected. Under the three levels of stucco floor, a very important stratigraphic sequence was detected within the occupation of the site, since several levels of tamping were located below the floors, including a small substructure, as well as charcoal samples that were dated to the Epiclassic.

For archaeomagnetic dating of stucco floors, the method of obtaining the samples entailed that each sample must be composed of eight to 13 cylindrical specimens of 2.5 cm in diameter and 2.1 cm in thickness. The samples must be in situ as any movement will change the directions and therefore the dating is not correct. On the other hand, samples can also be taken in a block that must be geographically oriented with the help of a Brunton compass. To obtain the individual specimens, a cylindrical wooden core (as it does not contain magnetic minerals) is adhered to the surface of the sample with quick-drying epoxy glue that has been tested in the laboratory and does not contain magnetic minerals. Once properly attached, an arrow is drawn that has been oriented (azimuth and bearing) with the help of the compass (Figure 4.4). After marking, the specimens are detached with the help of chisels, spatulas and non-magnetic hammers and wrapped to be transported to the laboratory. In the case of stucco, samples record the CMT at the time of setting or at the time of its last exposure to fire. However, the materials are also exposed to other magnetisations of much more recent temporality, so in order to determine the magnetisation of origin, called primaries or characteristics, they must be magnetically "washed". In our case, the washing process is carried out by exposure to increasing alternating magnetic fields. Fisher's statistics were used to obtain the mean direction of the sample. This direction was compared with the secular variation curve for central Mexico by Soler-Arechalde and collaborators (2006) using the Rendate program of Lanos (2004), obtaining the probable time intervals. According to the periods of occupation, the most probable ones were chosen. With the data obtained, it is possible to infer the construction date of the floors, which provides a reference on the temporality of the occupation in that specific area of the site. The two samples dated by archaeomagnetism correspond to the Early Postclassic, that is, they seal Epiclassic deposits that were previously dated with diagnostic materials from that period as well as the Early Postclassic, among the ceramic types present is the Xajay Red incised type, so it is not justified to suggest that there was an abandonment of the site.

During the Cerro Magoni 2012 field season, 20 charcoal samples were dated at Beta Analytic Inc., resulting in radiocarbon dating between AD 570 and AD 945 with ranges of 2-sigma, dates belonging to the Epiclassic (Anderson 2016).

In summary, for the Epiclassic period:

- Empirically, the Xajay tradition is not from the Bajío; according to the delimitation of researchers such as Grégory Pereira, it corresponds to the south of Queretaro, the northeast of the State of Mexico and the west of the Mezquital Valley, in the Tula Region.
- According to the distribution of sites in the Tula Region, there is no evidence of drastic demographic increases during the Epiclassic, which is to say that the immigration model cannot be corroborated.
- Empirically, it has been shown that from Zacatecas to the central Mexican highlands, the Epiclassic was characterised by droughts, indicating that environmental differences between the Bajío and the Tula Region were not grounds for migrations.
- Since the end of the Classic period there is genetic evidence (DNA) that the Toluca Valley was inhabited by Otomian groups, who in turn were responsible for the Epiclassic developments in the Tula Region, in addition to the fact that their worldview was ultimately Otomian.
- In no aspect of the material culture that we have documented, is it evident that there were population movements that implied substitutions of native populations by others who invaded the Tula Region, at any altitudinal level.
- The presence of intrusive pottery from an area neighbouring Tula does not mean invasion but rather interaction between contiguous areas, as in the case of the Xajay Red incised type pottery.
- In order to determine in detail, the interlocking zone between spheres of the Mezquital Valley and the Cuitzeo basin, northern Michoacan and Lerma Medio, future research is required in the area for which empirical data are abundantly lacking. These works should include DNA analysis, dates properly interpreted by $^{14}C$, typological analyses that allow the construction of chronological sequences without speculation, with a clear delimitation of the phases.

## The Tollan Era (AD 900–1150)

Undoubtedly, Tula Grande was a metropolis that during the Tollan phase constituted the nucleus of the region, around which multiple rural settlements gravitated that, even though they had structures with monumental architecture, these never reached the importance of the city in the immediate area. There is a predominance of sites with dispersed settlement patterns that were rarely occupied by the valleys, since these are wide systems of terraces and levelling of the middle foot of the mountain ranges, without exceeding 2300 meters above sea level. Rainfed agriculture must have been intensive and both the construction and maintenance of the retaining walls to prevent erosion must have been tasks that required a profuse investment of time and effort from the organised populations to carry out these works.

The Sierra del Xithi is an example of this dispersion pattern, where the terraces found in the highest parts have a width that rarely exceeds 1.5 m, with walls more than 1 m wide, with slopes ranging between 34º and 42º. In these areas we assume that the main crop was agave and in the lower terraces they may well have been planted with various cultigens such as maize, beans, squash, etc., as well as in the valleys crossed by streams that are now rainfed that in the past could have been permanent channels, in the vicinity of which housing complexes were built. These terraces are part of the settlement of Tepetitlan, which Cobean and Mastache (1999) mistakenly restrict to a few square kilometres, as it covers more than 14 hectares of discontinuous occupation, and include two rhyolite workshops in addition to agricultural-residential terraces. In the latter, Levantado Watermarked pottery predominates as well as, curiously, Late Aztec III Black-on-orange materials, which leads us to question the validity of the Early Tollan and Late Tollan phases and the possible continuity of variants of the Levantado Watermarked until the Late Postclassic in rural settlements in the Tula region. We maintain this stance with some reservations because we are dealing with surface materials, but it is something worthy of study before erosive processes put an end to these occupations.

At the foot of the middle mountain of the Sierra del Xithi, in the vicinity of the Loma Taxhuada in the sector designated as La Estrella, excavations were carried out in a mound which allowed the recovery of part of a residential complex of the Tollan phase, which stands on a levelling platform. Elements typical of the residential character of the structure were detected, such as a fire pit (*tlecuil*). Unfortunately, it was not feasible to completely define clear internal or external spaces in the housing complex and, comparing with what was reported by Healan (1989) for contemporary domestic structures of El Canal, near Tula Grande, in the Toltec urban environment, with the available information La Estrella is of less complexity since it is part of an essentially rural settlement. An interesting element is the long stair of about 12 m, of which the only two steps preserved were covered by tabular slabs of white limestone, a covering that is common for the Tollan phase. In fact, there are similarities with the assemblage excavated approximately 1.4 km to the northwest in independent investigations by Cobean and Mastache (1999). The two burials recovered at La Estrella show funerary patterns different from those reported for the other excavated assemblages, given the position of the individuals, which would be a continuation of Epiclassic patterns observed at Chapantongo (Fournier 2007). One corresponds to an old woman with no associated offerings. The other is of a child, potentially a boy and the only element detected is a trilobular eccentric, of importance given that, as in El Canal as reported by Healan (1989), it appears with an infant. It has been interpreted that the shape of the object is an iconographic-symbolic representation of blood and that it derives from pre-existing traditions in Teotihuacan, where it is postulated that its symbolism is that of water (Stocker and Spence 1973: 197). The position of the eccentric on the individual's sternum allows us to suppose that it served an ear adornment, or an ornament that was part of the infant's clothing, this being the first case where its probable use is reported.

In addition, a circular structure was found in the sunken courtyard of the residential complex; its diameter is more than five meters, and it was filled with tuff and basalt blocks, with exterior walls covered with tabular limestone slabs on its exterior surfaces. The building was desacralised in Precolumbian times as a shallow well was excavated in its centre, while the courtyard, which covers about 60 $m^2$, was filled in at a later construction stage and even contained remains of disturbed human burials, such as part of a skull (Fournier and Martínez 2010).

Another important aspect of the architectural elements found is the series of probable ducts, which may have been covered with slabs, as is the case in some housing units in Tula (Paredes Gudiño 1990). The abundant fragments of ceramic tubes indicate water channelling and drainage practices, which must have been important in the rainy season, since even today in Tepetitlan there are torrential storms that, due to the slope on which housing structures such as La Estrella are located, endanger the physical integrity of the buildings.

An aspect that should be highlighted is that two coal samples extracted from relatively deep fills in the excavations, yielded calibrated dates (2 sigma and mean

date) of AD 980 (1030) 1180 and AD 980 (1020) 1060 or AD 1080 (1020) 1150, which correspond to the Tollan phase.

Regarding other types of materials, the most represented raw material for carved lithics is rhyolite, unlike what was reported for the unit excavated in Tepetitlan independently, where basalt predominates (Sánchez Miranda 1999). Despite the short distance that separates these residential complexes, given the location of La Estrella in the vicinity of one of the two rhyolite workshops that we have located, which was widely exploited during the Postclassic, it is logical that this volcanic rock was privileged for the manufacture of tools such as scrapers to process maguey fibres. One of the economic activities that we inferred was of importance in Tepetitlan according to the characteristics of large sectors of agricultural terraces in the middle foothills of the Sierra de El Xithi and Loma Taxhuada. Even though La Estrella is located a few meters from a riverbed where basalt pebbles abound, there is little presence of flakes and artefacts made of this type of stone, an analogous case to chalcedony, raw material of which only flakes were found.

It should be noted that fragments of the relatively abundant freshwater shell (*Anondota impura*) were recovered, which refers to the probable manufacture of artefacts that would exceed the domestic needs of the occupants of the housing unit. This is consistent with surface observations for both Tepetitlan (Las Conchas sector) and another site in the Tollan phase located in the Municipality of Tezontepec (El Abulón). It is feasible that in some of the residential units of rural settlements of the Early Postclassic of the Tula region, there were tendencies towards artisanal specialisation and that perhaps many of the finished products were destined for the consumption of the inhabitants of the Toltec city.

Tepetitlan was recorded in ethnohistorical sources as a provincial centre for the collection of tribute and probably served as the axis of these scattered occupations by the end of the Postclassic. The fact that diagnostic ceramic types from both the Early and Late Postclassic are recurrently observed at the same locus leads us to suppose not only a continuous preference for these areas of medium stoniness to leave fertile valleys vacant for agricultural purposes, but also that some types assigned to the Tollan phase may well have continued in production/consumption during the Late Postclassic (Fournier and Bolaños 1999). Unlike the occupations located in the Chapantongo and Tepetitlan valleys, where basalt predominates as an industry from the Classic to the Postclassic, the settlements detected in the Tezontepec valley as well as in the foothills and middle scrub of the Xithi mountain range are characterised by the abundance of rhyolite artefacts. It is feasible that between Santiago Acayutlan and Mixquiahuala there are more rhyolite quarries with a high degree of vitrification, from where it was extracted for the supply of the populations located south of the Sierra del Xithi.

In addition, we are interested in referring to the excavations on Cerro Magoni, where the sites have been assumed to date to the Epiclassic, as well as the rhyolite workshops. In the excavations carried out in 2016 (the Tula Region Interaction and Migration Project 2016), three different levels of stucco floors were recorded on the northern terraces of the hill. These stucco floors are associated with a large platform on which several buildings are placed. Under the three levels of stucco floor, a very important stratigraphic sequence was detected for the occupation of the site, since below the floors different levels of tamping were located, including a small substructure, as well as charcoal samples that were dated to the Epiclassic. From these three floors, only two samples were taken. Once the magnetisations per specimen are obtained, they are averaged using Fisher statistics, as mentioned for the case of the Epiclassic. We obtained successful dating in the case of two samples, i.e. AD 1224–1247 and AD 1187–1194, both from the Postclassic period for the Tollan phase at the top of Cerro Magoni since, although the floors sealed contexts of the Corral phase, the occupation that had the greatest extension and number of structures was during the Tollan phase corresponding to the same temporality of the occupation of greater magnitude and social relevance in Tula Grande during the same phase.

El Águila, which according to Mastache and Cobean (1989) is one of the sites where northern migrant intruders settled at the beginning of the Epiclassic, being carriers of the Coyotlatelco culture, has a privileged location in terms of viewsheds, given its position on a plateau that turns out to be the prolongation of the fertile valley of Tezontepec and that is formed by the canyoning of the Tula River and the Salado River, both permanent streams. Horizon markers can be observed that may have been of importance for astronomical observations. That is, the Xicuco hill, the Xithi mountain range and the Elephant hill (Romero Azuela 2009). Apparently, the site was accessed from both the Tezontepec Valley and the Tula River, since they can be seen terraced in that area. Access to the Salado stream is impossible due to the steep slope. The monumental sector of the site, located to the south, is made up of a set of three platforms built during the Tollan phase, the highest being about four meters high; these structures are totally looted and partially levelled. On the western portion of the plateau there is a terraced platform that takes advantage of the basalt outcrops. The platform occupies the entire plateau; on the northwest side

of the canyon there are four terraces, while on the southeast side there are no terraces due to the abrupt change in the slope of the ravine. The length of the platform is approximately 200 m, while its width is 100 m. The terraces vary between two and four meters in width and their slopes range from 34° minimum to 42° maximum.

Throughout the area of the plateau there are low platforms, extensively looted and there are remains of alignments that possibly correspond to residential units. In the thinning plateau, on a rocky outcrop to the west that looks out over the Tula River, there are two white Postclassic paintings that resemble shields or *chimalli*. Ceramic materials show continuous occupation from the Epiclassic (Prado and Corral phases) to the early colonial period, with an abundance of those from the Early Postclassic, as well as to a lesser extent from the Late Postclassic. The diagnostic ceramic types of the Tollan phase of Tula Grande are recurrent in the sites we work with: Mazapa Red-on-brown, Joroba Orange-on-cream, Proa Polished Cream, Jara Polished Orange, Soltura Smoothed Red, Macana Red-on-brown, Manuelito Brown, Alicia Openwork Censer, Abra Coarse Brown and Plumbate (scarce), among others. In terms of lithics, scrapers made of rhyolite, scarce basalt and green and grey obsidian in low density were mainly identified, with prismatic blades predominating. Another interesting site is El Abulón, which is also located in the municipality of Tezontepec approximately 1.5 km from the church of Santiago Acayutlan at 2 075 meters above sea level. The level of stoniness is medium, with basalt and rhyolite on the surface, while the deposit of cultural origin is relatively deep, reaching a maximum depth of 1.20 m. The surface archaeological materials have a medium density, being distributed continuously, covering an area of approximately 1 hectare. The site consists of the remains of a platform, possibly a dwelling platform that reaches up to three meters in height, which was almost completely destroyed and levelled by the construction of an irrigation canal, with no traces of its walls remaining visible. In the looters' pits, the material from the filling of the platform corresponds in all cases to the Tollan phase. The ceramic materials correspond to the Postclassic period with the predominant diagnostic ceramic types of Macana Red-on-brown, Proa Polished Cream, Jara Polished Orange, Plumbate and Cojumatlan Red from western Mexico. In terms of lithics, green and grey obsidian blades were identified, as well as rhyolite flakes and scrapers. Low-density mother-of-pearl shell remains were found, evidencing different stages of the process of manufacturing shell artefacts. According to local informants, this type of material has been collected in abundance at the site, so one of the productive activities of the inhabitants of the Early Postclassic may well have been the elaboration of shell ornaments that may have been consumed in Tula, which could have come from the coasts of Michoacan or Jalisco, given the presence of diagnostic pottery from the West. To the north of Tepetitlan, in the municipality of Chapantongo, two Tollan settlements were located. The first, designated Mogote Pánfilo, is located in the community of Taxhue, with an approximate area of seven hectares and consists of a rectangular basement of about four meters high attached to a platform with NE orientation, 150 m long by approximately 18 m wide. The predominant ceramic types correspond mainly to the Early Postclassic with Levantado Watermarked, Macana Red-on-brown, Sillón Incised, Proa Polished Cream, Jara Polished Orange, Manuelito Brown, Toza Smoothed Brown, Abra Coarse Brown and Plumbate; there are types of the Prado-Corral phases in lesser proportion such as Cañones Red-on-brown, Coyotlatelco Red-on-brown, Mazapa Red-on-brown and Joroba Orange-on-cream.

On the other hand, northwest of Chapantongo at the San Ramón ranch, three levelling platforms and the remains of two highly looted basements were identified. The interesting thing about the site is that among the materials the predominant ceramic type is Mazapa Red-on-brown and burnished *ollas* with red spots, similar in silhouette to Soltura Smoothed Red, as well as basins with the same coloration and finish, which we designate as San Ramón Alisado type. In other words, these are materials from the Tollan phase but with subregional variants since it is one of the northernmost sites found.

**Epilogue**

In the studies about the Epiclassic period in the study region, the problems of definition and inference continue, unlike the Early Postclassic, when the region of study became the seat of a city of importance in the Precolumbian period in the central valleys, that is, the Toltec state and the emphasis of most research has fallen on this archaeological zone and its surroundings, with an accumulation of data that is not necessarily properly interpreted. In recent decades, the rural area has also been subjected to research, which provides a clearer picture of past processes. The emergence of Tula as a centralised power leads to the formation of a large rural area in the region, as is evidenced in the settlement pattern. The rural areas respond to the organisational and economic needs of the governing centre, without competing settlements. Although there are no clear trends towards nucleation within the different dispersed settlements (except in the case of El Águila), the extension of the sites and their distribution indicate the implementation of extensive productive strategies with the construction of terrace systems that cover considerable areas, which in examples such

as Tepetitlan-Loma Taxuada show the organisation of human populations for production that must have exceeded self-consumption. Thus, the surpluses were possibly destined for the Toltec city under taxation systems. The causes of Tula's decline seem to be related to megadroughts, according to the paleoclimate analyses of David Stahle and his collaborators (2011, 2016), an inferential model that Peter Jimenez Betts (2018) accurately takes up in his research. It is worth mentioning that the rural sites of the Tula region mostly show occupational continuity until the Late Postclassic. This aspect, evident in the settlement pattern, leads us to suggest that the daily life of the rural populations may not have been drastically affected by the collapse of Tula and, eventually, they remained in the direct sphere of control of the Tepaneca-Mexica Triple Alliance without radical transformations in the forms of tribute extraction, that by the early viceregal period, they would become taxes or *tasaciones*.

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## References cited:

Anderson, Heath
2016 *Proyecto Cerro Magoni 2012. Informe Técnico Temporada de Campo 2012*. Minnesota University, Mankato.

Anderson, Heath, Dan M. Healan and Robert H. Cobean
2016 Collapse, Regeneration, and the Origins of Tula and the Toltec State. *Beyond Collapse: Archaeological Perspectives on Resilience, Revitalization, and Transformation in Complex Societies*, edited by Roland K. Faulseit, pp. 431–458. Center for Archaeological Investigations, Occasional Paper No. 42. Southern Illinois University, Carbondale.

Beekman, Christopher S.
2015 Causes and Consequences of Migration in Epiclassic Northern Mesoamerica. *Migration and Disruptions: Toward a Unifying Theory of Ancient and Contemporary Migrations*, edited by Brenda J. Baker and Takeyuki Tsuda, pp. 73–96. University Press of Florida, Gainesville.

Bey, George J. III
1986 A Regional Analysis of Toltec Ceramics, Tula, Hidalgo, Mexico. PhD dissertation. Tulane University, New Orleans.

Braniff, Beatriz
1972 Secuencias arqueológicas en Guanajuato y la Cuenca de México: Intento de correlación. *Teotihuacan, XI Mesa Redonda*. Vol. 2: 273–323. Sociedad Mexicana de Antropología, Mexico City.

Carlson, Jon D.
2012 Externality, Contact Periphery and Incorporation. *Routledge Handbook of World-Systems Analysis*, edited by Salvatore J. Babones and Christopher Chase-Dunn, pp. 87–96. Routledge, New York.

Carrasco, Pedro
1987 *Los otomíes. Cultura e historia prehispánica de los pueblos mesoamericanos de habla otomiana*. Ediciones del Gobierno del Estado de México, Mexico City.

Castañeda Gómez del Campo, Alejandra
2015 La cerámica Xajay: Una aproximación tecnológica y cognitiva a través de cadenas operatorias. Master thesis. Escuela Nacional de Antropología e Historia, Mexico City.

Castillo, Mario A. and Patricia Fournier
2017 *Ecology in the Tula Region of Mesoamerica: A Local Landscape Perspective*. Society for American Archaeology 82 Annual Meeting, Vancouver, March 30th.

Cobean, Robert T.
1978 The Pre-Aztec Ceramics of Tula, Hidalgo, Mexico. PhD dissertation. Department of Anthropology, Harvard University, Cambridge.
1990 *La cerámica de Tula, Hidalgo*. Colección Científica 215. Instituto Nacional de Antropología e Historia, Mexico City.

Cobean, Robert T. and Alba G. Mastache
1999 *Tepetitlán: un espacio doméstico rural en el área de Tula*. University of Pittsburgh, Latin American Archaeology Publications & Instituto National de Antropología e Historia, Pittsburgh and Mexico City.

Cowgill, George
2013 Possible migrations and shifting identities in the central Mexican Epiclassic. *Ancient Mesoamerica*, Vol. 24 (1): 131–149.

Davies, Nigel
1977 *The Toltecs: Until the Fall of Tula*. University of Oklahoma Press, Norman.

Fournier, Patricia
2007 *Los hñähñü del Valle del Mezquital: Maguey, pulque y alfarería*. Consejo Nacional para la Cultura y las Artes & Escuela Nacional de Antropología e Historia, Mexico City.

Fournier, Patricia and Víctor H. Bolaños (coords)
1999 *Proyecto Distrito Alfarero del Valle del Mezquital. Informe de la Cuarta Temporada de campo, 1998-1999*. Unpublished Report. Archivo de la Coordinación Nacional de Arqueología del Instituto National de Antropología e Historia, Mexico City.

Fournier, Patricia and Víctor H. Bolaños
2007 The Epiclassic in the Tula Region beyond Tula Chico. *Twin Tollans: Chichen Itza, Tula, and the Epiclassic to Early Postclassic Mesoamerican World*, edited by Jeff K. Kowalski and Cynthia Kristan-Graham, pp. 481–529. Dumbarton Oaks Research Library and Collection, Washington, D.C.

Fournier, Patricia and Alejandro Pastrana
2009 La obsidiana de Sinana. *III Coloquio Internacional sobre grupos otopames. Homenaje a Román Piña Chan*, compliated by Alfonso Serrano Serna, Vol. 1: 199–207. Mexico City.

Fournier, Patricia and Maira Martínez Lemus
2010 El modo de vida precolombino de los otomíes de la región de Tula. *Estudios de Antropología e Historia. Arqueología y Patrimonio del Estado de Hidalgo,* coordinated by Natalia Moragas Segura and Manuel Alberto Morales Damián, pp. 175–225. Universidad Autónoma del Estado de Hidalgo, Pachuca.

Fournier, Patricia and Rocío Vargas Sanders
2002 En busca de los «dueños del silencio»: Cosmovisión y ADN antiguo de las poblaciones otomíes epiclásicas de la región de Tula. *Revista de Estudios Otopames*, Núm. 3: 37–75.

Fournier, Patricia and Silvina Vigliani
2007 Pintura rupestre epiclásica en la región de Tula: una aproximación desde la arqueología del paisaje: *Estudios sobre representaciones rupestres en Hidalgo*, coordinated by Manuel Alberto Morales Damián, pp. 9–44. Universidad Autónoma del Estado de Hidalgo, Pachuca.

Fournier, Patricia, Melania Jiménez-Reyes and Dolores Tenorio
2014 *Interacción y regionalización epiclásica con base en análisis de activación neutrónica de la cerámica de Chapantongo, Hgo., México*. Unpublished Paper, Cuarto Congreso Latinoamericano de Arqueometría, Mexico City.

Galinier, Jacques
1990 *La mitad del mundo. Cuerpo y cosmos en los rituales otomíes*. Universidad Nacional Autónoma de México & Centro de Estudios Mexicanos & Instituto Nacional Indigenista, Mexico City.

Harding, Anthony
2013 World Systems, Cores, and Peripheries in Prehistoric Europe. *European Journal of Archaeology*, Vol. 16 (3): 378–400.

Healan, Dan M.
1989 Synthesis of Prehispanic Occupation of the Canal Locality. *Tula of the Toltecs*, edited by Dan M, Healan, pp. 163–167. University of Iowa Press, Iowa City.
1997 Pre-Hispanic quarrying in the Ucareo-Zinapecuaro obsidian source area. *Ancient Mesoamerica*, Num. 8: 77–100.
2021 Nuevas perspectivas sobre la cronología y la historia del asentamiento de Tula. Unpublished paper, México, *Webposio Arqueología del Occidente de México*, electronic presentation, https://www.youtube.com/watch?v=eWZdAPWitZM [accessed, January 20, 2020].

Hernández, Christine and Dan M. Healan
2019 Migration and the Coyotlatelco Ceramic Tradition. Evidence from El Bajío. *Migrations in Late Mesoamerica*, edited by Christopher Beekman, pp. 88–116. University Press of Florida, Gainesville.

Jimenez Betts, Peter F.
2018 Orienting West Mexico. The Mesoamerican World System 200-1200 CE. PhD dissertation. Department of Historical Studies. University of Gothenburg, Gothenburg.

Jiménez Moreno, Wigberto
1941 Tula y los toltecas según las fuentes históricas. *Revista Mexicana de Estudios Antropológicos*, Vol. 5 (2–3): 79–83.
1959 Síntesis de la Historia Pretolteca de Mesoamérica. *Esplendor del México Antiguo vol. 2*, coordinated by Carmen Cook and Raúl Noriega, pp. 1019–1108. Centro de Investigaciones Antropológicas de México, Editorial del Valle de México, Mexico City.

Kabata, Shigeru
2011 Estrategias de Abastecimiento de Obsidiana en el Valle de Toluca durante el Clásico Tardío y el Epiclásico. *Bulletin of the Graduate School of International Cultural Studies*, Num. 12: 195–215.

Kantner, John
2008 The Archaeology of Regions: From Discrete Analytical Toolkit to Ubiquitous Spatial Perspective. *Journal of Archaeological Research*, Vol. 16 (1): 37–81.

Lachniet, Matthew S., Yemane Asmerom, Victor Polyak and Juan Pablo Bernal
2017 Two millennia of Mesoamerican monsoon variability driven by Pacific and Atlantic synergistic forcing. *Quaternary Science Reviews,* Vol. 155 (1): 100–113.

Lanos, Philippe
2004 Bayesian Inference of Calibration Curves: Application to Archaeomagnetism. *Tools for Constructing Chronologies Crossing Disciplinary Boundaries*, coordinated by Caitlin E. Buck and Andrew R. Millard, pp. 43–82. Lecture Notes in Statistics 177, Springer-Verlag, London.

Manzanilla, Linda R.
2005 Migrantes epiclásicos en Teotihuacan. *Reacomodos demográficos del Clásico al Posclásico en el centro de México*, edited by Linda Manzanilla, pp. 261–273. Instituto de Investigaciones Antropológicas, Universidad Nacional Autónoma de México, Mexico City.
2009 Nuevos datos sobre la cronología de Teotihuacan. Correlación de técnicas de fechamiento. *V Coloquio Bosch Gimpera: Cronología y periodización de Mesoamérica y el Norte de México,* edited by Annick Daneels, pp. 21–52. Universidad Nacional Autónoma de México, Mexico City.

Mastache, Alba G.
1996 El Estado Tolteca. Una investigación sobre un proceso de desarrollo y estructura social, económica y política. Doctoral thesis. Universidad Nacional Autónoma de México, Mexico City.

Mastache, Alba G. and Robert Cobean
1989 The Coyotlatelco Culture and the Origins of the Toltec State. *Mesoamerica after the Decline of Teotihuacan, AD 700–900*, edited by Richard A. Diehl and Janet C. Berlo, pp. 49–68. Dumbarton Oaks Research Library and Collection, Washington, D.C.
Mastache, Alba G. and Ana María Crespo
1974 La ocupación prehispánica de Tula, Hgo. *Proyecto Tula, 1ra Parte*, coordinated by Eduardo Matos Moctezuma, pp. 71–103. Colección Científica 15. Instituto Nacional de Antropología e Historia, Mexico City.
Mastache, Alba G., Robert H. Cobean and Dan M. Healan
2002 *Ancient Tollan. Tula and the Toltec Heartland*. University Press of Colorado, Boulder.
Metcalfe, Sarah and Sarah Davies
2007 Deciphering recent climate change in central Mexican lake records. *Climatic Change*, Vol. 83: 69–86.
Michelet, Dominique
1996 *Río Verde, San Luis Potosí*. Instituto de Cultura San Luis Potosí, Lascasiana, S.A. de C.V., Centre d'études mexicaines et centraméricaines, San Luis Potosí.
Morales Monroy, Juan Jorge
2011 Producción cerámica en el suroeste del Bajío. *TRACE*, Núm. 59: 25–39.
Paredes Gudiño, Blanca
1990 *Unidades habitacionales en Tula, México*. Colección Científica 210. Instituto Nacional de Antropología e Historia, Mexico City.
2005 Análisis de flujos migratorios y composición multiétnica de la población de Tula, Hgo. *Reacomodos demográficos del Clásico al Posclásico en el centro de México*, edited by Linda Manzanilla México, pp. 203–226. Instituto de Investigaciones Antropológicas, Universidad Nacional Autónoma de México, Mexico City.
Pomédio, Chloé
2015 Las tradiciones alfareras en el Bajío epiclásico. *Anales de Antropología*, Vol. 49 (1): 223–260.
Pomédio, Chloé, Grégory Pereira and Eugenia Fernández-Villanueva (eds)
2013 Presentación. *Tradiciones cerámicas del Epiclásico en el Bajío y regiones aledañas: cronología e interacciones*, pp. 3–8. BAR International Series 2519. British Archaeological Report, Oxford.
Price, Douglas, Linda Manzanilla and William Middleton
2000 Immigration and the Ancient City of Teotihuacan in Mexico: A Study Using Strontium Isotope Ratios in Human Bone and Teeth. *Journal of Archaeological Science*, Vol. 27 (10): 903–913.
Rattray, Evelyn C.
1966 An Archaeological and Stylistic Study of Coyotlatelco Pottery. *Mesoamerican Notes*, No. 7–8: 87–211.
Romero Azuela, Arnoldo
2009 Arqueología del paisaje de la serranía del Xithi, la utilización ritual de los cerros en la región de Tula, Hidalgo. Licentiate thesis. Escuela Nacional de Antropología, Mexico City.
Sánchez Miranda, Ma. Guadalupe
1999 Análisis de la lítica tallada. *Un espacio doméstico rural en el área de Tula Tepetitlán*, edited by Robert H. Cobean and Alba G. Mastache, pp. 172–238. Latin American Archaeology Publications, University of Pittsburgh & Instituto National de Antropología e Historia, Pittsburgh and Mexico City.
Solar Valverde, Laura (ed)
2006 *El fenómeno Coyotlatelco en el centro de México: tiempo, espacio y significado*. Consejo Nacional para la Cultura y las Artes & Instituto Nacional de Antropología e Historia & Coordinación Nacional de Arqueología, Mexico City.
Soler, Ana María and Fermín Sáchez Aldana
2016 *Fechamientos de Pisos de Estuco con Técnicas Arqueométricas en el cerro Magoni, Tula.* Unplished Report submited to H. Anderson. Universidad Nacional Autónoma de México, Mexico City.
Soler-Arechalde, Ana M., F. Sánchez, María Rodriguez, Cecilia Caballero-Miranda, Avto Goguitchaishvili, Jaime Urrutia-Fucugauchi, Linda Manzanilla and Donald H. Tarling
2006 Archaeomagnetic investigation of oriented pre-Columbian lime-plasters from Teotihuacan, Mesoamerica. *Earth Planets Space*, Vol. 58 (10): 1433–1439.
Spence, Michael W., Christine D. White, Patricia Fournier, Emily Webb and Fred J. Longstaffe
2011 *Chapantongo Site: Oxygen Isotope Analysis and the Epiclassic Population Mobility in the Valley of Mezquital*. Society for American Archaeology 76th Annual Meeting Sacramento, March 31st.
Stahle, David W., Dorian J. Burnette, José Villanueva Diaz, Richard R. Heim Jr., Falco K. Fye, Julián Cerano Paredes, Rodolfo Acuna Soto and Malcolm K. Cleaveland.
2011 Pacific and Atlantic influences on Mesoamerican climate over the past millennium. *Climate Dynamics*, Vol. 39 (6): 1–16.
Stahle, David W., Edward R. Cook, Dorian J. Burnette, Jose Villanueva, Julian Cerano, Jordan N. Burns, Daniel Griffin, Benjamin I. Cook, Rodolfo Acuña, Max C.A. Torbenson, Paul Sjezner and Ian M. Howard
2016 The Mexican Drought Atlas: Tree-ring reconstructions of the soil moisture balance during the late pre-Hispanic, colonial, and modern eras. *Quaternary Science Reviews*, Vol. 149: 34–60.
Sterpone, Osvaldo
2000-2001 La quimera de Tula. *Boletín de Antropología Americana*, Núm. 37: 141–204.
Stocker, Terrance and Michael Spence
1973 Trilobal Eccentrics at Teotihuacan and Tula. *American Antiquity*, Vol. 38 (2): 195–199.

Sugiura, Yoko, César Villalobos Acosta, Ma. del Carmen Pérez and Elizabeth Zepeda
2015 Una mirada hacia el proceso de identidad en el valle de Toluca precortesiano, México. *Revista de Indias*, Vol. 75 (264): 289–322.

Wallerstein, Immanuel
2007 *El Moderno Sistema Mundial*. Translated by Antonio Resines. Siglo Veintiuno Editores, Mexico City.

# Chapter 5
# Conflict and Community during the Epiclassic Period in the Basin of Mexico and Southern Mezquital Valley

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For approximately three centuries following the decline and collapse of Teotihuacan in the sixth and seventh centuries AD until the formation of Tula in the tenth, central Mexico and much of Mesoamerica witnessed a series of dramatic changes. Archaeologists have come to call this time the Epiclassic. Of all the concepts deployed in discussions of the Epiclassic, those that describe the political landscape are perhaps the most significant, denoting developments that conditioned the manifestations of other processes and trajectories. Competition, conflict and militarism in the wake of Teotihuacan's collapse has been considered a major factor in the creation of a decentralised, fragmented geopolitical landscape, which, in turn, directly shaped the emergence of Tula. Archaeologists not only recognise conflict and violence as intrinsic components of geopolitical relationships but also as a set of institutions, practices and ideologies that shaped the fabric of society locally and macro-regionally. As López Austin and López Luján (2000: 23) observed, "during the Epiclassic, political instability assured that military concerns would permeate all aspects of social life."

In this chapter, I examine the role of conflict, instability and militarism in shaping the Epiclassic political landscape of the northern Basin of Mexico and the southern Mezquital region (Figures 5.1, 5.3). This is a particularly significant region for undertaking this task. It falls physically between the sites of Teotihuacan and Tula Grande, the two cities and state systems whose collapse (Teotihuacan) and formation (Tula) conventionally demarcate beginning and end of the Epiclassic period. More importantly, this region was incorporated within the political economies of both states during their apogees (Fournier García 2007; Mastache *et al.* 2002; Parsons 2008; Sanders *et al.* 1979). Archaeologists therefore recognise that research on the collapse of Teotihuacan and the formation of Tula requires understanding the political relationships during Epiclassic period (e.g. Diehl and Berlo 1989; Fournier García and Bolaños 2007; Manzanilla 2005; Mastache *et al.* 2002; Solar Valverde 2006). In this regard, multiple centres were established in the Basin of Mexico and adjacent areas in defensive positions, on elevated terrain and large hilltops, suggesting regional conflict in a fragmented geopolitical environment.

Epiclassic settlement in the northern Basin of Mexico and the Tula valley in the southern Mezquital especially illustrates the trend toward population nucleation in hilltop centres (Anderson *et al.* 2016; Fournier García and Bolaños 2007; Mastache and Cobean 1989, 1990; Mastache *et al.* 2002; Parsons 2008). Centres were established on the tops of several large Tertiary and Cretaceous mesas, hills and mountain ranges that overlook the alluvial bottomlands of the Salado and Tula Rivers. Competition and conflict have been considered key reasons for their appearance (Mastache and Cobean 1989; Mastache *et al.* 2002). Archaeologists have speculated that new groups of people, some possible migrants, settled in this area during or soon after Teotihuacan's political collapse but prior to any widespread demographic collapse. This encounter led to competition with the pre-existing population, forcing settlers to establish communities in defensible positions. During the early facet of the Epiclassic, which was originally known as the Mesa phase, the hilltop settlements would become independent polities in a decentralised political landscape. However, a new polity, Tula Chico, would emerge as the centre of a Toltec state amid this constellation of kingdoms. The hilltop centres were soon abandoned, perhaps conquered by Tula Chico, which dominated the valley during the Corral phase. Toward the end of the Epiclassic period, Tula Chico also was abandoned, again possibly due to conquest or internal conflict. The epicentre of regional power then shifted to Tula Grande, which would become a centralised state throughout the Early Postclassic period, Tollan phase.

Although support for this reconstruction is hardly unanimous, a trajectory that moves from the collapse of Teotihuacan to the establishment of Tula Chico to the formation of Tula Grande has been influential for over half a century (see Diehl 1983). New field research and recent revisions to the region's chronology,

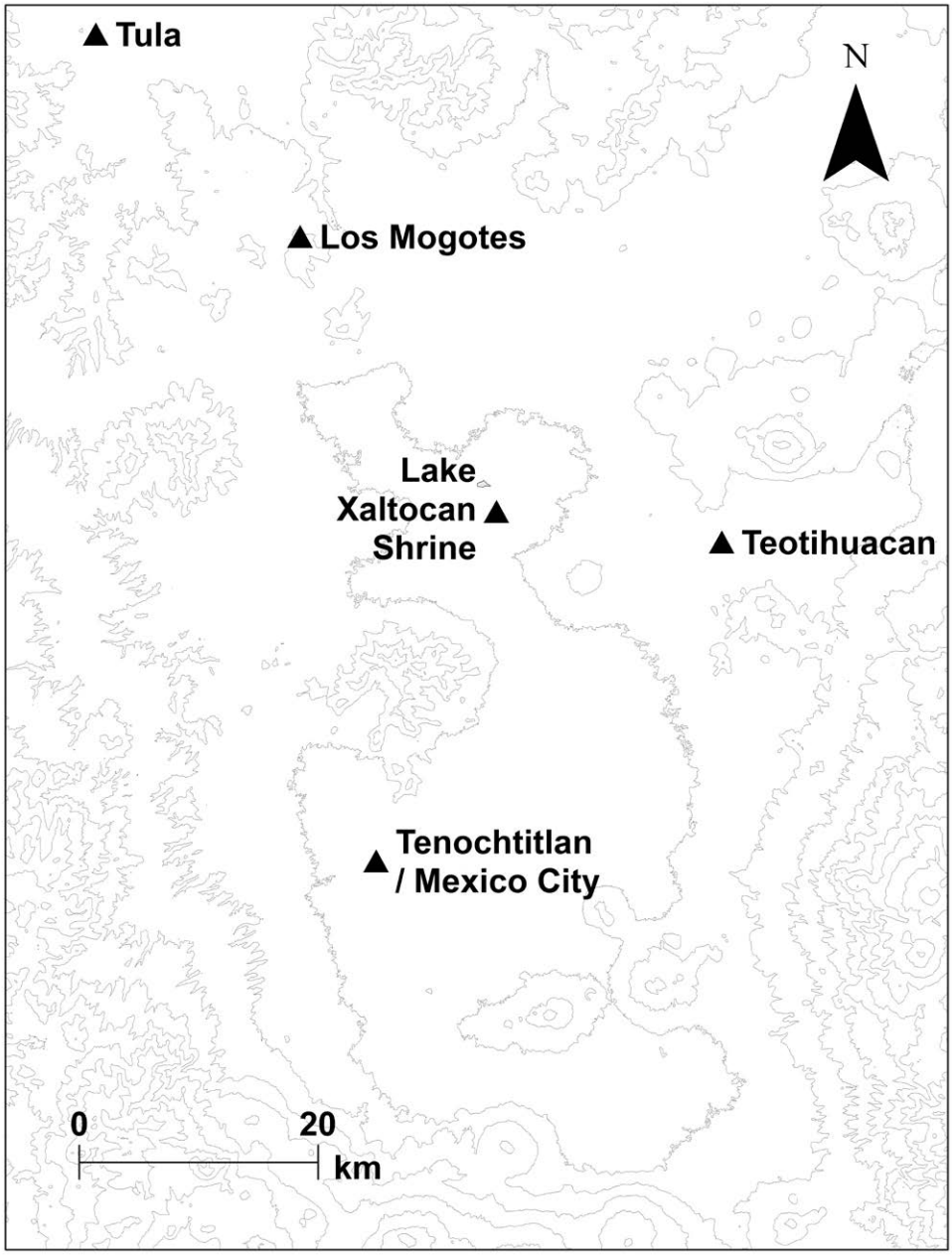


**Figure 5.1:** Map of the Basin of Mexico and the Tula region (map by Christopher Morehart).

however, has complicated the standard model of Tula's development (Anderson 2018; Cobean *et al.* 2021; Healan *et al.* 2021). Tula Chico may have been settled in the Classic period, though two centuries would pass before the initiation of monumental building. Tula Chico's Terminal Epiclassic period abandonment was also called into question, raising the possibility that it was occupied or used as a shrine during the Tollan phase (Healan *et al.* 2021: 175). Moreover, archaeologists have eliminated the Mesa Phase, making the hilltop centres contemporary with Tula Chico from the Classic to the Epiclassic period. These revisions likely will have a profound effect on reconstructions of Tula's history but integrating them into a long-term trajectory is still necessary.

In this chapter, I explore the effects that the rapidly changing archaeological record has for understandings of historical change and evaluate their implications at the local level at one of the hilltop centres in the Tula region, known simply as Los Mogotes or La Mesa Ahumada. I begin with an overview of research on the Epiclassic period in central Mexico, focusing specifically on the Basin of Mexico and the Tula region. This provides a framing to review earlier views and to assess how recent revisions might alter interpretations

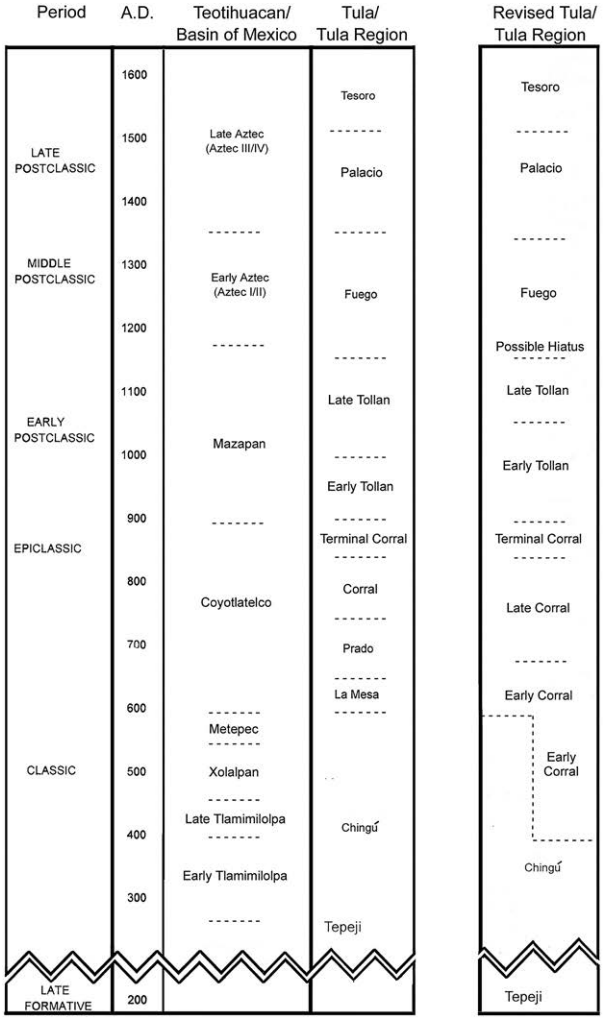


**Figure 5.2:** Regional Chronological Scheme for the Basin of Mexico and Tula region (adapted from Healan *et al.* 2021: Fig. 1a).

of the Epiclassic and the development of Early Postclassic Tula. Thereafter, I scale down geopolitics to Los Mogotes and present data that might indicate the existence of persistent conflict. But this research also demonstrates a community of people adapted to the challenges of hilltop living and, perhaps, political instability. Finally, this case study offers an opportunity to re-evaluate the nature of conflict in the Epiclassic period and to consider alternative models to explain the transformation of the political landscape.

## Politics and conflict

In the Basin of Mexico and adjacent areas, the collapse of Teotihuacan strongly affected settlements, economies, political systems, ideology and material culture (e.g. Diehl and Berlo 1989; Manzanilla 2005; Sanders *et al.* 1979). The regional population declined and became more nucleated in large communities and centres (Parsons 2008; Sanders *et al.* 1979). Classic period production and distribution systems of key goods, such as obsidian, apparently broke down and new networks connected to faraway sources emerged (Cobean 2002). Pottery assemblages indicate participation within a regional interaction sphere (Jimenez 2020). For example, producers and consumers of this sphere's most diagnostic ceramic type, Coyotlatelco Red-on-buff (*Rojo sobre bayo*), engaged in a high degree of cultural and information exchange (Clayton 2016; Crider 2023; Crider *et al.* 2007; Sugiura 2006). The prevalence and distribution of ceramic griddles (*comales*), ladles, censers (*sahumadores*) and by the Late Epiclassic, *molcajetes* attests to the coalescence of cultural practices into new forms of cuisine, commensality and ritual (Clayton 2021; Jimenez 2020: 114).

Cultural relationships and information flow had farther reach across this interaction sphere than the movement of certain goods, however. The production and the exchange of Coyotlatelco ceramics, for example, were tied to local polities or communities (Crider 2011, 2023; Crider *et al.* 2007). Based primarily on the distribution of ceramic data, scholars have suggested the sub-regionalisation of political economic spheres in the northern, eastern, western and southern sections of the basin (e.g. Crider 2011; García Velasco *et al.* 2017; García Chávez and Martínez Yrizar 2006; Sanders *et al.* 1979: 129–137). Politically, in other words, the collapse of Teotihuacan seems to have fostered competition and the formation of a balkanised political landscape (Blanton 1975; Parsons 1971, 2006).

Archaeological data from the northern Basin of Mexico and the Mezquital suggest that war-making and ritual violence was ongoing throughout the Epiclassic period, supporting the notion that militarism represented an important trans-cultural value (e.g. Bey and Ringle 2007; Hirth 1989; Koontz 2009; López Austin and López Luján 2000; Mastache and Cobean 1989; Ringle *et al.* 1998). Evidence of human sacrifice, decapitation and possibly the practice of keeping trophy heads also exists and reinforces widespread themes seen in the iconography of political centres in central Mexico and elsewhere. For example, a shrine site constructed in Lake Xaltocan in the northern basin contained evidence of repeated episodes of ritual sacrifice during the Early and Late Epiclassic (Morehart *et al.* 2012) (Figure 5.1). The shrine was constructed and first used as early as the mid-sixth century AD, not far north from where a series of springs fed into Lake Xaltocan. Geographically and contextually, the shrine site exhibits several striking similarities to a sacred place the *Anales de Cuauhtitlan* named Acpaxapocan, where people conducted rituals and sacrifices to a goddess named Acpaxapo (Bierhorst 1992), an enigmatic deity who shares characteristics with Otomí siren goddesses.

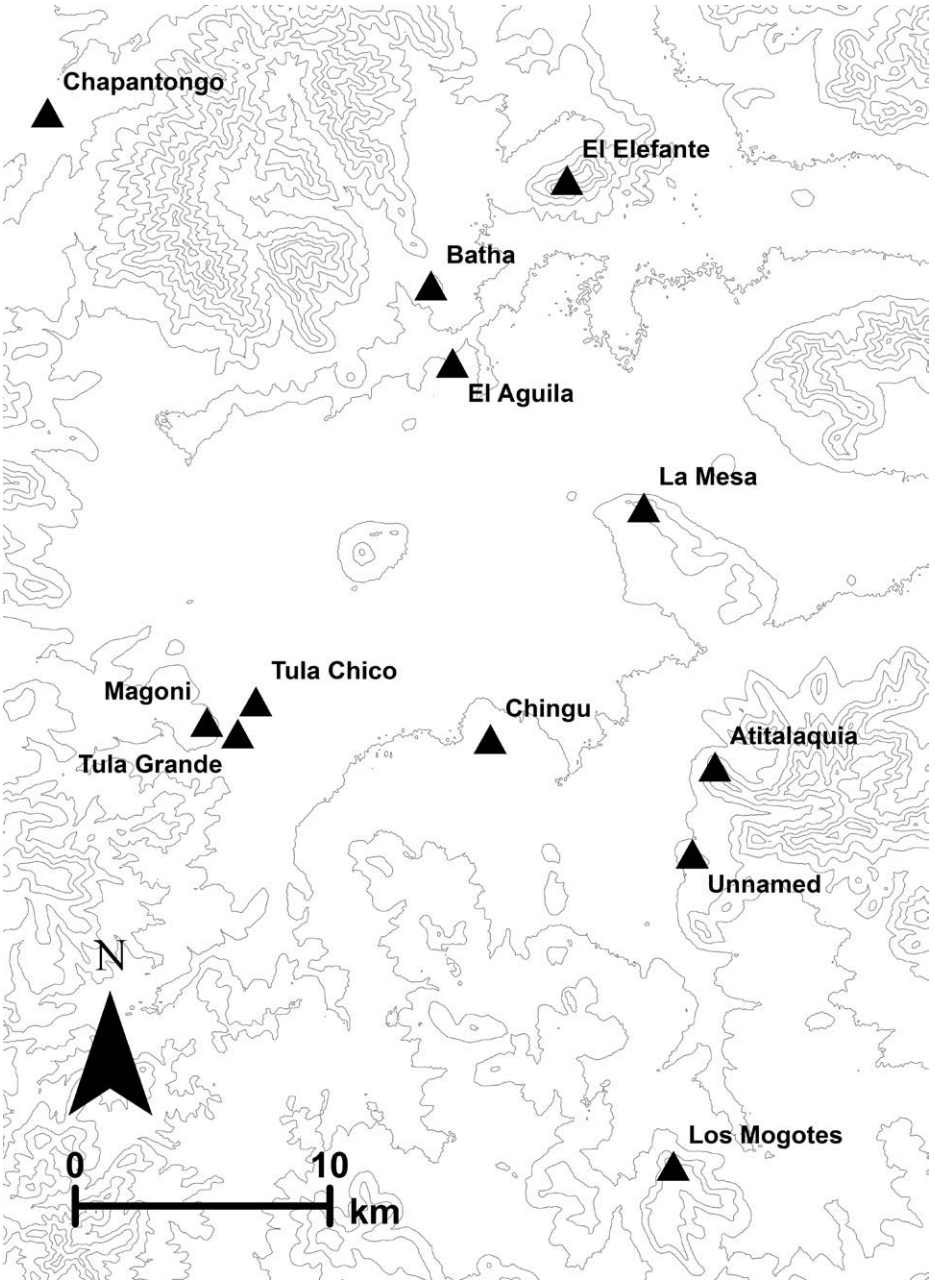


**Figure 5.3:** Map of the Tula region and northern Basin of Mexico with the location of hilltop centres (map by Christopher Morehart).

Both ceramics and radiocarbon dates suggest the shrine was used from the Early to the Late Epiclassic period. Offerings of food, flowers and humans occurred. The remains of at least 300 individuals were recovered, represented either by complete crania or cranial fragments, though some skulls had finger bones in the eye sockets. Most crania were associated with cervical vertebrae, suggesting muscles or tendons were present at burial. Cut marks suggest defleshing and decapitation. Almost all the crania appear to be from biological males. Isotopic and biodistance analyses indicate that most of the sacrifices differ from both earlier and contemporaneous populations in the region, suggesting they were individuals who relocated to the Basin of Mexico prior to death (Meza- Peñaloza *et al.* 2019; Meza- Peñaloza *et al.* 2021; Pacheco-Forés *et al.* 2021). It is possible they were warriors captured in battle, not unlike later Mexica practices (Durán 1971). Farther away from Lake Xaltocan, similar remains were found at Chapantongo, northwest of Tula, where crania of 12 individuals were recovered from an altar, associated with cervical vertebrae and finger and foot bones (Fournier García and Bolaños 2007).

Militarism is certainly evident at the Early Postclassic city of Tula Grande. Art historians and archaeologists

frequently have interpreted individuals depicted in the site's sculptures as warriors, warrior-kings, or warrior-merchants (Acosta 1941, 1943; Kristan-Graham 1993; Mastache *et al.* 2009). Depictions of skeletons, skulls and sacrifices also place later Tula within this ideological paradigm. Moreover, human remains from burials also point to a degree of institutionalised violence, where burials of crania and child sacrifices have been documented (Gamboa Cabezas and Healan 2021; Gómez Serafín *et al.* 1994; Medrano Enriquez 2021). The origin of these ideas and practices is controversial. Archaeologists working in Yucatan have speculated that many of the beliefs and practices seen at Tollan phase Tula may have come from the eastern Lowlands, notably from Terminal Classic period Chichen Itza (e.g. Bey and Ringle 2007; Ringle 2017). Iconographic data from Tula Chico and the hilltop site of La Mesa, however, indicate that some of the symbolic themes prevalent at Tula and Chichen Itza had antecedents even earlier in the Epiclassic period (Cobean *et al.* 2021; Jordan 2016; Mastache and Cobean 1989; Mastache *et al.* 2009; Turner and Kristan-Graham 2023). Future research on the poorly understood Late Epiclassic component underlying Tula Grande might shed light on this issue (Paredes Gudiño 1998; Sterpone Canuto 2006).

Understanding conflict, settlement and politics hinges on chronological reconstructions (Figure 5.2). The transitional nature of ceramics between the Classic and Epiclassic periods has been well noted (e.g. Cobean 1990; Crider 2011; Dumond and Muller 1972; Healan 2012; Healan *et al.* 2021; Hicks and Nicholson 1964; Mastache *et al.* 2002; Parsons 2006; Piña Chán 1967; Sanders 2006; Sugiura 2006). The likelihood that overlaps existed raised the possibility that ceramic classifications, particularly those from regional surveys, lacked the resolution to adequately capture this important period of social change. Surveyors in the Basin of Mexico, for example, identified Classic sites as either Early or Late (sometimes simply as Classic), Epiclassic sites as "Early Toltec," and Early Postclassic sites as "Late Toltec" (Sanders *et al.* 1979). One reason surveyors classed Classic sites as either Early or Late was due to the potential overlap between diagnostic later Classic and Early Toltec period types, which Parsons (2008: 371) noted was difficult to distinguish at multi-component sites.

The need to subdivide the Epiclassic period into earlier and later facets is based on key pottery types (e.g. Cobean 1990; Crider 2011, 2013, 2023; Good and Obermeyer 1986; Healan *et al.* 2021; Piña Chán 1967; Sanders 2006; Sugiura 2006). Propositions for an early Epiclassic or transitional phase tend to distinguish between (1) an earlier facet that exhibits types and forms common to the Classic period, notably to the Xolalpan and Metepec phases, as well as newer types and (2) a later facet in which Coyotlatelco was common. The widespread distribution of Coyotlatelco throughout the Basin of Mexico and surrounding areas seems to differ from the more sub-regional distribution of pottery types considered markers of the Early Epiclassic period, suggesting different cultural orientations and relationships before the spread of the Coyotlatelco sphere (see Clayton 2016). Sanders (2006) argued that the Early Epiclassic at Teotihuacan, designated the Oxtotipac phase, demonstrates continuity with the Classic period and the local development of Coyotlatelco, perhaps at Teotihuacan itself, one of the largest Epiclassic settlements in the Basin of Mexico (*cf.* Bennyhoff 1967). Among Oxtotipac pottery was a Red-on-buff type that is like Coyotlatelco, but which seemed to be a "crude" prototype (Sanders 1986: 369; see also Rattray 1966: 98). This type was found in regional surveys of the northern Basin and is known to exist in the Tula region from at least one of the hilltop sites, La Mesa (Crider 2011; Healan *et al.* 2021; Martínez Landa 2009). Its underrepresentation, however, could be the result of analysists classifying it as Coyotlatelco, which may be correct.

In the Tula region, the Early Epiclassic originally was designated the Prado phase but now the Early Corral phase, in which incised wares existed along with types similar to Classic wares, such as upright, tripod vases (Cobean 1990; Healan *et al.* 2021). These Early Corral materials were common at Tula Chico, leading to the model that saw Tula Chico as the likely progenitor for Tula Grande (Anderson *et al.* 2016; Cobean *et al.* 2021; Diehl 1983; Healan 2012; Mastache and Cobean 1989; Mastache *et al.* 2002). Subsequent survey around Tula complicated this developmental trajectory. Ten nucleated centres on elevated terrain were documented, eight of which were established on large hilltops and ranges overlooking the Tula Valley (Figure 5.3). Intensive fieldwork has occurred only at three of these sites: La Mesa in the southeast of the valley; Magoni to the west; and Los Mogotes to the south, just outside the Basin of Mexico (Anderson 2018; Anderson *et al.* 2016; Mastache and Cobean 1989, 1990; Mastache *et al.* 2002; Morehart *et al.* 2023; Rees 1990). These centres are noted for architectural diversity, variable site orientations and size differences. However, they share several features in common, such as multiple precincts with pyramidal structures, plazas and probable palaces; the use of "Toltec small stone" building techniques; and extensive architectural and agricultural terracing. Size disparities exist in the distribution of terracing across their associated hills. However, if measurements focus on areas of clear settlement, all three centres occupy between 30 and 40 ha (within the range of Tula Chico).

Hilltop sites had Coyotlatelco ceramics, the diagnostic pottery type for the Late Corral phase in the Tula

region. However, like Oxtotipac materials, they appeared to be the simpler prototypes (Healan *et al.* 2021: 171; Mastache and Cobean 1989: 56). Consequently, archaeologists were able to incorporate these hilltop centres into the existing developmental scheme by proposing an earlier phase, the Mesa phase (Anderson *et al.* 2016; Healan 2012; Healan and Cobean 2019; Healan *et al.* 2021; Mastache and Cobean 1989, 1990; Mastache *et al.* 2002). According to this view, new populations moved into the region during the decline of Teotihuacan but encountered remnant settlements associated with the collapsing mega-state. Hilltops would have offered a degree of protection if conflict over land and resources existed as these would have been easier to defend from attack. The hilltop locations also may have provided an effective means of alerting allied centres during conflict, particularly with fire or smoke signals. Indeed, visibility analyses demonstrate a high degree of intervisibility between hilltops as well as much better views of the landscape than non-hilltop locations, suggesting the importance of inter-polity communication and regional surveillance (Morehart *et al.* 2023).

As Tula Chico emerged as a regional power, archaeologists argued that the hilltop centres were incorporated into the new state, perhaps through conquest and were abandoned (*cf.* Anderson *et al.* 2016). Toward the end of the Epiclassic, Tula Chico also was thought to have been embroiled in conflict, possibly due to internal struggles between competing lineages or houses, which led to its destruction and the victors' establishment of Tula Grande. Tula Chico's destruction led to speculation that this event is the source of the mythical account of the overthrow or betrayal of Topiltzin Quetzalcoatl (e.g. Diehl 1983), who fled to the east and either cremated himself or disappeared into the sea, as central Mexican sources relate (e.g. Alva Ixtlilxochitl 1891; Bierhorst 1992; Sahagún 1961), or re-established his rule at Chichen Itza by way of the Gulf Coast, possibly under the moniker Nacxit, as described in highland and lowland Maya accounts (e.g. Recinos and Goetz 1953; Scholes and Roys 1968; Tedlock 1985).

Recently, the Mesa phase has been abandoned based on analyses that demonstrated the contemporaneity of hilltop sites with Tula Chico (Healan *et al.* 2021). Likewise, the initial occupations of Tula Chico and now the hilltop sites were pushed back to the fifth century AD, concurrent with the Tlamimilolpa phase at Teotihuacan, when the region was densely occupied by a multi-ethnic population (Healan and Cobean 2019; Holt Mehta 2018; Mastache *et al.* 2002; Pierce *et al.* 2022; Sandoval 2017). This revision also makes Tula Chico's early occupation and apparently the hilltop sites contemporaneous with the nearby Classic period centre of Chingu, a possible outpost of Teotihuacan established to manage the production of limestone, as well as the largest Classic centre in the northern basin (Zu-CL-60) immediately to the south of Los Mogotes (Díaz Oyarzábal 1980; Parsons 2008). The possibility for co-existence might add greater weight to the idea of conflict and competition. New settlers possibly came into conflict not with remnant Teotihuacan-related populations but, rather, with the military apparatus of an empire.

## Conflict and community

Los Mogotes is positioned overlooking the Tula valley at the northern end of Cerro Ahumada, a mesa of Tertiary age just north of the Basin of Mexico between the towns of Tequixquiac and Huehuetoca (Figure 5.3). The *Anales de Cuauhtitlan* and the *Historia Tolteca Chichimeca* contain multiple provocative descriptions that mention a place called Macuexhuacan Huehuetocan, including in reference to Toltec and Chichimec migrations in the seventh century AD (Bierhorst 1992; Kirchhoff *et al.* 1976). Many of the settlements and landmarks related to Macuexhuacan are near Cerro Ahumada (e.g. Huehuetoca, Cuauhtitlan and Apaxco). More significantly, a 1577 land grant (*merced*) in Tequixquiac contains a description of a mountain that clearly is Cerro Ahumada but whose name is spelled as Mequexcacan, reinforcing the possibility of a linkage between Cerro Ahumada and the location described in historic chronicles (Archivo General de la Nación n.d.: fol. 273r; but see Vonk 2021; Whittaker 2012).

Los Mogotes occupies about 38 ha and has two precincts of monumental architecture, including pyramidal and range structures and a variety of households and occupational as well as agricultural terraces that cover most of Cerro Ahumada's slopes (Figure 5.4). The main monumental precinct seems to have been to the north, as it is the larger and more complex. This group is surrounded by low rubble mounds that are the remains of buildings, including households, a probable palace and more civic-oriented structures. It also appears to have been constructed in reference to astronomical events. The three main pyramidal structures line up so that if you are standing on the top of the site's largest pyramid during the summer solstice, the sun sets behind the second largest pyramid to the northwest. To my knowledge, this orientation differs from other Epiclassic period sites in the area (Anderson *et al.* 2016; Fournier García and Bolaños 2007; Healan and Cobean 2019).

Our excavations of the northern precinct identified a large building with a central plaza area that opens to the west toward the site's main monumental group (Figure 5.5). The structures that delineate the northern and southern sides of the plaza were in poor conditions, but

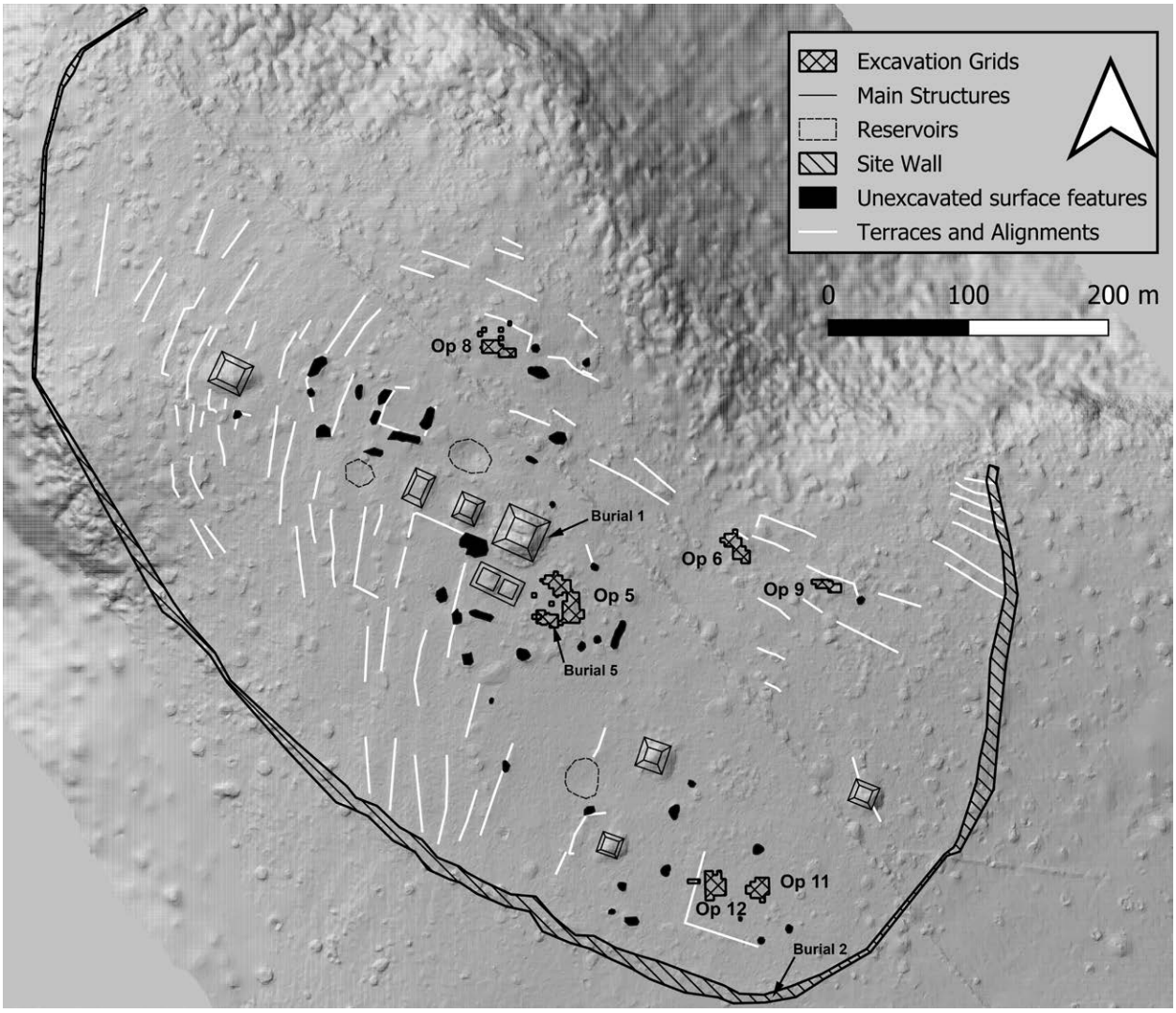


**Figure 5.4:** Topographic and photogrammetry map of Los Mogotes, showing features discussed in text. Prism (Maler convention) maps of major structures stress shape over height (map by Christopher Morehart).

it was possible to reconstruct their form. Each building was constructed by stacking bricks over larger, faced stones with mud-mortar and limestone stucco, like the Toltec-Small Stone technique observed at Tula (Healan 1989) (Figure 5.6). This technique was used to create two levels of slanting slopes or *taludes* that then step down into the plaza. Both the north and the south sides mirror one another and a similarly constructed wall runs north-south perpendicular to the former, which may have defined interior space to the east. Our analysis of the materials from this structure continues, but our preliminary assessment is that this building was central to the civic-ceremonial life of the community. We have recovered sizable quantities of decorated serving wares, including Coyotlatelco, more than any other operation. This operation also had high quantities of groundstone artefacts. Although tentative, these materials could have been for processing and serving food and drink during feasting events in the site centre.

Two burials associated with the main monumental group may have been sacrificial victims. One of these burials (Burial 1) was encountered in a test-pit we excavated to the east of the site's largest pyramid (Structure 1) (Figure 5.4). The burial contained the remains of a juvenile who was interred in a tightly flexed position without any clear offering goods. Its location in the site centre adjacent to a pyramid suggests the burial was undertaken during public rituals in the centre of the town, which would not be unusual for a sacrificed individual. The primary reason for this interpretation, however, lies with the configuration of the body itself: the location of the bones of the hands and arms suggests that the hands had been tied behind the back, similar to depictions of captives in Mesoamerican iconography (García Velasco *et al*. 2017). The other possible sacrificial burial (Burial 5) in the main group was encountered on the southern side of the large plaza complex just discussed. Just to the outside of the compound, the

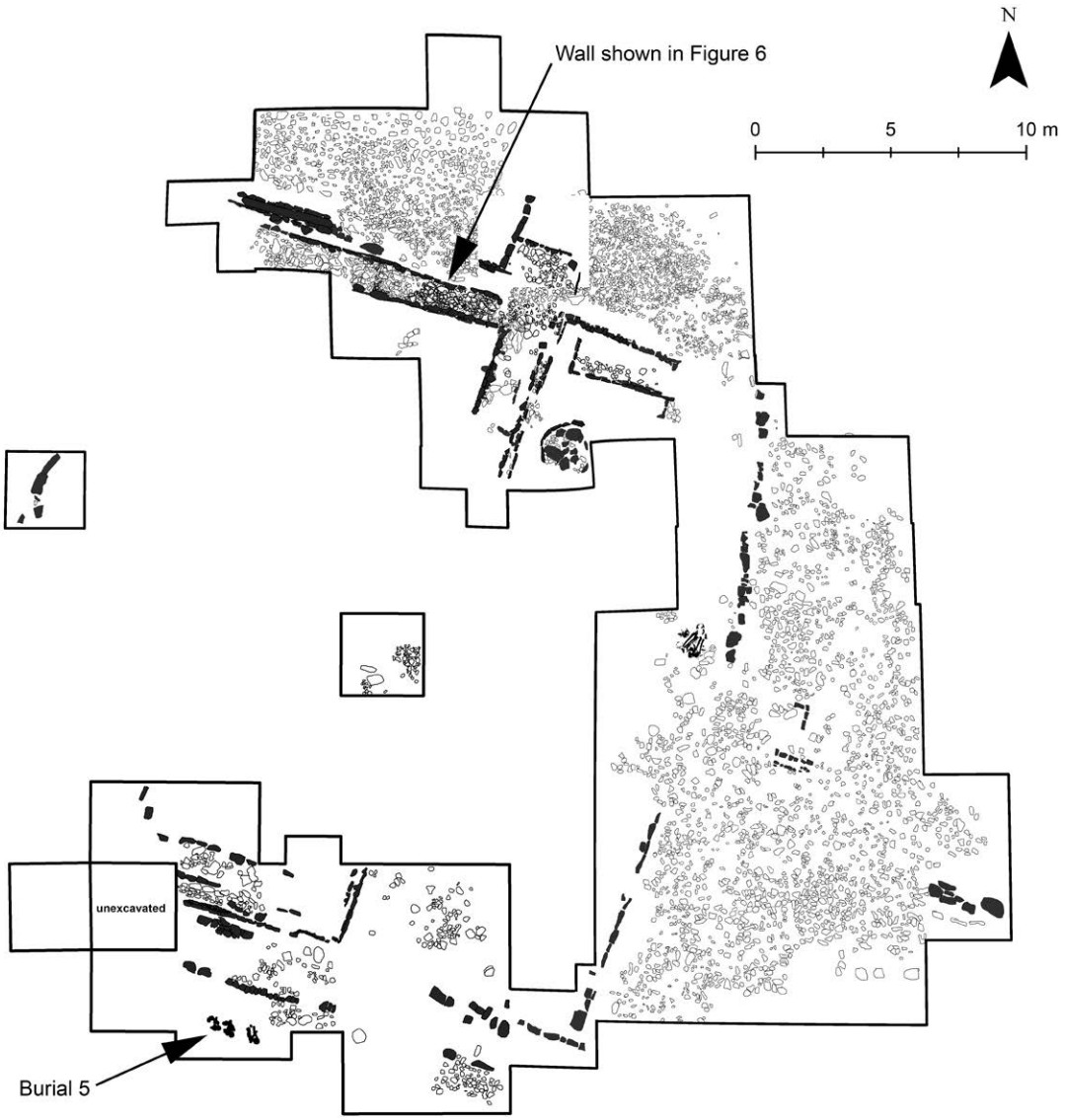


**Figure 5.5:** Plan map of exposed architecture in Operation 5 excavations in the main precinct. Possible sacrificial burial indicated as Burial 5 (plan by Chritopher Morehart).

burial contained three biological male adults who were interred together in line with the building's orientation (García Velasco and Meza Peñaloza 2018; Morehart *et al.* 2023). Osteological analysis discovered the tip of an obsidian biface embedded in the right femoral region of one individual, which easily could have been the cause of death. Similar to the Lake Xaltocan shrine, biodistance analysis suggests that the sacrifices do not appear related to individuals interred in household contexts at Los Mogotes (Meza-Peñaloza *et al.* 2021), suggesting ethnic differences may have influenced the selection of sacrificial victims (see Pacheco-Forés *et al.* 2021).

In addition to the hilltop setting and possible sacrifices, another potential sign that conflict was a major concern is suggested by the fact that Los Mogotes was fortified (Figure 5.4). Almost the entire site is surrounded by the remains of a stone wall, which delineates an ovoid perimeter encompassing Los Mogotes on the west, south and east. Only the north was not architecturally protected, where the centre faces and overlooks the Tula valley. However, this section of the mesa is marked by steep slopes and precipitous cliffs. Los Mogote's wall does not appear to have been a rapid response to a sudden escalation in conflict and violence. The wall does not interfere with the site's architecture


**Figure 5.6:** Northern side of north wall of building excavated in the main precinct (see Figure 5.5), showing building technique (photograph by Christopher Morehart).

and in some places we have documented terraces that abut the interior of the wall but do not extend beyond the other side. So far, we have only excavated a single trench into its rubble and collapse. The trench uncovered the stone basal courses that delineate the wall's interior and exterior sides, suggesting it was originally around 2 m wide. The space between the sides was filled in and levelled off with rubble and soil, perhaps creating an elevated walkway behind a now-collapsed parapet. In the centre of the wall, our trench uncovered the interment of a tightly flexed male adult (Burial 2), another potential sacrifice, who was buried with two large, obsidian bifaces (Figure 5.7). One of the bifaces was found in the soil around the pelvis missing its point, which was found embedded in the pelvis itself (Garcia Velasco *et al.* 2017).

Despite the evidence for violence and conflict, residents at Los Mogotes established a community and adapted to the conditions of a hilltop settlement. Variation in domestic architecture ranges from terraced residential complexes to isolated buildings. For example, in a flat area southeast of the second precinct we uncovered the partially intact remains of a square shaped building on a low platform with a single room and the poorly preserved remains of a colonnaded portico entrance on the north side. This architectural form has been documented at other hilltop sites in the region, such as La Mesa east of Tula (Bonfil Olivera 2005). Burials from this operation were few and poorly preserved and include one child burial and another containing an adult.

This household differs from three residential areas we excavated in an area of extensive terraces to the north and northeast of the main monumental group. All three differ in size and quality of construction materials and most have collapsed down slope. But they seem to be multi-structure or room complexes built on low platforms that follow the orientation of the terraces and may have housed one or more extended family. The terraces appear to have been constructed to build up architectural or residential space, a trend we also have noted with monumental architecture. Most burials have multiple individuals and indicate the re-utilisation of the same burial spaces, a practice that often disturbed earlier interments. Similar household burials have also been recorded at La Mesa (Mastache and Cobean 1989: 40). Unlike the possible sacrifices, these burials were found with a range of grave goods, including obsidian bifaces, shell ornaments, bowls and jars. Although a diversity of ceramic offerings, including red wares, has been found, Coyotlatelco is not frequent in household burials. Instead, rarer ceramic types seem common. We

**Figure 5.7:** Drone photograph of trench excavated in the site wall showing central burial (up is north) (photograph by Christopher Morehart).

have recovered double necked jars (*ollas*) and orange bowls decorated in white with waterfowl motifs, such as herons or egrets, pelicans and possibly ducks. This type was also documented at La Mesa, where Martínez Landa (2009) classified it as Western Cream-on-orange and suggested relationships with areas farther to the west. However, this type is also similar to contemporaneous pottery from sites in Veracruz, such as Nopiloa and Isla de Sacrificios (Medellín 1960), suggesting local efforts to demonstrate social connections to these regions as part of mortuary rites.

Settling on a hilltop far from perennial water sources rather than in the surrounding foothills or alluvial floodplains, would have created several logistical problems, particularly if conflict disrupted or impeded residents' ability to access essential resources. These settlements would have been particularly vulnerable to unpredictable environmental conditions or extended periods of low precipitation, such as drought. Based on settlement distributions across time, Parsons (2008: 99) speculated that drier conditions existed during the Epiclassic period. Support for this view exists in more direct paleoecological proxies from highland Mexico. In the Toluca valley to the west of the Basin of Mexico, Caballero and colleagues (2002) and Ludlow-Wiechers and collaborators (2005) found drier conditions and lower lake levels during the Epiclassic period than the Early Postclassic period (*c.* AD 1100). Lachniet and colleagues (2012) documented a "mega-drought" during the Epiclassic period via speleothem records south of the Basin of Mexico. Dendrochronological

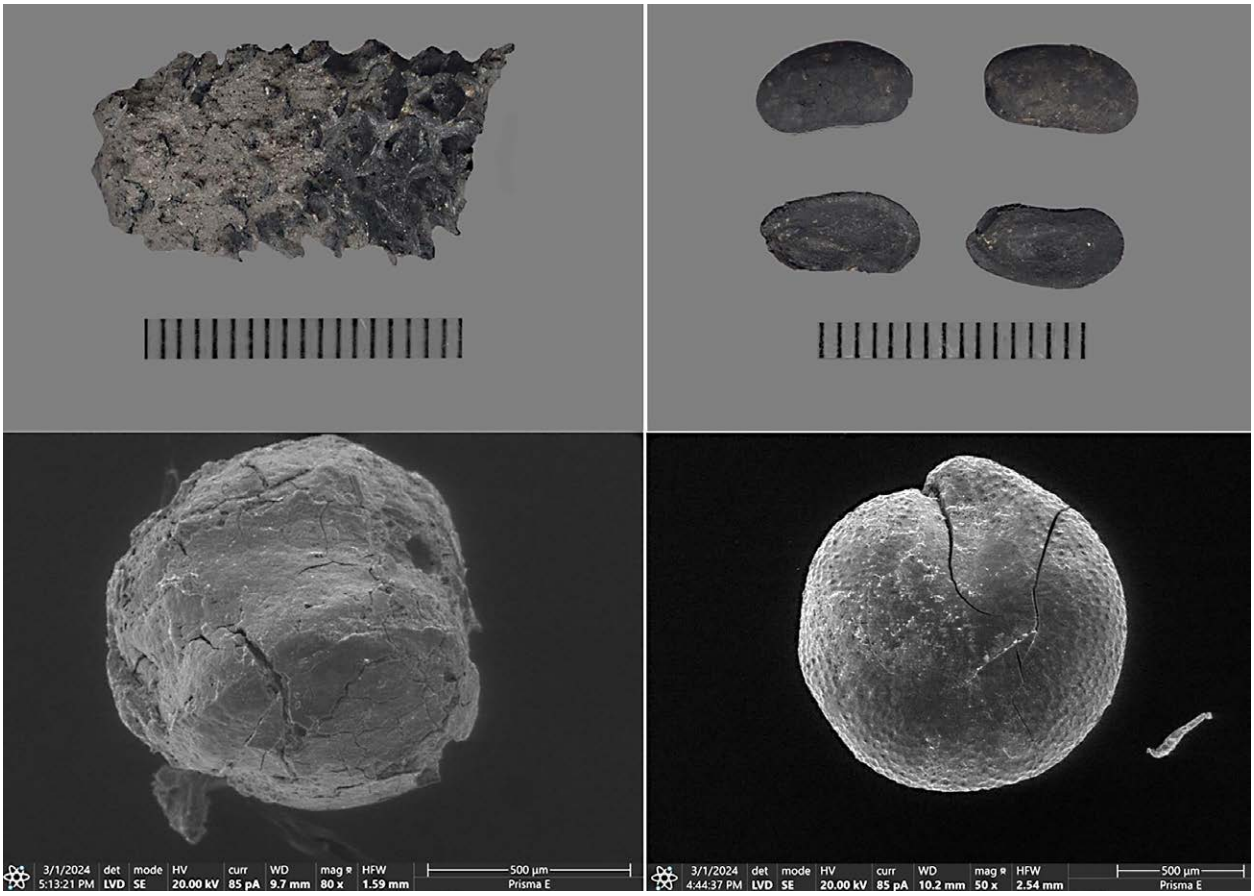


**Figure 5.8:** Botanical remains from Los Mogotes. Clockwise from top left: *Zea mays* cob; *Phaseolus vulgaris* cotyledons; truncated *Amaranthus* sp. seed; *Chenopodium* sp. Seed (photograph by Christopher Morehart).

data analysed by Stahle and colleagues (2011) indicate a massive drought toward the end of the Epiclassic period. On the other hand, considerable variation exists in paleoecological records (i.e. Almeida-Lenero *et al.* 2005).

Adaptations were necessary to respond to highly variable climatic conditions if basic subsistence needs were to be met. To overcome potential water scarcity, two large depressions were excavated at Los Mogotes and likely used as reservoirs. Each reservoir was in one of the monumental groups, which suggests a degree of control over water distribution within the community. Moreover, most of Cerro Ahumada's slopes are terraced. Some of the terracing created residential and monumental space, but the vast majority were agricultural in nature. Many terraced areas appear to have depended on rainfall, but others were connected to channels that drained water from depressions and reservoirs, intersected by check dams to distribute water to fields. Tentative estimates of maize (*Zea mays*) productivity suggests that essentially the entire hilltop needed to be under cultivation to meet the caloric needs of Parsons' (2008) estimated population for the site (750–1500). However, interdigitated production of maize and maguey (*Agave* sp.) might produce more realistic estimates for the semi-arid environment (see Anderson 2018; Fournier García 2007). However, no maguey remains have been recovered from Los Mogotes, though Blanco Levantado, an amphora possibly used to store *pulque*, is a common type (Huster 2017).

Archaeobotanical data nevertheless indicate that farmers cultivated a range of crops (Figure 5.8). Maize was fairly ubiquitous across but not especially abundant. Hundreds of bean (*Phaseolus vulgaris*) cotyledons were recovered. Beans are a good source of protein and contain many nutrients that maize lacks and rotating maize with beans can help rejuvenate soil nitrogen. Farmers also cultivated and perhaps collected chenopods (*Chenopodium* sp.) and amaranth (*Amaranthus* sp.). Thousands of amaranth seeds were recovered that exhibit clear signs of domestication, particularly smooth, thin seed coats and highly truncated seed margins, which result from increases in seed perisperm, surprisingly making these specimens some of the earliest archaeological examples of amaranth in Mesoamerica in which domestication

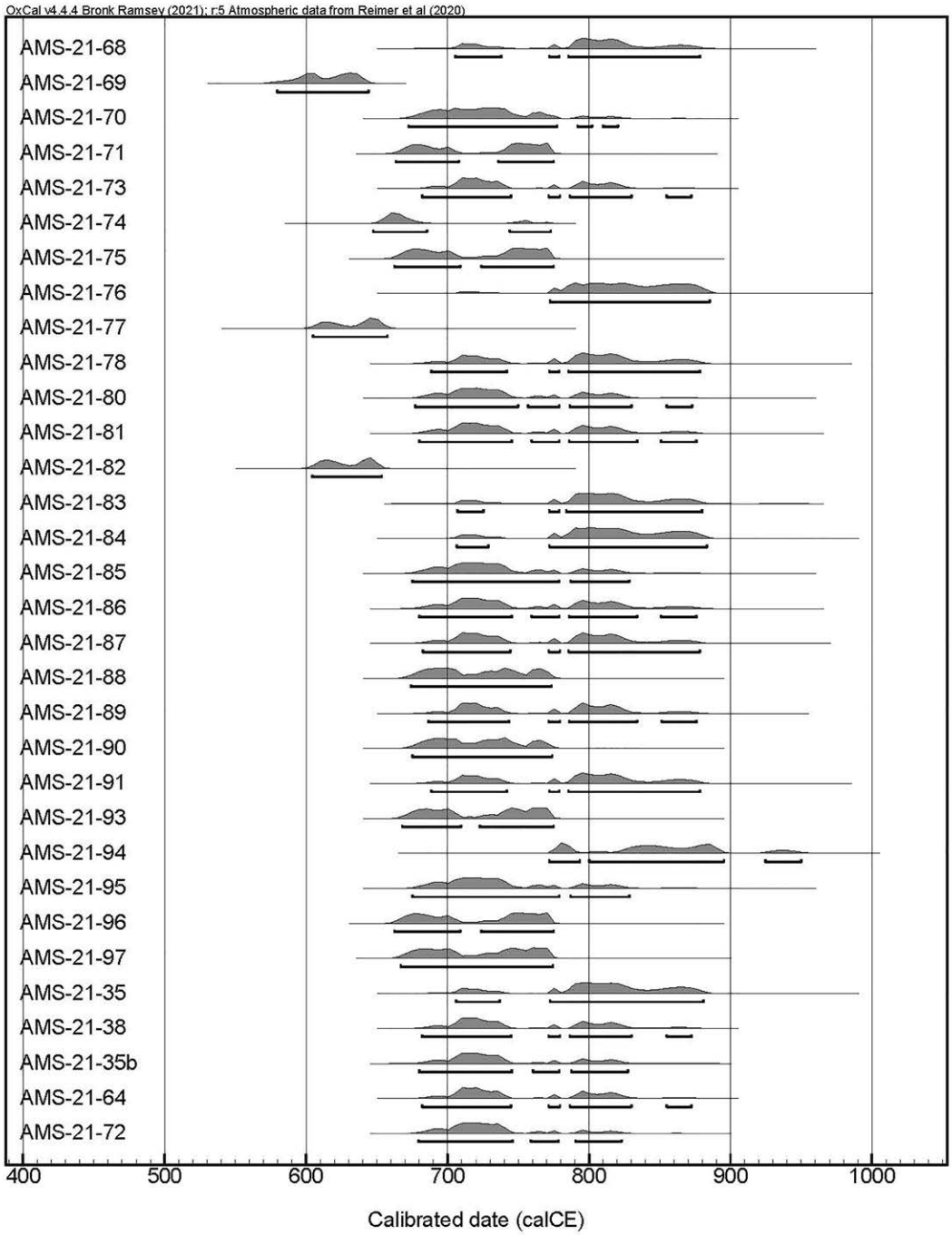


**Figure 5.9:** AMS radiocarbon dates from Los Mogotes (chart by Christopher Morehart).

traits have been clearly recorded (see McClung de Tapia 2016). Chenopod seeds from Los Mogotes exhibit some traits associated with domesticates but share more in common with wild taxa, particularly with their thick, reticulated seed coats. These might represent undomesticated or partially domesticated seeds, either collected or cultivated, perhaps alongside amaranth.

Cultivated amaranth and chenopods are far less susceptible to water stress than is maize and can be an effective response to low precipitation or drought. Biskowski and Watson (2013) made a similar suggestion via a study of grinding stones from the Epiclassic site of Cerro Portezuelo, located in the southeastern Basin of Mexico, which yielded an abundance of closed-surface groundstone artefacts useful for processing small seeds. They argued that a possible partial shift from maize to amaranth occurred during this time as a response to drought and aridity. Mastache and colleagues (2002: 255–260) made a similar argument for the Tula region,

noting the general aridity of this area as well as possible drought conditions at least by end of the Epiclassic period.

To summarise, several lines of data from Los Mogotes indicate persistent conflict and violence: (1) defendable hilltop location; (2) excellent visibility of the surrounding terrain; (3) ritual violence in the form of human sacrifice that targeted unrelated individuals or outsiders, perhaps captives taken during battles or raids; and (4) the presence of a wall fortification that surrounded the site. On the other hand, these data also demonstrate a settlement adapted to the environmental conditions of living on a hilltop and a complex community that responded to the social relationships of its members. Monumental architecture facilitated public rituals and reinforced cosmological perceptions of time and space. Hydraulic and agricultural infrastructure converted a hilltop far from perennial water sources and fertile alluvial lands into a productive anthropogenic landscape and farmers cultivated plants well adapted to the semi-arid environment. Members of the community participated in a regional interaction sphere and maintained connections to more distant places. Residences of diverse size and form existed and burial locations were re-used for multiple generations. In short, geopolitical conflict did not impede the formation of a community of durable social relationships.

**Revisiting the timing and nature of conflict**

With the elimination of the Mesa phase in the revised chronology for the Tula region, hilltop sites are now considered contemporaries of Tula Chico, whose initial settlement occurred well before the collapse of Teotihuacan (Healan *et al.* 2021). This timeframe would lend credence to the notion that settling on hilltops occurred due to conflict with existing communities. Tula Chico and the hilltop sites certainly were contemporaries for much of the Epiclassic period, though earlier components are less clear. Los Mogotes, Magoni and La Mesa have yielded abundant Late Corral ceramics, most notably assemblages of Coyotlatelco pottery (Anderson 2018; Anderson *et al.* 2016; Huster 2017; Martínez Landa 2009; Mastache and Cobean 1989). Radiocarbon data also support an Epiclassic chronology for the hilltop sites. Two of five radiocarbon dates from Magoni, for example, fall from the late sixth century and into the early to mid-seventh century AD, while the remaining three fall within the mid-eighth century (Anderson 2018: 116; Healan and Cobean 2019: 75). Dates from La Mesa are similar, with three date ranges clustering in the eight to ninth century with one falling within the sixth and seventh centuries (see below). This temporal trend is even more obvious at Los Mogotes, where thirty-two radiocarbon dates fall within the same range (Figure 5.9). Three extend back to the late sixth century and into the seventh century, whereas the remaining 29 are clustered in the eighth and ninth century AD.

However, what exactly Tula Chico represented during the Early Corral phase is not clear. Healan and colleagues (2021: 172) speculated that interactions between Tula Chico and Teotihuacan or Chingu-related settlements may have involved sharing material culture, beliefs and practices. Evidence of Early Epiclassic occupations at the hilltop centres is limited and actually postdates Tula Chico's initial fifth century chronology (see above) but should not be dismissed. Dates that fall within the sixth and seventh centuries at Los Mogotes and La Mesa indicate some kind of occupation. Anderson (2018: 116) reported that Early Epiclassic Prado ceramics were common at Magoni. Key Prado types (Cobean 1990) are not common at Los Mogotes (Huster 2017). However, other examples of Early Epiclassic ceramics identified in the Basin of Mexico do occur at Los Mogotes, Magoni and La Mesa, such as Composite Silhouette Bowls (Anderson 2018; Huster 2017, 2018; Martínez Landa 2009; see Crider 2011). Another possible indicator of an earlier facet to hilltop settlements is the appearance of Xajay Red incised, a type more common to Epiclassic interaction spheres northwest of the Tula Valley (Jimenez 2020: 110). Anderson (2018: 116) stated that Xajay is abundant at Magoni but does not report frequencies or percentages. Xajay has not been reported at La Mesa (Martínez Landa 2009) but occurs at Los Mogotes, albeit in low frequencies. Interestingly, all samples of Xajay pottery from Los Mogotes were found in household operations, perhaps pointing to the longevity of residential loci. Although still speculative, the presence of Xajay at the hilltop centres and Prado ceramics at Tula Chico might indicate variable regional relationships early in the Epiclassic period prior to the widespread appearance of Coyotlatelco (Jimenez 2020: 110–112).

Whatever these interactions were, they seem to have contributed to the development of Tula Chico but not to the persistence or longevity of Classic period settlements (Healan *et al.* 2021). By the seventh century AD, not long after the collapse of Teotihuacan, monumental building began at Tula Chico and intensified during the eighth and ninth centuries, contemporaneous with the dominance of Coyotlatelco in ceramic assemblages. This activity indicates that the beginning of Tula Chico's position as a centre of political authority occurred after the site's initial settlement. It also occurred during the same time frame of most of the radiocarbon dates from the hilltop centres. In other words, the same regional processes that led to the establishment of Tula Chico as a political centre also led to the formation of a network of hilltop polities.

Eliminating Teotihuacan-related settlements as a factor in regional conflict, requires consideration of alternate possibilities for the political landscape. It is possible that groups or lineages clashed and competition for resources and authority escalated as Tula Chico was established as a state centre, resulting in a decentralised landscape and a constant struggle for dominance (Morehart *et al.* 2023). Conversely, this configuration might instead indicate the development of a confederation of related polities and a collective system of regional governance, perhaps with rotating positions of rulership. Anderson and collaborators (2016) speculated that Tula Chico was an example of a disembedded capital, a political centre within a confederation of integrated yet independent communities. As Blanton (1976: 257) observed in his discussion of disembedded capitals, "where the highest-order goods in a society have a range which is less than the extent of the society as a whole, there should be multiple highest ranking economic centres." As he continues, with mutual competition between relatively equivalent economic central places, "the political capital will be located in a neutral position... spatially 'disembedded' from the remainder of the central placed hierarchy."

Several lines of data might support the notion that Tula Chico was politically disembedded from broader economic networks. The distribution of multiple similarly-sized centres surrounding Tula Chico could indicate an economic basis for decentralisation. The sub-regional production and distribution systems of Coyotlatelco pottery, for instance, perhaps reflected localised economic independence. That said, far more data are required to assess this model. Magoni appears to have developed an extensive production system of flaked stone tools made from immediately available rhyolite deposits (Anderson 2018; Rees 1990). However, clear evidence of specialised craft production is lacking for Los Mogotes and La Mesa. It is possible that their residents specialised in agricultural products (Mastache and Cobean 1989: 60), an activity that also would have occurred at Magoni.

Economic data from Tula Chico is equivocal. Like La Mesa and Los Mogotes, little evidence of craft production has been reported from Tula Chico, though Mastache and Cobean (1989: 62) suggested that lithic assemblages do not indicate agricultural specialisation. They nevertheless argued that Tula Chico occupied a unique position with "a more complex economy and more long-distance trade than other Coyotlatelco sites in the region" (Mastache and Cobean 1989: 62). A privileged economic position would appear *not* to conform to the expectations of a disembedded capital. If participation in long-distance economic networks instead reflects a political role rather than local economic position, Tula Chico might fit this model. More recent archaeological research at Magoni and Los Mogotes, however, demonstrates that the acquisition of long-distance exchange items was not unique. Such similarity is suggestive of Blanton's (1976) definition, where the capital cannot use its political position to acquire comparably *more* economic power than its peers. The lack of evidence for specialised craft or agricultural production at Tula Chico, furthermore, might reflect a disembedded capital's inability to translate political power into local economic advantage.

Geopolitically, the model of disembedded capitals is one manifestation of a variable range of possible regional strategies of collective governance and geopolitical cooperation (see Carballo 2012). Whether or not Tula Chico was a disembedded capital, systems of collective governance have been considered widespread phenomena throughout much of Mesoamerica during the Epiclassic (e.g. Fox 1989; Hirth 1989; Kowalski and Kristan-Graham 2007; López Austin and López Lujan 2000; *cf.* Blanton *et al.* 1996: 10; Manzanilla 2015: 9214). Settlement on the hilltops surrounding the Tula Valley could have supported mutual defence and a military guardianship over the broader region more than participation in a regional balancing act of economic self-interest, particularly if Tula Chico served as the central node where rulers selected by the confederation were installed. Such a scenario is strikingly similar to accounts in quasi-mythical histories of the Toltec state, such as the *Anales de Cuauhtitlan* (Bierhorst 1992) and especially the works of Alva Ixtlilxochitl (1891), which describe a coalition of captains who settled disputes, distributed lands and elected a ruler to head the Toltec confederation.

Over time, competition between polities may have increased, placing stress on regional alliances, intensifying conflict within the Toltec state and perhaps culminating in the concentration of power at Tula Grande (Anderson *et al.* 2016: 448; Morehart *et al.* 2023). Anderson (2018: 114) offered a compelling description of this transition: "the Epiclassic in the Tula area might have been characterised by multiple communities that were eventually combined into a single polity, a 'multicentric' hypothesis for the formation of the Toltec state." It is possible this trajectory was a violent one. Although earlier arguments for the burning of Tula Chico during its destruction no longer appear tenable (Cobean *et al.* 2021), indications of a violent conquest might explain data at other centres. Besides the wall at Los Mogote, the recovery of *bajareque*, or daub, that has been burned at high enough temperatures to be vitrified, was common (Morehart *et al.* 2023: 334). Other processes that could account for the vitrification of adobe, such as kilns, seem unlikely. Vitrified daub is ubiquitous at the site in both household and non-household contexts. Between 20 to well over 100 grams

of vitrified daube were recovered from each operation. Its widespread distribution and abundance could suggest conflagrations due to raiding or even conquest.

With the elimination of potential competitors, the regional population grew in the Tula valley and across much of the Basin of Mexico (Mastache *et al.* 2002; Sanders *et al.* 1979). The previously decentralised Toltec state became a distinctively hierarchical political system, with possibly four levels of administrative control (Castillo Peña and Guevara Chamacero 2009; Mastache *et al.* 2002; Parsons 2008). This remarkable difference suggests the centralisation of power and the elimination of any confederation of regional alliances. The co-option of power by the end of the Epiclassic period apparently led not only to a shift in the seat of authority but also to the virtual abandonment of previous centres. Early Postclassic materials from Magoni and Los Mogotes may suggest some occupation, but nothing like the Epiclassic (Anderson 2018; Morehart *et al.* 2023).

## Conclusion

In conclusion, the Epiclassic period will continually challenge our abilities to refine existing models of social change in central Mexico. To the extent that conflict was pronounced, however, we understand little about its causes and how it fits into the broader geopolitical scheme. When I first began thinking of this region and time, I found the proposition of conflict between existing populations and new settlers a compelling scenario (Morehart *et al.* 2023). This hypothesis also recognised processes early in the Epiclassic period that the resolution of survey data could not disentangle. Although considerable support exists to subdivide the Epiclassic, less evidence now exists for conflict between Teotihuacan communities and newer arrivals. Despite the earlier occupation of Tula Chico, monumental building activity occurred at Tula Chico and the hilltop centres after Teotihuacan's collapse. Two options exist to explain the data: either persistent inter-polity conflict and political instability or a confederation of polities with their centre of rule at Tula Chico. These possibilities are not mutually exclusive, and conflict could have emerged even with a confederation. That is, we should not expect static political relationships. Indeed, complex societies frequently cycle between episodes of coordination (including centralisation) and periods of fragmentation (Anderson *et al.* 2016; Marcus 1989, 1993).

A striking degree of heterogeneity existed during the Epiclassic period. The trajectories and scenarios explored in this chapter are not necessarily applicable everywhere, even if collective arrangements of governance were common in multiple parts of Mesoamerica. Some sites, even in the Basin of Mexico, demonstrate continuity from the Classic to the Epiclassic, a trend that is either absent or unclear in the Tula region (Clayton 2016; Mastache *et al.* 2002). Moreover, not every demographic and political system developed into a centralised state like Tula and some Epiclassic period polities were certainly regional states well before the Early Postclassic (i.e. Cacaxtla, Cantona, Xochicalco, Teotenango, Chichen Itza). Furthermore, perhaps some areas with decentralised polities remained in constant conflict while others found more cooperative solutions to avoid geopolitical fragmentation and hostility.

## References cited:


Acosta, Jorge R.

1941 Los Últimos Descubrimientos Arqueológicos en Tula, Hidalgo. *Revista Mexicana de Estudios Antropológicos*, Núm. 5: 239–248.

1943 Los Colosos de Tula. *Cuadernos Americanos*, Núm. 2: 138.

Almeida-Lenero, L., H. Hooghiemstra, A. M. Cleef and B. Van Geel

2005 Holocene climatic and environmental change from pollen records of lakes Zempoala and Quila, central Mexican highlands. *Review of Palaeobotany and Palynology*, Vol. 136 (1–2): 63–92.

Alva Ixtlilxochitl, Fernando de

1891 *Obras Históricas*. Translated by Alfredo Chavero. Vol. 1–2. Secretaría de Fomento, Mexico City.

Anderson, Heath

2018 Obsidian Consumption in the Tula Region after Teotihuacan's Decline. *City, craft, and residence in Mesoamerica: research papers presented in honor of Dan M. Healan*, edited by Ronald Faulseit, Xiuhtecutli Nezahualcoyotl and Haley Holt Mehta, pp. 113–124. Middle American Research Institute, Tulane University, New Orleans.

Anderson, Heath, Dan M. Healan and Robert H. Cobean

2016 Collapse, Regeneration, and the Origins of Tula and the Toltec State. *Beyond Collapse: Archaeological Perspectives on Resilience, Revitalization, and Transformation in Complex Societies*, edited by Ronald K. Faulseit, pp. 431–458. Center for Archaeological Investigation, Occasional Paper No. 42. Southern Illinois University, Carbondale.

Archivo General de la Nación

1577 *Merced a Gabriel de Soto de un sitio de estancia para ganado menor en términos del pueblo de Tequisquiaque.* Ramo de Mercedes, vol. 10, ff. 198v-199r. Archivo General de la Nación, Mexico City.

Bennyhoff, James A.

1967 Chronology and Periodization: Continuity and Change in the Teotihuacan Ceramic Tradition.

*Teotihuacan: Onceava Mesa Redonda. Sociedad Mexicana de Antropología*, pp. 19–29. Mexico City.

Bey, George J. and William M. Ringle

2007 From the Botton Up: The Timing and Nature of the Tula-Chichén Itzá Exchange. *Twin Tollans: Chichen Itza, Tula, and the Epiclassic to Early Postclassic Mesoamerican World*, edited by Jeff Kowalski and Cinthya Kristan-Graham, pp. 299–342. Dumbarton Oaks Research Library and Collection, Washington, D.C.

Bierhorst, John (trans)

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

Biskowski, Martin and Karen Watson

2013 Changing Approaches to Maize Preparation at Cerro Portezuelo. *Ancient Mesoamerica*, Vol. 24 (1): 213–223.

Blanton, Robert

1975 Texcoco Region Archaeology. *American Antiquity*, Vol. 40 (2): 227–230.

1976 Anthropological Studies of Cities. *Annual Review of Anthropology*, Vol. 5: 249–264.

Blanton, Robert, Gary Feinman, Stephen Kowalewski and Peter Peregrine

1996 A Dual-Processual Theory for the Evolution of Mesoamerican Civilization. *Current Anthropology*, Vol. 37 (1): 1–14.

Bonfíl Olivera, Alicia

2005 Cultura y contexto: el comportamiento de un sitio del Epiclásico en la región de Tula. *Reacomodos demográficos del Clásico al Posclásico en el centro de México*, edited by Linda Manzanilla, pp. 227–259. Universidad Nacional Autónoma de México, Mexico City.

Caballero, Margarita, Beatriz Ortega, Francisco Valadez, Sarah Metcalfe, José L. Macias and Yoko Sugiura

2002 Sta. Cruz Atizapán: a 22-ka lake level record and climatic implications for the late Holocene human occupation in the Upper Lerma Basin, Central Mexico. *Palaeogeography, Palaeoclimatology, Palaeoecology*, Vol. 186 (3–4): 217–235.

Carballo, David (ed)

2012 *Cooperation & collective action: archaeological perspectives*. University Press of Colorado, Boulder.

Castillo Peña, Patricia and Miguel Guevara Chumacero

2009 Auge y colapso de los centros provinciales toltecas. *Arqueología*, Núm. 42: 234–251.

Clayton, Sarah

2016 After Teotihuacan: A View of Collapse and Reorganization from the Southern Basin of Mexico. *American Anthropologist*, Vol. 118 (1): 104–120.

2021 Coalescence at Chicoloapan, Mexico: Migration and the Making of a Post-Collapse Community. *Mobility and Migration in Ancient Mesoamerican Cities*, edited by Charlotte Arnauld, Christopher Beekman and Grégory Pereira, pp. 189–207. University Press of Colorado, Denver.

Cobean, Robert H.

1990 *La Ceramica de Tula, Hidalgo*. Instituto Nacional de Antropologia e Historia, Mexico City.

2002 *Un Mundo de obsidiana: minería y comercio de un vidrio volcánico en el México antiguo*. Instituto Nacional de Antropología e Historia, Mexico City.

Cobean, Robert H., Dean M. Healan and María Elena Suárez

2021 *Recent Investigations at Tula Chico, Tula, Hidalgo. Ancient Mesoamerica*, Vol. 32 (1): 41–55.

Crider, Destiny

2011 Epiclassic and Early Postclassic Interaction in Central Mexico as evidenced by Decorated Pottery. PhD dissertation. Arizona State University, Tempe.

2013 Shifting alliances: Epiclassic and early postclassic interactions at Cerro Portezuelo. *Ancient Mesoamerica*, Vol. 24 (1): 107–130.

2023 Advances in the Study of Archaeological Ceramics of the Epiclassic and Early Postclassic Basin of Mexico. *The Legacies of "The Basin of Mexico"*, edited by Carlos E. Cordova and Christopher T. Morehart, pp. 285–315. University Press of Colorado, Denver.

Crider, Destiny, Deborah Nichols, Hector Neff and Michael Glascock

2007 In the Aftermath of Teotihuacan: Epiclassic Pottery Production and Distribution in the Teotihuacan Valley, Mexico. *Latin American Antiquity*, Vol. 18 (2): 123–143.

Díaz Oyarzábal, Clara Luz

1980 *Chingú: Un Sitio Clásico del Área de Tula, Hidalgo*. Instituto Nacional de Antropología e Historia, Mexico City.

Diehl, Richard

1983 *Tula, the Toltec capital of ancient Mexico. New aspects of antiquity*. Thames and Hudson, London.

Diehl, Richard A. and Janet C. Berlo (eds)

1989 *Mesoamerica after the Decline of Teotihuacan, A.D. 700–900*. Dumbarton Oaks Research Library and Collection, Washington, D.C.

Dumond, Donald E. and Florence Müller

1972 Classic to Postclassic in Highland Central Mexico. *Science*, No. 174: 1208–1215.

Durán, Diego

1971 *Book of the Gods and Rites and the Ancient Calendar*. Translated by Fernando Horcasitas and Doris Heyden. University of Oklahoma Press, Norman.

Fournier García, Patricia

2007 *Los hñähñü del Valle del Mezquital: Maguey, pulque y alfarería*. Consejo Nacional para la Cultura y las Artes & Escuela Nacional de Antropologia e Historia, Mexico City.

Fournier García, Patricia and Victor Bolaños

2007 The Epiclassic in the Tula Region beyond Tula Chico. *Twin Tollans: Chichen Itza, Tula, and the Epiclassic to Early Postclassic Mesoamerican World*, edited by Jeff K. Kowalski and Cynthia Kristan-Graham, pp.

481–529. Dumbarton Oaks Research Library and Collection, Washington, D.C.

Fox, John W.
1989 On the Rise and Fall of Tuláns and Maya Segmentary States. *American Anthropologist*, Vol. 91 (3): 656–681.

Gamboa Cabezas, Luis and Dan M. Healan
2021 Salvage and Rescue Archaeology inside Ancient Tula: Recent Discoveries and Revelations. *Ancient Mesoamerica*, Vol. 32 (1): 56–83.

García Chávez, Raúl and Diana Martínez Yrizar
2006 Proceso de Desarrollo del Estado Tolteca Durante las Fases Coyotlatleco y Mazapa-Azteca I. *La producción alfarera en el Mexico antiguo, Vol. III*, edited by Leonor B. Merino Carrión and Ángel Garcia Cook, pp. 221–256. Instituto Nacional de Antropología e Historia, Mexico City.

García Velasco, María and Abigail Meza Peñaloza
2018 Informe Antropofísico de los Restos Óseos Humanos hallados en las Operaciones 5 y 6. *Proyecto de la Ecología Histórica del Norte de la Cuenca de México: Informe de la Temporada de Campo 2017*, edited by Christopher Morehart, pp. 107–124. Unpublished Report. Archivo de la Coordinación Nacional de Arqueología del Instituto Nacional de Antropología e Historia, Mexico City.

García Velasco, María, Abigail Meza Peñaloza and Alejandro Cool Argüelles
2017 Informe Antropofísico de los Restos Óseos Humanos. *Proyecto de la Ecología Histórica del Norte de la Cuenca de México: Informe de la Temporada de Campo 2016*, edited by Christopher Morehart, pp. 125–144. Unpublished Report. Archivo de la Coordinación Nacional de Arqueología del Instituto Nacional de Antropología e Historia, Mexico City.

Gómez Serafín, Susana, Francisco G. Sansores and Enrique Fernández Dávila
1994 *Enterramientos Humanos de la Época Prehispánica en Tula, Hidalgo*. Instituto Nacional de Antropología e Historia, Mexico City.

Good, Kenneth and Gerald Obermeyer
1986 Excavations at Oxtotipac (TT82). *The Teotihuacan Valley Project, Final Report, Volume 4. The Toltec Occupation of the Valley: Part 1, Excavations and Ceramics*, edited by William T. Sanders, pp. 195–266. Occasional Papers in Anthropology 13. Department of Anthropology, Pennsylvania State University, University Park.

Healan, Dan M.
1989 *Tula of the Toltecs: Excavation and Survey*. University of Iowa Press, Iowa City.
2012 The Archaeology of Tula, Hidalgo, Mexico. *Journal of Archaeological Research*, Vol. 20 (1): 53–115.

Healan, Dan M. and Robert H. Cobean
2019 Three Migration Case Studies from the Tula Region. *Migrations in Late Mesoamerica,* edited by Christopher Beekman, pp. 66–87. University Press of Florida, Gainesville.

Healan, Dan M., Robert H. Cobean and Robert Bowsher
2021 Revised Chronology and Settlement History of Tula and the Tula Region. *Ancient Mesoamerica*, Vol. 32 (1): 165–186.

Hicks, Frederic and Henry Nicholson
1964 The Transition from Classic to Postclassic at Cerro Portezuelo, Valley of Mexico. *35th Congreso Internacional de Americanistas, Mexico, 1962*, pp. 493–505. Actas y Memorias, Vol. 1. Editorial Libros de México, Mexico City.

Hirth, Kenneth
1989 Militarism and Social Organization at Xochicalco, Morelos. *Mesoamerica after the Decline of Teotihuacan, A.D. 700–900*, edited by Richard A. Diehl and Janet C. Berlo, pp. 69–82. Dumbarton Oaks Research Library and Collection, Washington, D.C.

Holt Mehta, Haley
2018 More than an Enclave? Ethnic Identity and Cultural Affiliations at El Tesoro, a Classic Period Zapotec Site in the Tula Area. *City, Craft, and Residence in Mesoamerica: Research Papers Presented in Honor of Dan M. Healan*, edited by Ronald Faulseit, Xiuhtecutli Nezahualcoyotl and Haley Holt Mehta, pp. 125–135. Middle American Research Institute, Tulane University, New Orleans.

Huster, Angela
2017 Análisis de Cerámica. *Proyecto de la Ecología Histórica del Norte de la Cuenca de México: Informe de la Temporada de Campo 2016*, edited by Christopher Morehart, pp. 92–105. Unpublished Report. Archivo de la Coordinación Nacional de Arqueología del Instituto Nacional de Antropología e Historia, Mexico City.
2018 Análisis de Cerámica: Datos y Resultados Preliminares. *Proyecto de Ecología Histórica del Norte de la Cuenca De México: Informe de la Temporada de Campo 2017*, edited by Christopher T. Morehart, pp. 135–177. Unpublished Report. Archivo de la Coordinación Nacional de Arqueología del Instituto Nacional de Antropología e Historia, Mexico City.

Jimenez, Peter F.
2020 *The Mesoamerican World System, 200-1200 CE: A Comparative Approach Analysis of West Mexico*. Cambridge University Press, Cambridge.

Jordan, Keith
2016 From Tula Chico to Chichén Itzá: Implications of the Epiclassic Sculpture of Tula for the Nature and Timing of Tula-Chichén Contact. *Latin American Antiquity*, Vol. 27 (4): 462–478.

Kirchhoff, Paul, Lina Odena Guemes and Luis Reyes García
1976 *Historia Tolteca-Chichimeca*. Instituto Nacional de Antropología e Historia, Mexico City.

Kowalski, Jeff and Cynthia Kristan-Graham (eds)
2007 *Twin Tollans: Chichén Itzá, Tula, and the epiclassic to early postclassic Mesoamerican world*. Dumbarton Oaks Research Library and Collection, Washington, D.C.

Kristan-Graham, Cynthia
1993 The Business of Narrative at Tula: An Analysis of the Vestibule Frieze, Trade, and Ritual. *Latin American Antiquity*, Vol. 4 (1): 3–21.

Koontz, Rex
2009 *Lightning Gods and Feathered Serpents: The Public Sculpture of El Tajín.* University of Texas Press, Austin.

Lachniet, Matthew, Juan P. Bernal, Yemane Asmerom, Victor Polyak and Dolores Piperno
2012 A 2400 yr Mesoamerican rainfall reconstruction links climate and cultural change. *Geology*, Vol. 40 (3): 259–262.

López Austin, Alfredo and Leonardo López Luján
2000 The Myth and Reality of Zuyuá: The Feathered Serpent and Mesoamerican Transformations from the Classic to the Postclassic. *Mesoamerican Classic Heritage: From Teotihuacan to the Aztecs*, edited by David Carrasco, Lindsay Jones, and Scott Sessions, pp. 21–84. University Press of Colorado, Boulder.

Ludlow-Wiechers, Beatriz, Lucía Almeida-Leñero and Gerald Islebe
2005 Paleoecological and Climatic Changes of the Upper Lerma Basin, Central Mexico during the Holocene. *Quaternary Research*, Vol. 64 (3): 318–332.

Manzanilla, Linda R. (ed)
2005 *Reacomodos Demograficos del Clásico al Posclásico en el centro de México*. Instituto de Investigaciones Antropológicas, Universidad Nacional Autónoma de México, Mexico.
2015 Cooperation and tensions in multiethnic corporate societies using Teotihuacan, Central Mexico, as a case study. *Proceedings of the National Academy of Sciences*, Vol. 112 (30): 9210–9215.

Marcus, Joyce
1989 From Centralized Systems to City-States: Possible Models for the Epiclassic. *Mesoamerica after the Decline of Teotihuacan, A.D. 700–900*, edited by Richard A. Diehl and Janet C. Berlo, pp. 201–208. Dumbarton Oaks Research Library and Collection, Washington, D.C.
1993 Ancient Maya Political Organization. *Lowland Maya Civilization in the Eighth Century A.D*, edited by Jeremy Sabloff and John Henderson, pp. 111–183. Dumbarton Oaks Research Library and Collection, Washington, D.C.

Martínez Landa, Blanca E.
2009 La Cerámica Arqueológica de La Mesa, Hidalgo. Licentiate thesis. Escuela Nacional de Antropología e Historia, Mexico City.

Mastache, Alba G. and Robert H. Cobean
1989 The Coyotlatelco Culture and the Origins of the Toltec State. *Mesoamerica after the Decline of Teotihuacan, A.D. 700–900*, edited by Richard A. Diehl and Janet C. Berlo, pp. 49–68. Dumbarton Oaks Research Library and Collection, Washington, D.C.
1990 La Cultura Coyotlatelco en el Área de Tula. *Las Industrias Líticas Coyotlatelco en el Área de Tula*, edited by Alba G. Mastache, Robert H. Cobean, Charles Rees and Donald Jackson, pp. 9–22. Instituto Nacional de Antropología e Historia, Mexico City.

Mastache, Alba G., Robert H. Cobean and Dean M. Healan
2002 *Ancient Tollan: Tula and the Toltec Heartland*. University Press of Colorado, Boulder.
2009 Four Hundred Years of Settlement and Cultural Continuity in Epiclassic and Early Postclassic Tula. *The art of urbanism: How Mesoamerican kingdoms represented themselves in architecture and imagery*, edited by William Fash and Leonardo López Luján, pp. 290–328. University Press of Colorado, Boulder.

McClung de Tapia, Emily
2016 El amaranto desde el punto de vista arqueológico. *Arqueología Mexicana*, Vol. 23 (138): 22–25.

Medellín, Alfonso
1960 *Cerámicas del Totonacapan*. Universidad Veracruzana, Instituto de Antropología, Xalapa.

Medrano Enriquez, Angélica María
2021 Child Sacrifice in Tula: A Bioarchaeological Study. *Ancient Mesoamerica*, Vol. 32 (1): 84–99.

Meza-Peñaloza, Abigail, Federico Zertuche, María García-Velasco and Christopher Morehart
2019 A non-metric traits study of skulls from Epiclassic Xaltocan in relation to other Mesoamerican cultures. *Journal of Archaeological Science Reports*, Vol. 23: 559–566.

Meza-Peñaloza, Abigail, Federico Zertuche and Christopher Morehart
2021 Population level comparisons in central Mexico using cranial nonmetric traits. *American Journal of Physical Anthropology*, Vol. 176 (2): 237–248.

Morehart, Christopher, Angela Huster, Abigail Meza Peñaloza and Sofía Pacheco-Forés
2023 Pax Tolteca? Collapse, Conflict, and the Formation of the Tula State. *The Legacies of The Basin of Mexico,* edited by Carlos E. Cordova and Christopher T. Morehart, pp. 316–347. University Press of Colorado, Denver.

Morehart, Christopher, Abigail Meza Peñaloza, Carlos Serrano Sánchez, Emily McClung de Tapia and Emilio Ibarra Morales
2012 Human Sacrifice in the Northern Basin of Mexico during the Epiclassic Period. *Latin American Antiquity*, Vol. 23 (4): 426–448.

Pacheco-Forés, Sofía, Christopher Morehart, Jane Buikstra, Gwyneth Gordon and Kelly Knudson
2021 Migration, violence, and the "other": A biogeochemical approach to identity-based violence in the Epiclassic Basin of Mexico. *Journal of Anthropological Archaeology*, Vol. 61: 101263.

Paredes Gudiño, Blanca
1998 Evidencias de ocupación del periodo Coyotlatelco en la zona arqueológica de Tula, Hidalgo. *Antropología e historia del occidente de México*, *Vol. III*, pp. 1629–1644. Universidad Nacional Autónoma de México, Mexico City.

Parsons, Jeffrey
1971 *Prehistoric Settlement Patterns in Texcoco Region, Mexico*. Museum of Anthropology, University of Michigan, Ann Arbor.
2006 A Regional Perspective on Coyotlatelco in the Basin of Mexico: Some New Thoughts about Old Data. *El fenómeno Coyotlatelco en el centro de México: tiempo, espacio y significado*, edited by Laura Solar Valverde, pp. 83–96. Consejo Nacional para la Cultura y las Artes & Instituto Nacional de Antropología e Historia & Coordinación Nacional de Arqueología, Mexico City.
2008 *Prehispanic Settlement Patterns in the Northwestern Valley of Mexico: The Zumpango Region*. Museum of Anthropology, University of Michigan, Ann Arbor.

Pierce, Daniel, Haley Holt Mehta and Jeffrey Ferguson
2022 Local pottery, hybrid identities: Exploring the Zapo-Teotihuacáno community at El Tesoro, Hidalgo through ceramic compositional analysis. *Journal of Archaeological Science: Reports*, Vol. 45: 103598.

Piña Chán, Román
1967 Un complejo coyotlatelco en Coyoacan, México, D.F. *Anales de Antropología*, Vol. 4 (1): 141–160.

Rattray, Evelyn C.
1966 An Archaeological and Stylistic Study of Coyotlatelco Pottery. *Mesoamerican Notes*, No. 7–8: 87–211.

Recinos, Adrián and Delia Goetz (trans)
1953 *Annals of the Cakchiquels & Title of the Lords of Totonicapan*. University of Oklahoma Press, Norman.

Rees, Charles
1990 Estudio sobre la Cantera-Taller del Sitio Magoni. *Las Industrias Líticas Coyotlatelco en el Área de Tula*, edited by Alba G. Mastache, Robert H. Cobean, Charles Rees and Donald Jackson, pp. 23–144. Instituto Nacional de Antropología e Historia, Mexico City.

Ringle, William M.
2017 Debating Chichen Itza. *Ancient Mesoamerica*, Vol. 28 (1): 119–136.

Ringle, William M., Tomás Gallareta Negrón and George J. Bey
1998 The Return of Quetzalcoatl. Evidence for the spread of a world religion during the Epiclassic period. *Ancient Mesoamerica*, Vol. 9 (2): 183–232.

Sahagún, Bernardino
1961 *Florentine Codex, General History of the Things of New Spain: Book 10, The People*. Monographs of the School of American Research and the Museum of New Mexico, Santa Fe.

Sanders, William
1986 Ceramic Chronology. *The Teotihuacan Valley Project, Final Report, Volume 4. The Toltec Occupation of the Valley: Part 1, Excavations and Ceramics*, edited by William T. Sanders, pp. 367–373. Occasional Papers in Anthropology 13. Department of Anthropology, Pennsylvania State University, University Park.
2006 Late Xolalpan-Metepec/Oxtotipac-Coyotlatelco, Ethnic Succession or Changing Patterns of Political Economy: An Evaluation. *El fenómeno Coyotlatelco en el centro de México: tiempo, espacio y significado*, edited by Laura Solar Valverde, pp. 183–200. Consejo Nacional para la Cultura y las Artes & Instituto Nacional de Antropología e Historia & Coordinación Nacional de Arqueología, Mexico City.

Sanders, William T., Jeffrey Parsons and Robert Santley
1979 *Basin of Mexico: Ecological Processes in the Evolution of a Civilization*. Academic Press, New York.

Sandoval, Gustavo
2017 La presencia teotihuacana en San Antonio-Acoculco. *Arqueología*, Núm. 52: 76–97.

Scholes, France V. and Ralph L. Roys
1968 *The Maya Chontal Indians of Acalan-Tixchel: A Contribution to the History and Ethnography of the Yucatan Peninsula*. University of Oklahoma Press, Norman.

Solar Valverde, Laura (ed)
2006 *El fenómeno Coyotlatelco en el centro de México: tiempo, espacio y significado*. Consejo Nacional para la Cultura y las Artes & Instituto Nacional de Antropología e Historia & Coordinación Nacional de Arqueología, Mexico City.

Stahle, David W., José Villanueva Díaz, Dorian J. Burnette, Julian Cerano Paredes, Richard R. Heim Jr., Falco K. Fye, Rodolfo Acuna Soto, Mattew D. Therrell, Malcolm K. Cleaveland and Daniel K. Stahle
2011 Major Mesoamerican Droughts of the Past Millennium. *Geophysical Research Letters*, Vol. 38: L05703.

Sterpone Canuto, Osvaldo
2006 Coyotlatelco y los Orígenes de Tula Grande. *El fenómeno Coyotlatelco en el centro de México: tiempo, espacio y significado*, edited by Laura Solar Valverde, pp. 257–279. Consejo Nacional para la Cultura y las Artes & Instituto Nacional de Antropología e Historia & Coordinación Nacional de Arqueología, Mexico City.

Sugiura, Yoko
2006 Cambio Gradual o Discontinuidad en la Cerámica? Discusión acerca del Paso del Clásico al Epiclasico, Visto desde el Valle de Toluca. *El fenómeno Coyotlatelco en el centro de México: tiempo, espacio y significado*, edited by Laura Solar Valverde, pp. 127–162. Consejo Nacional para la Cultura y las Artes & Instituto

Nacional de Antropología e Historia & Coordinación Nacional de Arqueología, Mexico City.

Tedlock, Dennis (trans)
1985 *Popol Vuh: The Definitive Edition of the Mayan Book of the Dawn of Life and the Glories of Gods and Kings*. Simon and Schuster, New York.

Turner, Andrew D. and Cynthia Kristan-Graham
2023 Tula and the Origins and Characteristics of an Epiclassic-Early Postclassic Art Tradition. *When East Meets West: Chichen Itza, Tula, and the Postclassic Mesoamerican World*, Vol. 1, edited by Travis W. Stanton, Karl A. Taube, Jeremy D. Coltman and Nelda I. Marengo, pp. 427–478. BAR International series 3134. British Archaeological Reports, Oxford.

Vonk, Thomas
2021 "Teotihuacan," "Spearthrower Owl," and "Kaloomte'": Clues to the Language of Teotihuacan Writing in Classic Maya Texts. *PARI Journal*, Vol. 22 (2): 21–35.

Whittaker, Gordon
2012 The Names of Teotihuacan. *Mexicon*, Vol. 34 (3): 55–58.

# Chapter 6
# The Epiclassic in the San Juan River Region, Queretaro, Mexico: A Kaleidoscope of Possibilities

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## Introduction

The period known as Epiclassic—which in our study area is between AD 540 and 900—is a mystery. During these years, there are important differences between the sites and their archaeological materials that invite us to think of different groups occupying the region, but there are also similarities that seem to indicate the same cultural belonging. Faced with this situation, the question arises as to how to characterise the Epiclassic and then the culture(s) that developed during this period? Were they different groups that shared ideas and conceptions of the world? or the differences identified are more related to temporal variations? Can we talk of internal provinces occupied by different societies—local and foreign—that coexisted and established relationships sometimes of competition, sometimes of alliances? Does the evidence tell us of groups migrating from different regions—with their own traditions—inserted into a particular socio-political dynamic with subtle differences?

To try to answer some of these questions, we will present the archaeological evidence of five sites located within the Panuco-Moctezuma Basin, with emphasis on the San Juan River, since we have dozens of Precolumbian settlements that correspond to the period in question and that present characteristics that can serve as a guide to try to delineate the Epiclassic in Queretaro.

## Before you, are there not before?

In order to understand the transformations, rearrangements and reorganisations that the different populations of Queretaro underwent during the Epiclassic period, it is necessary to understand what happened before in that territory.

According to various studies (Saint-Charles Zetina 2022; Saint-Charles Zetina *et al.* 2010), the first sedentary agricultural populations originated around 500 BC in Cerro de la Cruz, San Juan del Río, in the Panuco-Moctezuma basin. This primitive occupation is related to groups from the Acambaro Valley, the Chupicuaro culture, that established the political and religious centre at the top of the hill and occupied, as a village socio-political system, the banks of the San Juan River to establish small houses and agricultural areas with a semi-dispersed pattern. Subsequently, near the beginning of our era—as a result of volcanic events in the Basin of Mexico (Pastrana 2018)—groups associated with the archaeological site of Cuicuilco migrated to this region, bringing with them, in addition to their cultural traditions embodied in new ceramic types and architectural patterns, a sociopolitical system that can described as chiefdom. Subsequently, the region again underwent changes that are perceived as even more profound and radical, determined by the entry of Teotihuacan into the eastern part of the Mexican Bajío in general and into the San Juan del Río valley region in particular (Fenoglio Limón 2024).

The relationship between Teotihuacan and Queretaro seems to have been based on the strengthening and control of trade routes that had existed since the Preclassic—through the formation of commercial diasporas driven by the intermediate elites who lived in distinct Teotihuacan neighbourhoods (Fenoglio Limón 2024). This new relationship generated both the creation of settlements such as El Rosario in San Juan del Río (Fenoglio Limón 2024; Saint-Charles Zetina *et al.* 2010;), La Negreta, in Queretaro (Brambila and Velasco 1988; Fenoglio Limón 2024; Velasco and Brambila 1988) and San Bartolo Aguacaliente in Guanajuato (Castañeda López 1992; Castañeda and Cano 1993; Fenoglio Limón 2024), as well as the occupation of preclassic settlements such as Las Peñitas in San Juan del Río (Fenoglio Limón 2024; Saint-Charles Zetina *et al.* 2010), Santa María del Refugio (Castañeda *et al.* 1989; Fenoglio Limón 2024) and El Mezquital-Los Azules, in Guanajuato (Faugère 2022; Fenoglio Limón 2024).

Based on the above, we can infer that the political structure of the population of Queretaro during the Classic period (AD 300 to 540) was radically transformed and changed from a chiefdom to be inserted into a

new political and economic dynamic orchestrated by the new elites. In this way, the relationships that were established generated a specific structure that, in summary, consist of a complex network of interconnected sites that had control over an extensive territory, as well as close ties with other regions such as central, western and northern Mesoamerica (Fenoglio Limón 2024). Probably, the consolidation of this diaspora was the one that laid the foundations for the spatial, social and political organisation of the following period, the Epiclassic, where the region once again underwent important changes related to new migrations and rearrangements of the local population, which drew a different panorama than the one during the Classic.

## Archaeological sites

Within the states of Queretaro and Guanajuato, there was an important explosion of settlements after the weakening and loss of Teotihuacan's hegemony (Fenoglio Limón *et al.* 2008). Although, as has already been mentioned, there were already important societies with historical depth in these areas, which were delimited in terms of their location. For example, if we take as a starting point only the valley of San Juan del Río, for the Classic period we have identified three archaeological sites—which could even be only one—but for the following period we have about 23 sites with architecture and twenty more concentrations of materials and discrete constructions. Therefore, it is obvious that the social, political and economic phenomena that was the "fall" of Teotihuacan had extremely important effects within our study region.

In order to try to delineate the characteristics of the Epiclassic in Queretaro, we consider it important to briefly describe some of the sites of the large sample we have, with special emphasis on the differences and similarities. Our study area is focused in the Panuco basin and the sub-areas of the San Juan River and its tributaries, the valley of San Juan del Río, Tequisquiapan and the hills and mountains of Amealco.

For the present work, I will use four categories of analyses: settlement patterns, architectural patterns indicating the presence or absence of ballcourts, ceramics and the presence/absence of petroglyphs.

## Moctezuma-Panuco Basin. San Juan del Río Watershed

The San Juan River originates in the northeastern part of the State of Mexico, in the drainage basin of Peña Ñadó, which is a watershed between the Gulf and Pacific slopes, between the Panuco and Lerma basins. On its way north, the San Juan River flows through deep canyons, up to 100 meters high, enters the San Juan del Río Valley crossing it towards the northeast, until it joins the Tula River near Zimapan. From there, the riverbed is called Moctezuma and later, is known as Panuco until it enters the Gulf of Mexico between Tamaulipas and Veracruz (INEGI 2006).

The San Juan River and its tributaries were the main source of water for the people who built and inhabited settlements such as San Ildefonso, La Muralla, Santa Rita and Cerro de La Cruz, or its tributaries such as La Cofradía, San Sebastián de Las Barrancas, El Rosario and La Estancia. A little further away, within the same basin, are sites such as La Trinidad and Los Cerritos, both in the municipality of Tequisquiapan (Fenoglio Limón *et al.* 2017).

For the purposes of this paper, I will only discuss La Trinidad, San Ildefonso, El Rosario, El Cerro de la Cruz, Santa Rita and Los Cerritos. It is important to note that archaeological excavations were conducted at La Trinidad, El Rosario and El Cerro de la Cruz.

## Changes in settlement patterns

The archaeological sites that correspond to the Moctezuma-Panuco Basin have a characteristic settlement pattern that distinguishes them from sites in other basins and watersheds: these are located on plateaus surrounded by deep ravines and on high, medium, or low hills. This change in location is extremely important because it reflects on the one hand, the abandonment of valleys and low and medium slopes—preferred pattern during the Preclassic and Classic periods—and, on the other hand, the need to locate settlements in areas of greater security, which are difficult to access, but which have less favourable conditions for agriculture and for the location of residential areas.

In order to solve the difficulties caused by the change of location, it was necessary to modify the topography with large levelling platforms, terraces for agriculture and residential areas, in addition to the construction of new buildings, barricades and checkpoints, which sometimes required enormous efforts from the population.

These characteristics can be seen in most of the new sites; these were located at the farthest end of the plateau, between the ravines, creating a certain level of natural protection on two fronts: the ravine itself and the long stretch between the natural access to the site and the settlement itself. Even in cases such as Santa Rita and La Trinidad, barricades and checkpoints were erected over the natural access to restrict passage.

Another element present in some of the sites is the *camino de ronda*, that we can compare it to the parapet


**Figure 6.1:** General plan of San Ildefonso (after Hernández Sánchez 2016, modified by Magdalena García).

walk used in Medieval architecture, a narrow passage on the edges of the cliffs, laid out on the rock and defined by high levelling walls that allow walking to surround the site from the outside. Paths with these characteristics can be seen in San Sebastián de las Barrancas, Santa Lucía and Cerro de la Cruz.

Cerro de la Cruz, a site originally built during the Formative and abandoned during the Classic, was reoccupied and is part of the sites located on the top of the hill. It also underwent major transformations, mainly the construction of the large main structure and the plaza, that completely buried the remains of the previous occupations.

Two sites break with this new settlement pattern: El Rosario and Los Cerritos. The first is located on a gentle slope in the San Juan Valley and was redesigned with an intention to reduce both site and ceremonial areas. This implied enormous constructive efforts by the inhabitants to generate a certain degree of protection despite its geographical location. The second site is located on the central slope of the hill and is one of the new sites in the region.

## Architectural patterns: The same, but different

In general, the architectural pattern of Epiclassic sites in Queretaro is similar: one or more patios—sometimes

contiguous—with one or two main mounds, L-shaped or horseshoe-shaped structures, platforms that used to support buildings made of perishable materials—be they religious or administrative—with terraces for agricultural and residential purposes.

Most of the settlements have more than one architectural complex, which we will briefly describe below. However, the pattern in terms of internal distribution of the architectural complexes is either on an east-west axis or in sections; the only case that breaks with this is Santa Rita, whose axis is south-north and responds more to taking advantage of the shape of the topography. Similarly, in most cases, the main structures and courtyards tend to face west. Despite these constants, each site is different. Therefore, we will briefly describe the characteristics of the architectural pattern of each one.

***San Ildefonso, Amealco***

San Ildefonso belongs to the group of ravine sites with a sectioned internal arrangement, although a slight orientation in a southwest-northeast direction can be perceived. The site is located on a hill whose east, west and north sides are cut by the ravines, the northern one being the deepest, forming a kind of quadrangular peninsula. The top and the slopes were modified with various elements—such as levelling platforms and retaining walls—to support the architectural complexes that comprise them (Saint-Charles Zetina and Crespo 1999) (Figure 6.1).

The site is divided into four sections. The first corresponds to the ceremonial centre conformed by a rectangular platform, although it presents a widening in the western sector of irregular plan. The Main Structure, 10 meters high with a square plan of 44 meters on each side of the base, is located in the southwestern sector of this platform. The Twin Structures, two quadrangular buildings about 10 meters apart, are located to the north. Large plazas bordered by small retaining walls of the same platform are located on the west, east and north of the complex (Fenoglio Limón 2012; Hernández Sánchez 2016).

The second section is located to the east of the ceremonial centre, on the surrounding platform at a


**Figure 6.2:** General plan of Santa Rita (by Saint-Charles, modified by Magdalena García Espino).

lower level than the latter and consists of two small structures 3 meters high.

The northern is rectangular, the southern is quadrangular; the distance between the two is about 50 meters creating a small plaza. To the east of both and almost in the middle of them, is a singular structure: a small thin platform—like a bench—40m long, whose north and south sides end in small semicircular structures (Fenoglio Limón 2012; Hernández Sánchez 2016).

The southern section is formed by a small plaza bounded on the north by the retaining wall of the central platform and on the east by a retaining wall; it is open on the south and west sides. To the south of this plaza is an inverted L-shaped platform—50 meters long, 20 meters at the north end and 12 meters wide. To the east of this platform is a semicircular structure. This sector closes to the south with a small quadrangular structure that, to the south, presents a small plaza delimited on three of its sides by small retaining walls. Finally, the site has a series of terraces distributed mainly in the western sector (Fenoglio Limón 2012; Hernández Sánchez 2016).

It is important to note that there are no petroglyphs or ballcourts at San Ildefonso.

***Santa Rita, San Juan del Río***

This site corresponds to those located in ravines and the structures are arranged on a north-south axis, mainly due to the shape and orientation of the plateau. It is located on the top of a long and narrow hill, cut by deep ravines to the west, north and east. On the south side it joins another larger hill, which would be the widest end and therefore the natural passage to the rest of the hill. The archaeological remains of this Precolumbian settlement are spread over almost a kilometre in the northern sector of the hill, where the terrain narrows to a width of only 50 meters (Fenoglio Limón 2012; Saint-Charles Zetina 1993) (Figure 6.2).

The constructions at the site begin, from south to north, with two terraces of about 220 meters in length that cross the top of the hill from east to west, with a certain parallelism and equidistance of about 40 meters from each other. These terraces seem to define the built space, especially in the most accessible sector, perhaps in the form of small barricades, where the slope of the hill is more gradual. Still in the southern sector, in the wide part of the hill, there are five mounds that do not seem to have a clear order. The first of them is only 35 meters north of the second terrace, the next one is 67 meters east of the previous one and after a distance of 45 meters to the north, there are two more, barely 30 meters apart. Farther away, about 110 meters to the north, is the last one. These mounds are made of stone and are no more than two meters high and between 10 and 15 meters on each side at the base. From here we find a more complex architecture, formed by three architectural ensembles (Fenoglio Limón 2012; Saint-Charles Zetina 1993).

The first consists of a group of structures dominated by a pyramidal building with a quadrangular floor plan. To the east, the complex is closed by an L-shaped platform and in the southern part there is an elongated platform with a rectangular base and similar dimensions. Finally, in the centre of the courtyard formed by these structures, is a square mound, 10 meters on each side and not more than two meters high (Fenoglio Limón 2012; Saint-Charles Zetina 1993).

The next complex is located 250 meters northeast of the previous one and is formed by two twin sunken courtyards. One is north of the other and occupies an area of a little more than 6 000 square meters, the interior measures 40 meters on each side. Each has a pyramidal base to the east facing west, about 20 meters on each side at its base and no more than two meters high (Fenoglio Limón 2012; Saint-Charles Zetina 1993).

Finally, 80 meters north of these courtyards—occupying the northern end of the hill—is the third architectural complex, which consists of a pyramidal building, approximately 8 meters high and about 20 meters on each side at its base, but with an "indentation" open to the east, giving the building a horseshoe shape. At the base of the eastern facade, in front of the fissure, there is a stone path that leads to the cliff a few meters away. The complex ends on the south side with a small "closed" courtyard, bounded on the east and west sides by platforms about two meters high and 20 meters long; the south side is bounded by a platform no more than one meter high and about 20 meters long. The northern ends of the east and west platforms end in two small mounds (Fenoglio Limón 2012; Saint-Charles Zetina 1993).

It is important to clarify that Santa Rita has no ballcourt or petroglyphs.

***El Cerro de la Cruz, San Juan del Río***

The Cerro de la Santa Cruz, or Cerro de la Cruz as it is better known, corresponds to the hilltop settlements with a sectional distribution pattern. It was reoccupied during the Epiclassic period. It is a small hill with cliffs on all sides; in front of it, on the north side, is the town of San Juan del Río and the vast plain of the San Juan del Río Valley; at the foot of the hill, on the east side, runs the San Juan River. The natural access to the top of the hill would be from the south side of the hill (Saint-Charles Zetina 2022) (Figure 6.3).


**Figure 6.3:** Plan prepared by the Cerro de la Cruz 2000 Archaeological Project (modified by Magdalena García Espino).

The evidence of the Epiclassic period consists of a large levelling platform, apparently rectangular, which covers almost the entire surface of the hill. In the northeastern quadrant of the platform is the main building, which is a stepped pyramidal base with three levels and 40 meters on each side at the base. This building had two phases of construction; the present views correspond to the last one. According to the topography, the stairs must have been on the west side. In the southern sector there is a large plaza open to the south and east, about 100 meters long, but partially closed to the west by a long platform that also closes the small plaza to the west of the main mound (Saint-Charles Zetina 2022).

To the west of the platform is another smaller plaza, bounded on the south side by a mound that probably connected to the main platform; however, the construction of the current access road destroyed much of it (Saint-Charles Zetina 2022).

On the edges of the hilltop there is a perimeter wall which, in addition to the function of enclosing and levelling the land of the rectangular platform mentioned above, gives rise to what we have designated a causeway. It is located outside the wall and is bordered by the edge of the cliffs. Petroglyphs have been found on this causeway, which we will discuss later (Saint-Charles Zetina 2022).

It should be noted that the northern part of the hill was cut off in the 1960s during the construction of the Mexico Queretaro highway. We do not have any information that would allow us to know what archaeological elements were lost. Another important point is that the settlement was not limited to the top of the hill, where the ceremonial centre was established, but that the residential and production zones were in the lower area, below the streets and houses of the present-day Barrio de la Cruz (Saint-Charles Zetina 2022).

Cerro de la Cruz has petroglyphs, but no ballcourt.

### *El Rosario, San Juan del Río*

The archaeological site of El Rosario breaks with the Epiclassic settlement pattern because it is located on


**Figure 6.4:** General plan of El Rosario during the Epiclassic period (prepared by Magdalena García Espino).

a hill in the valley of San Juan del Río. It corresponds to the sites with a sectioned internal pattern and was reoccupied during the Epiclassic period.

After the completion of the Teotihuacan cycle, the site underwent a series of transformations in order to comply with the new architectural canons and to reduce the public and private spaces. Thus, the first major transformation took place with the construction of a large platform in the western sector of the site. During the Classic period, a large plaza surrounded by two rectangular platforms was located to the west of the main platform. For the construction of the new platform, these buildings were completely covered and a large retaining wall was built reducing the space by almost half of the original. In addition, two more elongated mounds were placed on this platform, forming an L shape and closing the new plaza to the north and west, leaving the southern portion open, since the Main Structure is to the east (Saint-Charles Zetina *et al.* 2010) (Figure 6.4).

The Main Structure also underwent a major transformation. From a platform on which a ceremonial precinct with a closed portico was placed, it was transformed into a stepped pyramidal base with three terraces; the upper precinct was reduced by using the walls of the portico and the previous precinct as construction pens. The new enclosure was built inside the existing walls, which were finally "sunken" with respect to the final surface of the building. As a result, the overall structure gained volume even though the enclosure was reduced in size (Saint-Charles Zetina *et al.* 2010).

The northern sector was also completely transformed. The previous buildings—the palace, the administrative structures and the rooms—were buried and filled with stones and earth to form a large, stuccoed plaza. The eastern sector was probably the least transformed, remaining as another stuccoed plaza of the complex.

Despite the significant changes, the main stair of the building to the west was preserved. El Rosario has no petroglyphs or ballcourt.

***La Trinidad, Tequisquiapan***

Perhaps one of the most complex sites in this basin is La Trinidad, in the municipality of Tequisquiapan. It corresponds to the sites with a sectioned internal pattern. It is located on the top of a hill on the eastern edge of the Divino Redentor massif. The hill of La Trinidad has cliffs on its north, west and southeast sides. On the western side there is a relatively deep ravine that separates it from the massif, but in the southwestern part, which is the highest and most rugged, there is a narrow pass that connects it to the massif. This means that the natural access is in the southern and southeastern part. From the top of this hill, the entire eastern part of the San Juan del Río Valley is visible, in the direction of the municipalities of Cadereyta, Tequisquiapan and San Juan del Río (Saint-Charles Zetina 2007, 2012).

The natural entrance is protected by a series of terraces and mounds that serve as watchtowers, as in Santa Rita. In this case, there are four *albarradas* (low walls) and a quadrangular space of approximately 45 × 40 meters, with functions that may be similar to those of a barbican. It is located in the narrowest part of the "port" and is directly connected to *albarradas* 1 and 2. In contrast, *albarradas* 3 and 4 are relatively distant from the aforementioned structure and closer to the core of the settlement. Apart for *albarrada* 1, which begins in the lower part of the plaza and is the shortest (about 171 meters), *albarradas* 2, 3 and 4 begin on the southwestern slopes of the hill, toward its highest part, measuring 680, 985 and 184 meters in length, respectively. These run more or less parallel from west to southeast. In comparison, *albarradas* 2 and 3 change direction to the north along the eastern slope of the hill until these both end at the edge of the cliff on the northern face. The last one is located close to the rest of the architectural complex (Saint-Charles Zetina 2007, 2012) (Figure 6.5).

The ceremonial centre is located in the central part of the mound. It is formed by a pyramidal base that reaches a height of about eight meters and has about 20 meters per side at its base. It is likely that this building had stairs on all four sides. Immediately to the east of this building is a ballcourt with a double T-shaped floor


**Figure 6.5:** General plan of La Trinidad (after Saint-Charles Zetina 2012, modified by Magdalena García Espino).

plan—53m long by six meters wide—oriented north-south (Saint-Charles Zetina 2007, 2012).

The north sector of the Main Building has a small plaza delimited, to the north, by an elongated mound. After this, there is another small courtyard closed to the northeast by a quadrangular mound (Saint-Charles Zetina 2007, 2012).

South of the main complex are two large quadrangular patios and south of these are a series of stepped platforms forming small patios. To the west and southwest, there are six patios on an east-west axis, three and three in a row. In each of the divisions there is a small mound that could have served as an altar. Finally, in the most northern and eastern part, there is a series of terraces—14 have been identified so far—that could correspond to living areas (Saint-Charles Zetina 2007, 2012).

It is important to note that in the lower part of the hill, in the eastern sector, there is an enclosed patio with a rectangular platform. It is also worth mentioning that different petroglyphs have been found in this archaeological site, which we will return to, below.

***Los Cerritos, Tequisquiapan***

Los Cerritos corresponds to the sites located on the middle slope and those with an east-west axis. It consists of five architectural groups, in addition to several groups of petroglyphs that will be discussed later. The first group (A) is located in the northern sector of the hill and corresponds to a rectangular platform—approximately 110 × 50m—on which a larger mound of 20 meters on each side is placed in the centre; it closes to the west with a horseshoe-shaped structure that delimits a small patio open to the west. To the east it has a patio closed on all sides. The steps of the large mound are located on the west facade (Fenoglio Limón 2014; Fenoglio Limón and Flores Oaxaca 2019) (Figure 6.6).

Complex B, which is the largest, consists of a large platform—approximately 150 × 100m—with a central structure and courtyards on both the east and west sides; the larger one is open to the west and the smaller

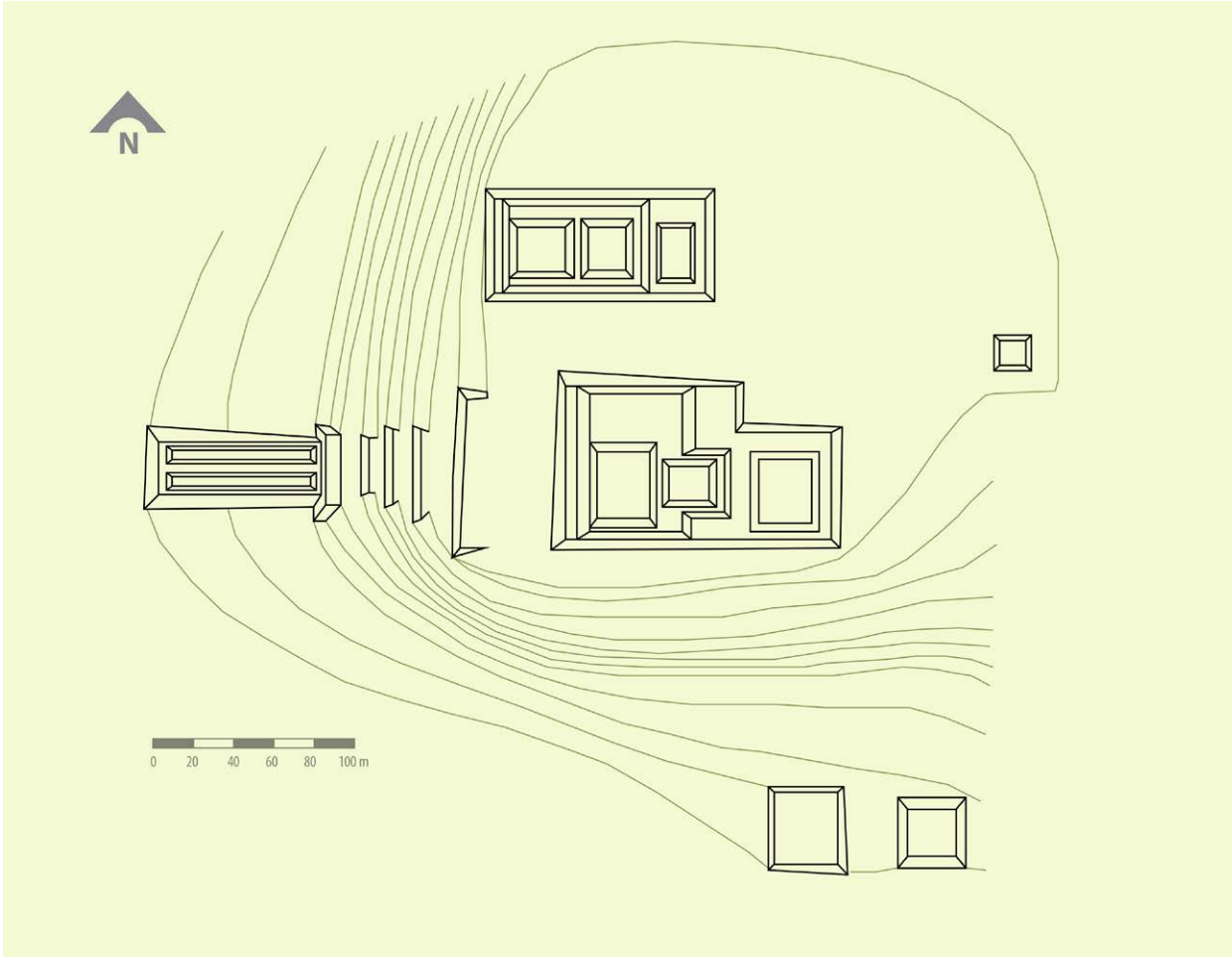


**Figure 6.6:** General plan of Los Cerritos (after Brambila Paz *et al.* 1993, modified by Magdalena García Espino).

one is closed. It is similar to complex A, but differs in the shape of the plan, since the former is completely rectangular, while in this case the platform that supports both, the main building and the courtyard, is larger than the eastern courtyard creating an L-shaped at the northeastern end of the platform (Fenoglio Limón 2014; Fenoglio Limón and Flores Oaxaca 2019).

Complex C consists only of a quadrangular structure that measures approximately 20 meters on each side. Complex D consists of the ballcourt, located at the western end of the site, outside the area of the main architectural complexes and in the courtyard of a house. Its architectural plan is I-shaped, oriented east-west, with a total extension of 100 meters long and 40 meters wide. Due to its proximity to the community and the existence of a road that crosses it on the west side, it is the most affected building of the site (Brambila Paz *et al.* 1993). Group E is made up of two small platforms with a rectangular plan, which are quite destroyed and measure 30 meters on each side. In addition to the previous assemblages, the site has two terraces in the northeastern part (Fenoglio Limón 2014; Fenoglio Limón and Flores Oaxaca 2019).

As we could see in the description, Los Cerritos has both a ballcourt and petroglyphs.

**Petroglyphs**

One of the new elements that entered the region during the Epiclassic period are the motifs, generally geometric, engraved on rocky outcrops. However, these archaeological traces are not present at all the Epiclassic sites. As we have mentioned, of the settlements included on this paper, only Cerro de la Cruz, La Trinidad and Los Cerritos exhibit these. In general, these are not present in the same quantity and there are slight differences in the types of motifs.

If we speak in general terms about the petroglyphs of the Epiclassic period, we can make two classifications: the first one according to the type of motifs and the second one based on their location. In this sense, we have geometric petroglyphs, mainly curvilinear and schematic representations of architectural elements. In terms of location, they could be divided into those associated with architecture, those near or surrounding areas with architecture and those associated with sources of water.

In the first group—associated petroglyphs or those that form a direct part of the architecture—El Cerro de la Cruz stands out, where the blocks forming the slopes of the structures are carved. In the case of La Muralla, La Trinidad and Cerro de la Cruz itself, these are located along the perimeter roadway; and in El Tepozan, Los Cerritos, El Cerrito and La Trinidad, these are located near the central areas. It is important to note that in these cases, although the petroglyphs might be concentrated in one area or scattered throughout the terrain, they are always found within the main settlement boundary.

The second case, represented by sites such as El Carmen II/La Minita (El Marqués) or El Pedregoso (Pedro Escobedo), is characterised by the presence of petroglyphs in areas close to an archaeological site, but they do not have a direct connection as is shown in the previous groups. In fact, the distance between the site and the area with rock art can reach up to 500 meters. Although we cannot confirm the direct relationship between the settlement and the petroglyphs, it is noticeable that they are located within a relatively close perimeter.

Finally, the third type consists of rock art directly related to water sources, as in the case of Arroyo Neverías (Huimilpan) or La Fuente (Tequisquiapan). In the first case, the petroglyphs are located along the riverbank and in the second, directly related to a spring.

In the cases under consideration, the petroglyphs correspond to curvilinear elements and architectural representations associated with or surrounding architectural elements.

At Cerro de la Cruz we have petroglyphs directly associated with architecture and others in the surrounding category. The former are stone blocks that probably formed part of the stairs of the main building or the facing walls of the facade; a total of 10 petroglyphs have been recovered (Saint-Charles Zetina 2022). Among these, six represent curvilinear geometric motifs, either spirals, curved lines or a combination of both and simple circles or circles crossed by an intermediate line; three represent rectilinear geometric motifs—one exhibits parallel straight lines, another has straight lines crossed to form an inclined grid and the last one has vertical straight lines forming a sequence of parallel V shapes—(Figure 6.7).

The tenth petroglyph presents a very complex and different motif from what has been observed in the region. It was found in complete condition, on the surface and out of context in the house of the Capilleros, located to the south of the hill. It is an engraving on red quarry stone, worked in square form. The carving appears to represent a numeral, with three horizontal parallel lines at the top and a concentric circle with a cross in the middle below them, some of the lines forming the cross are duplicated. Finally, at the bottom there are four concentric circles. The technique used for the engraving is only about 1 mm deep. The dimensions

**Figure 6.7:** Petroglyphs of El Cerro de la Cruz (photographs by Juan Carlos Saint-Charles).

**Figure 6.8:** Petroglyph with possible calendar date found on Cerro de la Cruz (photograph by Juan Carlos Saint-Charles).

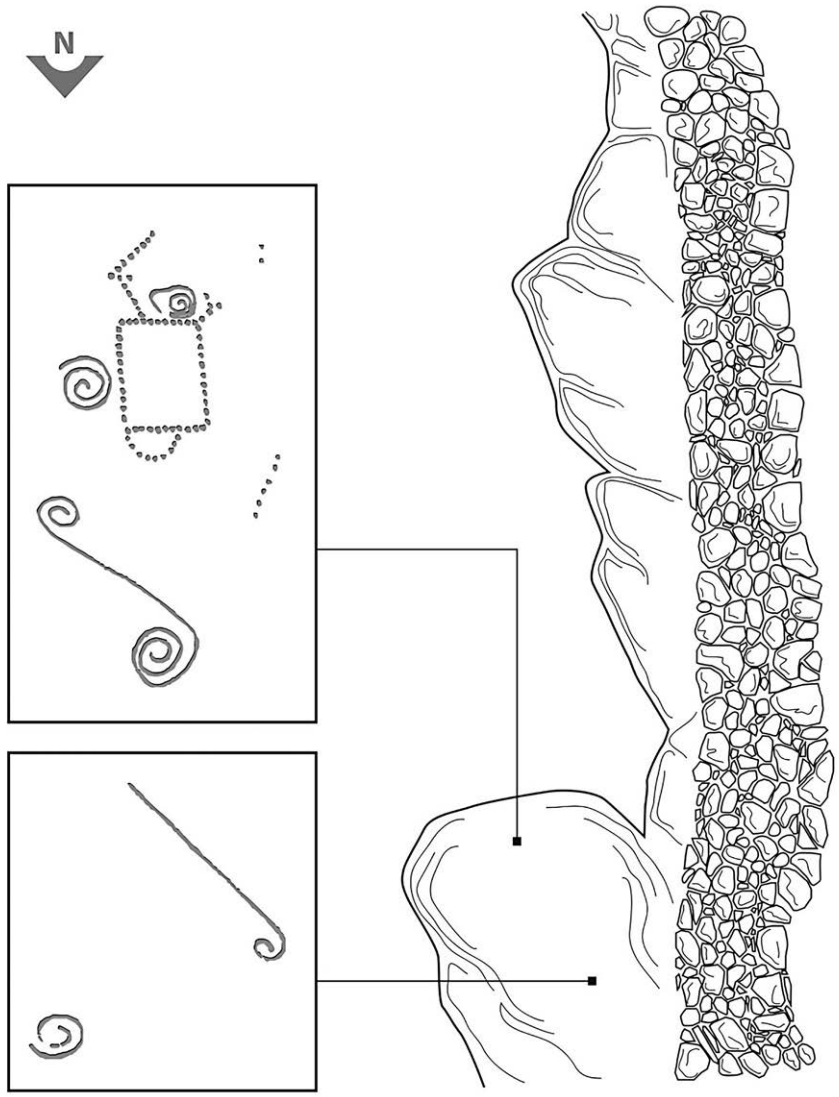


**Figure 6.9:** Petrography on the parapet walk at Cerro de la Cruz (drawing by Juan Carlos Saint-Charles).

of the stone are 33 cm long, 28.6 cm wide and 11.4 cm high (Saint-Charles Zetina 2022) (Figure 6.8).

On the other hand, the petroglyphs, which belong to the category of surrounding architecture, are located on the rocky outcrops that border the hill, on the parapet walk. There are four engraved motifs that, although different, are on the same rocky outcrop. Three are curvilinear elements, mainly curved lines ending in a spiral or simple spirals. The fourth is more complex and consists of a square formed by dots. From its left side come some straight lines, also dotted and in different directions, while on the right side there is a semicircle. Above the central motif are two dotted straight lines. In addition, there are two spirals on the left and below the rectangle, but it is not possible to be sure that the spirals are part of the dotted pattern. Because the designs are so different—some curvilinear and some rectilinear—and executed with different techniques—some dotted and some carved—it is possible that each style corresponds to two stages of occupation (Figure 6.9).

In the case of the site Los Cerritos, we have three groups of petroglyphs and three isolated petroglyphs. Due to their location, at a distance of 200 to 400 meters from the architectural complex, fall into the category of surrounding architecture. The first group is located to the east of the site; the second to the southeast; and the third and those isolated to the northeast. In total,

**Figure 6.10:** Examples of petroglyphs from Los Cerritos (photographs by Fiorella Fenoglio).

there are 16 petroglyphs and three wells. In general, the motifs belong to the categories of curvilinear, rectilinear and schematic architectural elements. Thus, we have single and double spirals, undulating lines, double concentric circles, curved lines with double spirals, two representations of ramifications—one with straight lines and the other with curved lines—and one composed of dots with no apparent order. In addition, we have two representations of stairs or temples (Fenoglio Limón 2014; Fenoglio Limón and Flores Oaxaca 2019) (Figure 6.10).

In the case of La Trinidad, we have a greater number of rock outcrops—18 in total—and more complex motifs, since most of them are combined or have more than one element per rock. We have curvilinear and rectilinear geometric motifs and a probable anthropomorphic one. As for their location, the outcrops are presented more or less in groups (four groups and three that could be considered isolated) and although most of them—except the central one—are located between the *albarradas* and the terraces, we consider them to be surrounding the architecture. The central group—composed by outcrops 1, 2, 3, 4, 8, 9, 16 and 17—is located in association with the northern group. The remaining assemblages and the isolated ones are located mainly in the northern and northeastern sectors of the site, except for petroglyphs 11 and 12, which are located to the southwest and to the west is the isolated outcrop 18, which also has a small well and is near *albarrada* 4, very close to the mound assemblage.

Although the motifs are mainly spirals, circles, fretwork and curvilinear lines, these are presented in combination and create complex designs, most of them made with the technique of wearing, but there are also dots. Among the elements, two stand out for breaking with the common: a probable anthropomorphic and a radial square element with straight lines, below which presents a straight line that connects the previous one with another square of smaller size and thicker lines, ending with a vertical straight line connected to another horizontal one (Figure 6.11).

## Ceramics

One of the elements considered diagnostic of Epiclassic is the red-on-buff (*rojo sobre bayo*) pottery decorated with geometric motifs. These are generally pots, bowls and dishes whose natural paste colour is light brown or cream, on which various designs were painted in red. Although at first glance they all appear to be the same,

**Figure 6.11:** Examples of the complex petroglyphs of La Trinidad (photographs by Juan Carlos Saint-Charles).

there are clear differences between the types that have allowed us to propose the existence of ceramic provinces within Queretaro and Guanajuato.

Saint-Charles and colleagues (2013) proposed the existence of four provinces: Laja, Lerma, Central and San Juan-Tula. Although the boundaries between the provinces are blurred, so that ceramics from one can be found in another, the number of diagnostic types of pottery from each province exceeds by far the number of types from the other provinces. In this sense, the differences between them are subtle in terms of designs and small variations in particular shapes of vessels.

The ceramics of the Lerma province are characterised by the types of Red-on-buff el Bajío and Cantinas Red-orange. The former consists of dishes and tripod bowls decorated with thick red lines, stars, circles and spirals. The Cantinas type includes bowls and *ollas* decorated with thin red lines on the inside and a thick, wavy red line on the outside. The *ollas* usually have a composite silhouette and the decoration of reticulated motifs, tight spirals and fretwork runs from the rim to the base (Saint-Charles *et al.* 2013) (Figure 6.12).

The Central province includes types such as Cantinas Red-orange, San Bartolo Red-on-buff, Ana María Red-on-brown (*rojo sobre café*) (also known as El Mogote) and Red-on-buff el Bajío. The diagnostic type is San Bartolo Red-on-buff, which consists of plates, bowls and tripod *ollas*. The bowls and plates have high and grooved supports and are decorated inside and out with designs thicker than those of the Cantinas type, although they are similar. The *ollas*, on the other hand, have three small conical supports and are decorated from the base to the beginning of the neck. In funerary contexts, the type found is Garita Black brown (Saint-Charles *et al.* 2013) (Figure 6.13).

Finally, the diagnostic ceramics of the San Juan-Tula province—to which the sites presented here correspond—are the Ana María Red-on-brown (El Mogote), the Platos Red-on-buff Moy and the Cañones *ollas*. The tableware Ana María Red-on-brown consists mainly of tripod bowls decorated on the inside with motifs of small spirals in red and/or crosses in the form of X. The Moy group is formed by small plates with openwork pedestal supports decorated with thick vertical lines, the decoration inside the plate consists of red circles, generally four. Finally, Cañones *ollas* have high necks, three vertical handles and decorated with wide vertical red lines running from the rim to the beginning of the neck, connected by a wide horizontal red stripe, while the body is decorated with pairs of thick vertical lines (Saint-Charles *et al.* 2013) (Figure 6.14).

In accordance with the above-mentioned, San Ildefonso has the types Cantinas Red-orange, Cañones, Ana María Red-on-brown and Platos Red-on-buff Moy; however, it is noteworthy that the most abundant ceramic on the surface corresponds to the Huamango tradition.

**Figure 6.12:** Ceramics from the Lerma Province; upper row: Red-on-buff el Bajío; lower row: Cantinas Red-orange (after Saint-Charles *et al.* 2013).


**Figure 6.13:** Central Province ceramics (after Saint-Charles *et al.* 2013).

**Figure 6.14:** San Juan-Tula Province ceramics. Ana María Red-on-brown bowls; Platos Red-on-buff Moy and Cañones *ollas* (after Saint-Charles *et al*. 2013).

In Santa Rita and El Rosario we have Cañones, Ana María Red-on-brown and Platos Red-on-buff Moy; in La Trinidad the Cañones type predominates; in Cerro de la Cruz, Cantinas Red-orange, Cañones, Ana María Red-on-brown and Platos Red-on-buff Moy have been identified, in addition to San Bartolo Red-on-buff and Garita; in Los Cerritos we have Ana María Red-on-brown and San Bartolo Red-on-buff. It should be noted that in all the sites, there were surface fragments of pottery of the post-fired Xajay Red incised that, according to Saint-Charles Zetina and Argüelles Gamboa (1986), corresponds to a late occupation, either the end of the Epiclassic or the beginning of Early Postclassic.

**Discussion**

The research that has been developed so far in the Panuco-Moctezuma Basin has a great advantage over other areas because we have a regional vision and we have information from a number of archaeological sites. The first results show that the Epiclassic was an unusual phenomenon, not only because it was the period of greatest population density, but especially because the diverse material records indicate strong irruption. They do not follow the architectural, site, ceramic or stylistic patterns that we have in the region for previous periods; moreover, two new elements are introduced: the ballcourt and petroglyphs.

Of the sites shown here, Los Cerritos and El Rosario are located in the valley or in flat areas, while San Ildefonso, Cerro de la Cruz, Santa Rita and La Trinidad are on the top of hills and are difficult to access, although only La Trinidad and Santa Rita have defensive architecture. All the sites are relatively close to water sources, as the San Juan River and its springs are either at the foot of the hill where the site is located or only three kilometres away. Thus, neither the plains nor the rivers and their

tributaries are abandoned in favour of agricultural production to obtain basic resources; some of the sites even have residential and productive terraces.

The shift in the settlement pattern towards naturally protected sites has been attributed to the strong instability and constant conflict that caused the weakening of the great city of Teotihuacan (Jiménez Moreno 1959). However, with the exception of the architectural elements mentioned above, we have no other archaeological evidence indicating war, conflict, violence, or any other social upheaval. On the contrary, the distribution of the sites, those with architecture and material concentrations, lead us to propose that there was an intention and a new vision: to control the territory at the regional level. Thus, the new settlement pattern should be analysed from the point of view of locating the sites in positions that allow the protection of the elites, but above all to control the intra-regional landscape.

In terms of architectural patterns, there is a tendency for the main mounds to face west and the construction of closed courtyards, usually delimited by elongated platforms that create rectangular plans or form an L. They all have similarities in terms of the elements involved because they all respond to a particular conception of space, but the differences are obvious.

On the one hand, La Trinidad is the most complex in terms of density and architectural complexity, since it presents a high degree of concentration and integrates civic, ceremonial administrative spaces, a ballcourt, several residential/productive terraces and elements used for surveillance, such as benches on the *albarradas* that provided elevated vantage points for observation. In the second order would be San Ildefonso, where the differences that stand out are the size of the main structure, the presence of wide plazas and semicircular structures. Following is Santa Rita, since it has a semi-dispersed pattern in the distribution of architectural ensembles and the presence of barricades at the entrance to the site. After that, Los Cerritos, which despite having fewer assemblages, has a ballcourt. El Rosario would follow, which was remodelled to generate a main structure with a sunken enclosure, a central patio delimited by structures forming an L shape and wide plazas. Finally, Cerro de la Cruz, which is different because it has only one central structure with a patio to the west and the plazas that surround it. The great amount of work invested to achieve the final architectural distribution stands out in the case of the last two sites, whose Epiclassic reoccupation implied significant remodelling.

As for the petroglyphs, these are present in La Trinidad, Los Cerritos and El Cerro de la Cruz sharing geometric and curvilinear motifs, although in La Trinidad there are also rectilinear and an anthropomorphic, besides being more complex. In Los Cerritos, in addition to the geometric ones, we have representations of mounds or temples, while El Cerro de la Cruz is the only one where these elements are a direct part of the architecture, in addition to a square element elaborated with the stippling technique, a calendrical date and spirals.

On the other hand, the ceramic analyses indicates that all sites correspond to the same ceramic province (Saint-Charles *et al.* 2013); with the types Cañones, Cantinas, Ana María Red-on-brown, Platos Red-on-buff Moy that are inserted in the San Juan-Tula province. However, the abundant presence of Huamango materials in San Ildefonso and the presence of San Bartolo Red-on-buff and Garita in El Cerro de la Cruz and Los Cerritos stand out.

We must add another factor to the already complex panorama described by the evidence: Time. According to the research carried out in the region, the Epiclassic cannot be conceived as an immobile temporal unit. Therefore, we propose the existence of three distinct moments during the span of at least 400 years. The first phase would correspond to the response to the crisis, characterised by population movements and the arrival of migratory groups, which constructed sites in topographic areas difficult to access and defensive structures. The second phase, which might be called stability, in which the middle and lower slopes and valleys were reoccupied without leaving the sites. Finally, the moment of collapse, when new factors—climatic and social—caused the abrupt abandonment of the sites—leaving unfinished buildings—and the region was partially abandoned by sedentary groups and reoccupied by hunter-gatherers.

In terms of territorial organisation, it is clear that there was a hierarchy of sites where the main settlement of La Trinidad concentrated political, economic, religious, administrative, military and even residential activities. It is probably that the main elites occupied the site. The hierarchical second level is represented by Santa Rita and San Ildefonso which also have civic-ceremonial architecture albeit smaller and were inhabited by secondary elites.

Los Cerritos and similar sites correspond to settlements built during the second phase, when the general situation of instability decreases, making it possible to settle in low hills and valleys. In addition to the location, two other factors indicate a later date for this site: the change in the axis of the ballcourt with respect to that of La Trinidad and the presence of schematic petroglyphs representing architecture.

Cerro de la Cruz and El Rosario are two special cases. As mentioned above, both sites were reoccupied during

the Epiclassic period. In the case of Cerro de la Cruz, a large pyramidal base with three bodies, a patio to the west and a large plaza to the south; and in the case of El Rosario, a large mound with a sunken ceremonial area on top, with stepped bodies, a patio to the west closed by an L-shaped structure and at least three large plazas around it. This leads us to believe that the specific function of these sites during this period was entirely ceremonial. Probably, Cerro de la Cruz was reoccupied from the first phase and El Rosario, during the second, until the abandonment of the region. In the former case, these assumptions are based on its hilltop location and importance during the Preclassic, Epiclassic and Postclassic periods, as evidenced by the first occupations, inverted work and offerings found with Xajay and Aztec materials (Saint-Charles Zetina 2022). In the case of El Rosario, it is supported its location on a slight hill, but above all by the radiocarbon dating, whose sample was found on the floor of the so-called red enclosure, which was dated 1086 ±29 (AD 890).

We have proposed that the first occupations were due to the arrival of different migrant groups in the region. Unfortunately, we do not have enough bioarchaeological information to approximate the ethnic identities and origins of these populations. However, we do have other factors that can help us outline some proposals for the composition of this cultural kaleidoscope. The first of these is the history of the cultural dynamics of the region and the introduction of new elements such as the ballcourt and petroglyphs.

The main characteristic of the region under study is its multiculturalism since its origin, a product of its geographical location. In addition to the presence of ancient hunter-gatherer groups, since the establishment of sedentary agricultural societies, this area has been influenced by the presence of a great diversity of groups from other regions. During the Formative, as mentioned above, the territory was occupied by people related to the Chupicuaro culture from the Acambaro Valley and Cuicuilco in the Valley of Mexico. Later, commercial diasporas were created to connect different regions, mainly western and central Mexico, indicating a strong relationship, since early times, between these three regions.

Thus, future research should focus on characterising the cultural diversity of the region during the Epiclassic, with emphasis on three lines of investigation: First, to consider the historical relationships between the San Juan River basin and western Mexico; second, the link established between the city of Teotihuacan—mainly the neighbourhoods that financed the commercial diasporas during the Classic period—and the western neighbourhood; and third, the relationships with the groups of the current states of Mexico and Hidalgo, implicit in the materials located mainly in San Ildefonso.

Similarly, the introduction of ballcourts and petroglyphs should be considered, as well as circular and semicircular structures, which, although briefly mentioned in this work, are new elements that are present to a greater extent in the other basins and sub-areas that were not included here for limitations of space.

## Conclusions

The socio-political phenomenon known as Epiclassic had a greater impact in the Panuco-Moctezuma Basin, especially in the San Juan River sub-area. The increase in population and the creation of new sites—occupying the ravine plateaus that are characteristic of the location in this sub-area—are evidence of the largest population occupation since the settlement of sedentary groups in the region.

Although we do not have enough information about the population, we cannot ignore the history and the background of the relationships that the region established with other areas, such as Central and Western Mexico. It is certain that these populations found refuge in these already known areas at the time of the great crisis. For this reason, in this and other basins, some of the sites that were of minor importance during the Classic and Epiclassic periods were transformed into centres of domination. Others retained or regained their importance, either political or religious.

Similarly, if we extend our vision to the other basins and sub-areas represented in the ceramic provinces, we will see indicators that point to occupations of different ethnic origins that have yet to be delineated. The spatial and hierarchical arrangement, however, will be similar to the one presented here.

The analyses of architectural patterns, rock art and pottery indicate that a well-defined set of practices existed, but that each site adapted these practices according to their specific needs. In this sense, it is important to undertake a detailed analysis of the differences within the sub-areas, as well as within the basin as a whole and to do comparisons with the others, since in these cases the small differences may be more noticeable. However, in the case of the San Juan River sub-area, we can conclude that the sites located there were strengthened by promoting internal alliances, creating, to a certain extent, coordinated and integrated units.

Finally, an important question remains to be answered: why most of the sites were abruptly abandoned around

AD 900 and we only find reoccupations without new constructions as well as intrusions in the form of offerings related to the bearers of the post-fired Xajay Red incised pottery? Likewise, the presence of hunter-gatherer groups for the last phases of the Epiclassic must be reanalysed, since new evidence (Saint-Charles and Fenoglio 2025) points to the reoccupation of these sites by these groups. Was their arrival the reason for the abandonment of sedentary groups in this region? The presence of both societies, although brief, determined the abandonment of the region and gave way to the concentration of the population in a new and imposing centre: El Cerrito, which marks the beginning of the Early Postclassic in the entire Panuco-Moctezuma River basin.

**References cited:**


Brambila Paz, Rosa, Ana María Crespo Oviedo and Juan Carlos Saint-Charles
1993 Juegos de pelota en el Bajío. *Cuadernos de Arquitectura Mesoamericana*, Núm. 25: 89–95.

Brambila, Rosa and Margarita Velasco
1988 Materiales de La Negreta y la expansión de Teotihuacan al norte. *Primera Reunión sobre las sociedades prehispánicas en el Centro Occidente de México. Memoria, Centro Regional de Querétaro, Cuaderno de Trabajo 1*, pp. 287–297. Instituto Nacional de Antropología e Historia, Mexico City.

Castañeda López, Carlos
1992 Un antiguo señorío en el Bajío guanajuatense. San Bartolo Agua Caliente. Master thesis. Universidad Veracruzana, Xalapa.

Castañeda, Carlos and Yolanda Cano
1993 La arquitectura monumental en San Bartolo Agua Caliente. *Cuadernos de Arquitectura*, Núm. 25: 65–72.

Castañeda, Carlos, Beatriz Cervantes, Ana María Crespo and Luz María Flores
1989 Poblamiento prehispánico en el centro-norte de la frontera mesoamericana. *Boletín Oficial del Instituto Nacional de Antropología e Historia,* Núm. 28: 34–43.

Faugère, Brigitte
2022 *De Chupícuaro a Teotihuacán. Arqueología del valle del río Tigre, Guanajuato*, Tomo I y II, Investigaciones de campo e interpretaciones, Cuadernos de Arqueología Mesoamericana. Serie Occidente, CEMCA, Mexico City.

Fenoglio Limón, Fiorella
2012 *Proyecto Estrategias para la protección del patrimonio arqueológico en el estado de Querétaro. Informe Final de la Temporada 2012*. Unpublished Report. Archivo de la Coordinación Nacional de Arqueología del Instituto Nacional de Antropología e Historia, Mexico City.
2014 *La cuenca del río Querétaro durante el Epiclásico. Un mosaico arqueológico*. Paper presented at XXX Mesa Redonda de la Sociedad Mexicana de Antropología, Queretaro.
2024 Teotihuacan fuera de Teotihuacan. La porción oriental del Bajío Mexicano durante el Clásico. Doctoral thesis. Escuela Nacional de Antropología e Historia, Mexico City.

Fenoglio Limón, Fiorella and Pablo Flores Oaxaca
2019 El sitio arqueológico de Los Cerritos y sus petrograbados. *Estudios Históricos. Nuevas Lecturas*, Edición XX y XX, pp. 15–24. Archivo Histórico de Querétaro, Queretaro.

Fenoglio Limón, Fiorella, Juan Carlos Saint-Charles and Elizabeth Hernández Sánchez
2017 Aportes recientes en la arqueología de las cuencas de los ríos San Juan y Huimilpan. Investigación, protección y difusión. *La investigación en arqueología, antropología e historia en Querétaro, Tiempo y Región IX*, coordinated by Carlos Viramontes and Ricardo Jarillo, pp. 43–64. Instituto Nacional de Antropología e Historia & Universidad Autónoma de Querétaro, Mexico City.

Fenoglio Limón, Fiorella, Enah Fonseca Ibarra and Israel Hinojosa Baliño
2008 El Epiclásico en el Marqués, Querétaro. Un grano de arena. *Tiempo y Región. Estudios Históricos y Sociales Vol. II*, coordinated by Carlos Viramontes, pp. 57–76. Instituto Nacional de Antropología e Historia & Universidad Autónoma de Querétaro & Archivo Histórico Municipal de Querétaro, Mexico City.

Hernández Sánchez, Elizabeth
2016 *Proyecto Dinámicas Culturales en el sur de Querétaro durante época prehispánica (municipios de Huimilpan y Amealco). Informe Final, Segunda Fase-Etapa 1*. Unpublished Report. Archivo de la Coordinación Nacional de Arqueología del Instituto Nacional de Antropología e Historia, Mexico City.

INEGI
2006 *Síntesis geográfica, nomenclátor y anexo cartográfico del estado de Querétaro*. Instituto Nacional de Estadística, Geografía e Informática. Secretaria de Programación y Presupuesto, Mexico City.

Jiménez Moreno, Wigberto
1959 Síntesis de la Historia Pretolteca de Mesoamérica. *Esplendor del México Antiguo vol. 2*, coordinated by Carmen Cook and Raúl Noriega, pp. 1019–1108. Centro de Investigaciones Antropológicas de México, Editorial del Valle de México, Mexico City.

Pastrana, Alejandro
2018 La erupción del Xitle y su afectación a Cuicuilco. *Arqueología Mexicana*, Vol. 25 (151): 46–55.

Saint-Charles Zetina, Juan Carlos
1993 Asentamientos sobre Barrancas, Río San Juan. *Cuadernos de Arquitectura Mesoamericana*, Núm. 25: 17–22.
2007 La Trinidad: un emplazamiento defensivo del Epiclásico en Tequisquiapan. *Tiempo y Región, Estudios Históricos y Sociales, Vol. I.*, coordinated by Ricardo Jarillo, pp. 19–39. Municipio de Querétaro

& Instituto Nacional de Antropología e Historia & Universidad Autónoma de Querétaro, Mexico City.

2012 La Trinidad: un centro de poder fortificado. Ensayo interpretativo. *Del Quehacer al Hacer en el Centro INAH Querétaro. Memorias del XXV Aniversario del Centro INAH Querétaro*, coordinated by Fiorella Fenoglio, Israel Lara and Yanet Lezama, pp. 210–224. Instituto Nacional de Antropología e Historia, Mexico City.

2022 *Cerro de la Cruz Archaeological Project. Informe Final de la Temporada 2000*. Unpublished Report. Archivo de la Coordinación Nacional de Arqueología del Instituto Nacional de Antropología e Historia, Mexico City.

Saint-Charles Zetina, Juan Carlos and Miguel Argüelles Gamboa

1986 Cerro de la Cruz, un asentamiento prehispánico en San Juan del Río, Querétaro. *Investigación*, Núm. 18: 2–4.

Saint-Charles Zetina, Juan Carlos and Ana María Crespo

1999 *San Ildefonso, lugar de confluencia de las "culturas" Xajay y Huamango*. Paper presented at *Tercer Coloquio Internacional sobre Otopames*, Toluca.

Saint-Charles, Juan Carlos and Fiorella Fenoglio

2025 *Informe sobre el Salvamento Arqueológico Loma de San Pedro Mártir, Querétaro*. Unpublished Report. Archivo de la Coordinación Nacional de Arqueología del Instituto Nacional de Antropología e Historia, Mexico City.

Saint-Charles, Juan Carlos, Luz María Flores and Trinidad Duran

2013 Tradiciones cerámicas rojo sobre bayo del Epiclásico en el oriente del Bajío y sur de Querétaro. *Tradiciones cerámicas del Epiclásico en el Bajío y regiones aledañas*, coordinated by Chloé Pomédio, Gregory Pereira and Eugenia Fernández, pp. 9–18. BAR International Series 2519. British Archaeological Reports, Oxford.

Saint-Charles Zetina, Juan Carlos, Carlos Viramontes Anzures and Fiorella Fenoglio Limón

2010 El Rosario, Querétaro: un enclave teotihuacano en el Centro Norte. *Tiempo y región. Estudios históricos y sociales Vol. IV*. Instituto Nacional de Antropología e Historia & Universidad Autónoma de Querétaro & Archivo Histórico Municipal de Querétaro, Mexico City.

Velasco, Margarita and Rosa Brambila

1978 Trabajos de rescate arqueológico en La Negreta, Querétaro. *Revista Mexicana de Estudios Antropológicos*, Vol. 24: 53–74.

# Chapter 7
# Epiclassic in South Central Michoacan

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## Archaeology in South Central Michoacan. A great diversity

In this chapter, I will analyse a strip of land in the state of Michoacan, Mexico, which stretches from the basins of Lake Patzcuaro and Lake Zirahuen to the north and reaches the Balsas River to the south. It is a straight 100 km axis which crosses an abrupt geography that reaches heights of almost 3 000 meters in the peaks that surround the lakes of Patzcuaro and Zirahuen, to less than 200 meters above sea level in the vicinity of the Balsas River.

Humans have lived in this megadiverse and resource-rich area for more than 12 000 years (Punzo and Martínez 2021), leaving material evidence of the numerous cultural groups that developed in the region. Among the vestiges of these cultures are the architectural remains of ancient cities of which the most important and perhaps least known examples are from the Epiclassic period.

The study area includes two adjacent hydrological regions: 1) The endorheic basin of Lake Zirahuen, the Tacambaro River and the sub-basin of the La Parota River, the latter two being tributaries of the Balsas River; and 2) The Tepalcatepec River, the largest tributary of the Balsas River. These basins are very shallow, which has caused the zones to become highly integrated with each other.

In this area, three archaeological traditions converged during the Epiclassic period (Figure 7.1). To the north is what we call the Lupe Sphere. To the west, in Tierra Caliente, is the Tepalcatepec River Sphere, of which we know very little except for the pioneering work of Isabel Kelly; and the Middle Balsas Sphere, where I have been developing an archaeological project for the past decade. At the confluence of these three spheres is the archaeological site of Tingambato, an important city influenced by them. Due to this cultural diversity in this relatively small area, different chronologies have been developed, which we have tried to match and present for better understanding (Figure 7.2).

## Paleoclimatic data of the region during the Epiclassic

A great effort has been made to recover the palaeoecological data of the Zirahuen Lake. In this sense, the records of increased sedimentation and magnetic susceptibility during the first five centuries of the common era, that is, during the Classic period, suggest an increase in humidity in the region. Likewise, there is evidence of an increase in the occurrence of fires, which may be the reason for the replacement of forested areas by herbaceous ones, with the presence of *Poaceae*, *Chenopodiaceae-Amaranthaceae* and *Asteraceae*. This could be an indication that the Zirahuen Basin was inhabited by an important human population during the Classic Period (Israde-Alcántara *et al*. 2005; Vázquez *et al*. 2010).

However, during the Epiclassic period, all indicators change: Records in Lake Zirahuen show drought conditions between AD 500 and 1000; the pollen assemblage increases in *Pinus* reaching the maximum data in AD 800; and the water levels of the lakes decrease, for example, the level of Lake Patzcuaro lost 4 to 5 meters between AD 750 and 1000 (Fisher *et al*. 2003; Platt Bradbury 2000; Watts and Platt Bradbury 1982). Therefore, since it is possible that some areas used for seasonal agriculture may have been abandoned, this period can be considered the most difficult for agricultural purposes.

In this sense, we only have detailed paleoclimatic data from basins above 2 000 meters above sea level, but in the lowlands of Tierra Caliente, conditions could have been worse to sustain human occupation. Perhaps

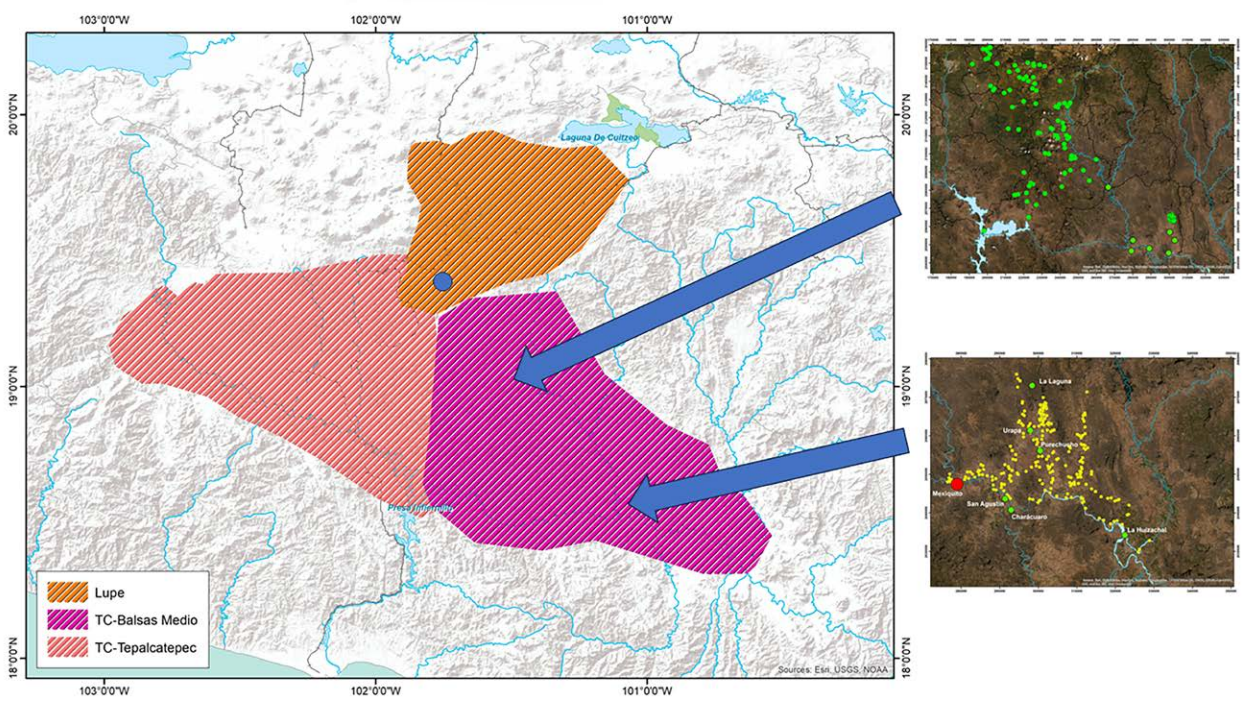


**Figure 7.1:** Archaeological cultural spheres. In blue is pointed out Tingambato site (map by José Luis Punzo Díaz).

| | Tepalcatepec | | Balsas Medio | | Michoacán Centro | Tingambato |
|---|---|---|---|---|---|---|
| | Goging 1939 | Kelly 1943 | Cabrera 1976 | Punzo 2020 | Pollard/Michelet | Punzo 2018 |
| 1500 | | | | | | |
| 1400 | | | | Cutzio | Taríacuri | |
| 1300 | Chandio | Chila | | | | |
| 1200 | | | San Miguel | | Urichu Tardío | |
| 1100 | | | | Los Tamarindos | Urichu Temprano | |
| 1000 | | | | | | |
| 900 | | | | | Joya | |
| 800 | Apatzingan | Tepetate | Pochote | | | |
| 700 | | | Tardío | La Casita | Lupe | Tingambato 3 |
| 600 | | Delicias | | | | |
| 500 | | | | | Jarácuaro | |
| 400 | | | | Piaitúcuro | | Tingambato 2 |
| 300 | | | Pochote | | Loma Alta 3 | |
| 200 | | | Temprano | | | |
| 100 | | | | Ancón | Loma Alta 2 | Tingambato 1 |
| 0 | | Chumbícuaro | La Villita Tardío | | | |

**Figure 7.2:** Chronology of South-Central Michoacan (by José Luis Punzo Díaz).

this could be one of the factors that led to sites such as Tingambato or larger sites closer to the Balsas River, such as Mexiquito, becoming more populated, while areas with more limited access to water were less populated.

## The Epiclassic in the Tierra Caliente: Middle Balsas and Tepalcatepec Rivers

Tierra Caliente is a region that occupies the states of Michoacan and Guerrero, in addition to the basins of

the Balsas and Tepalcatepec rivers, which played an important role in the development of societies due to the wealth of resources they offered. Paradoxically, the same climatic, geographical and social characteristics have hindered the development of archaeological research and limited our knowledge of the area to few systematic and archaeological rescue projects for the construction of dams and roads.

Crossed by the Balsas River, one of the largest in Mexico, the Middle Balsas region includes the southeastern part of Michoacan and the southwestern part of Guerrero. This privileged location, rich in natural resources, with highly productive soils, the presence of streams and rivers, a great diversity of flora and fauna and deposits of precious metals such as gold, silver and copper (Roskamp 2003), was exploited by the human groups that settled here and eventually built monumental constructions.

The first systematic survey of the area was carried out in 1939–1941 by Donald D. Brand and a team of students that included Douglas Osborne and Robert H. Lister of the University of New Mexico (Lister 1947; Osborne 1943). The result of this work has been the identification of an architectural style, a general settlement pattern and a classification of pottery types. Osborne (1943) classified the site types identified in the municipalities of Huetamo and San Lucas on the Michoacan side and Zirandaro in Guerrero. The author described in a general way the settlement pattern of some of the monumental sites, such as Purechucho, Urapa, La Laguna, Hacienda Characuaro and Mexiquito, among others. The latter is the largest site in the entire Middle Balsas and is referred to by Pedro Armillas as "the great city of Tierra Caliente" (Armillas 1944).

As a result of my work in the area, in 2020 we presented (Punzo *et al.* 2020) an occupation chronology for southeastern Michoacan based on radiocarbon and archaeomagnetic dates to complement Meanwell's (2007) results from La Quesería, Itzimbaro and Mexiquito. This proposal consists of five local phases: Ancón phase (AD 0–200), identified by the presence of a small mound near creeks at the Chigüero stream; the Piriticuaro phase (AD 200–500), defined by the site of the same name, in which the settlements seem to be established on the tops of the hills near the Chigüero stream; La Casita phase (AD 500–900), there is a continuity in the occupation of the sites founded in the previous phase, including the site of Piriticuaro, as well as the foundation of new ones settled in the fertile valleys and on the banks of the streams. These new sites responded to an increasing regional population, probably resulting from the climatic changes described above, while the larger sites established in the previous phase continued to grow. This period, which corresponds to the Epiclassic is the most important one in the region and the one in which the most important settlements were developed. These new populated areas dominated the Huetamo Valley and the banks of the Balsas River, surrounded by numerous settlements, indicating the region's very important agricultural use based on wet agriculture near streams and large rivers.

Unfortunately, my work in the northern region of the Huetamo Valley has not found any evidence of occupation between AD 900 and 1250. However, materials from private collections may indicate that occupation continued to be very intense. Meanwhile, around AD 1250, during the Tamarindos phase, new archaeological sites appear with new settlement patterns that are very different from those established in previous phases (Punzo *et al.* 2020).

**Architecture**

Based on the work of Osborne and Lister on the settlement pattern, I make a reinterpretation of it, including the most recent studies. The first and most common group is what they call "house remains". These are identified by the presence of scattered stones, alignments of river stones—interpreted as remnants of house foundations and fragments of burnt daub (*bajareque*). They are square and rectangular, between 6 meters and 9 meters on a side and between 30 cm and 90 cm high. Ethnographically, there are still houses built with the same type of foundations and walls of reed and mud, so we can assume that it may have been similar in Precolumbian. These remains are located on hilltops and slopes, at ground level and on low platforms. In general, they are grouped together, which suggests that they were settlements or villages.

The second group are the "isolated truncated pyramids", which are also found throughout the area. These have a square base and a body with a long inclination. The dimensions vary from 18 meters to 122 meters per side and from 1 meter to 27 meters in height. From the excavations that have been carried out, it is clear that the core was made of stones with earth and that they may have been covered with stucco, since many fragments were found in the excavations. At the top of these "pyramids", rooms were built with adobe architecture. These truncated pyramids were found in the alluvial plain of the Balsas River or at the crossings of tributary streams (Lister 1947).

The third group are the truncated pyramids associated with platforms or other structures. Most are sites along the Balsas River. Lister identified five variations:

1. The truncated pyramid built on a platform and associated with small mounds.

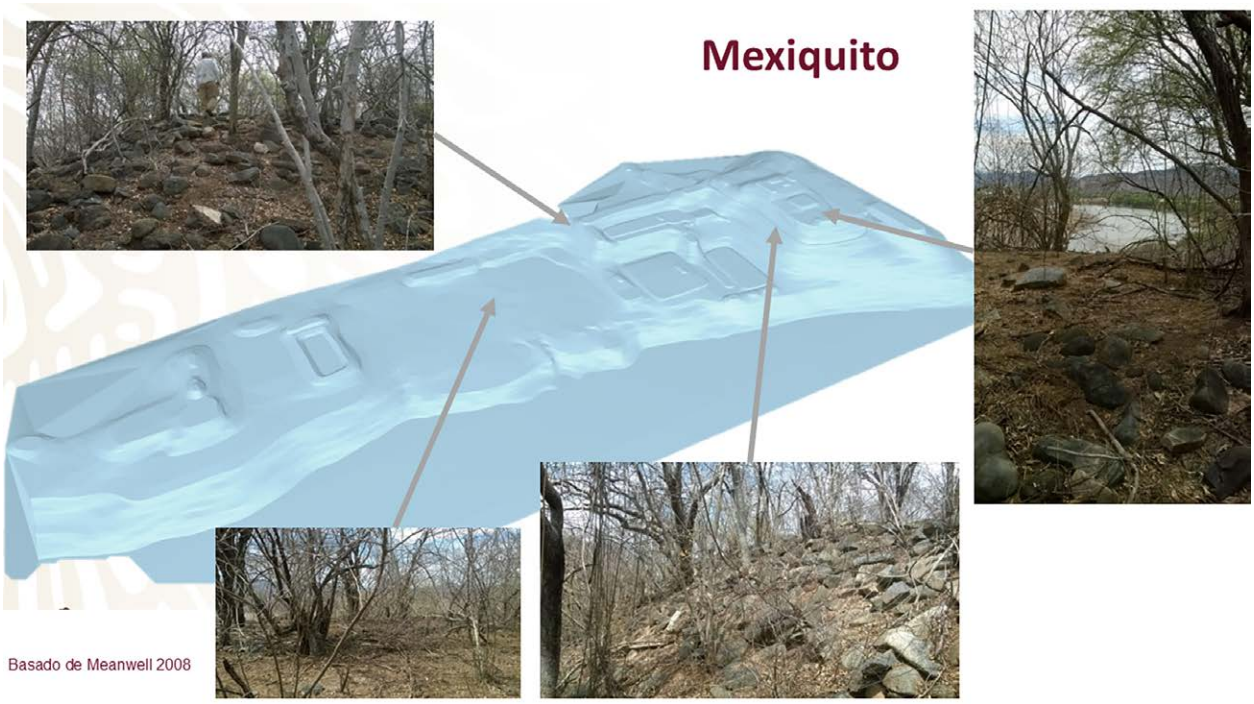


**Figure 7.3**: Mexiquito archaeological site (plan after Meanwell 2007, survey by José Luis Punzo Díaz).

2. The arrangement of truncated pyramids and platforms cut in the shape of a wedge.
3. The terraces built on the slopes of the mountains. A series of platforms, mounds and truncated pyramids were built atop.
4. The small natural and flat hills used as a base for the construction of platforms and truncated pyramids with more than one stage of construction.
5. The site of Mexiquito, the only one of its kind in the area, both for its monumentality and its complexity. Built on a large L-shaped hill, on the banks of the Balsas River, completely covered with terraces, groups of platforms, mounds and truncated pyramids (Figure 7.3).

Among the most important structures located in this area are the ballcourts of large dimensions. There are two types: Those that have two parallel structures and are open-ended, such as those of Sierra la Laguna and Hacienda Characuaro, differing from those described for the Epiclassic in other parts of Mesoamerica. The second type corresponds to structures such as those of Purechucho and especially the one from Mexiquito, which are slightly sunken and bounded on their four sides.

This tradition of ballgames has been maintained in the region to this day, although in the *rancherías* of the Huetamo area where the "Tarascan" ball game is played, the current courts are very different. The field is an unpaved area about 9 to 11 meters wide and a little more than 100 meters long, delineated solely by two lines. The game is played between two teams of 4 players: a captain, a *bolillero* and two *orilleros* who try to hit the ball with their hands (many players hold a stick to strike the ball) to win 12 points divided into three sets. The game is refereed by a *coime*, who is usually the person who owns and maintains the *patio*, as they call the court (Figure 7.4).

**Archeological materials**

We highlight the most important ceramic types from the archaeological material of the Middle Balsas area: Balsas Smoothed brown with incised decorations or a decorative band, Huisachal Orange incised, Cutzamala Black incised, Huetamo Red, Cutzio Black and Salitre. All these types are very simple in their decoration and without much variability regarding their technological process (Castañón and Punzo 2017; Punzo *et al.* 2016a, 2016b; Punzo *et al.* 2020).

Among the cultural material characteristic of the Epiclassic period in Tierra Caliente, the figurines of the Delicias A type stand out (Kelly 1947). These anthropomorphic figurines—mostly female—have a distinctive headdress in the form of a band, a face with a pronounced nose, gouged eyes and two ear plugs. In general, they hold their hands intertwined on their stomachs and in some cases, they wear a long dress that reaches to their ankles. Of the two zones in Tierra

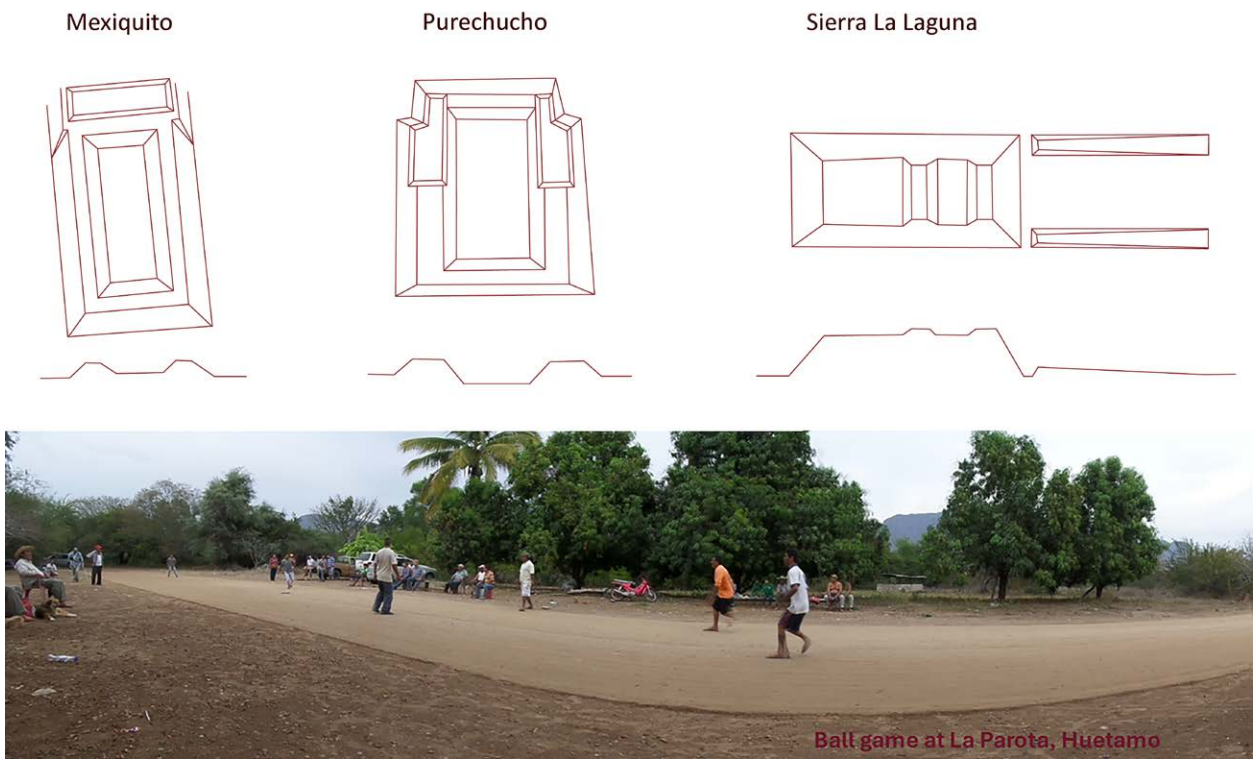


**Figure 7.4:** Archaeological ballcourts in Tierra Caliente. Above: Mexiquito (Meanwell 2007), Purepucho and Sierra La Laguna (Osborne 1943). Below: A contemporary ballgame at La Parota town in Michoacan (photograph by José Luis Punzo Díaz).

Caliente, this type of figurine is more abundant in the area of the Tepalcatepec River. While in the Middle Balsas area, in addition to finding the Delicias A type in important sites—and currently in private collections— , it is worth mentioning that there is an enormous variety of figurines that have not yet been classified, but that appear frequently in sites of the Epiclassic period.

The so-called Tapaderas Capiral (Kelly 1947) are perhaps the most representative ceramic form of this period in the Tierra Caliente area. These objects are generally quadrangular, with four "legs" or supports that leave a space between them and the intervening area often exhibits signs of exposure to fire. There are also some circular variants, which may or may not have legs separating them from the base on which they rested. One of the most important characteristics of this type of pottery is that the outer part presents a large number of decorations made with applications and modelling, such as figures of animals or, in some cases, geometric figures. The least common are the complete representations of animals, such as the armadillo. Although these covers are defined and more abundant in the Tepalcatepec basin, they have also been found in the Middle Balsas area, in Tomb 1 at Tingambato (Piña Chán and Ohi 1982), in tombs at Zacapu and even at the Zaragoza site in the Lerma River area. All sites clearly dated to the Epiclassic period.

The appearance of a large number of shell objects is also relevant in the Epiclassic. For example, shells of the species *Turbinella angulata* and *Fasiolaria princeps*, modified to be hung and used as trumpets, are recorded among the objects from private collections from the Mexiquito site. Likewise, the species *Fasiolaria princeps* and *Strombus galeatus* have been identified in the Poturo-Churumuco area, with the spires cut for use as trumpets. Other types of shells that have begun to appear in a very important way are the beads made with *Spondylus*. These were reported in many sites, including Turicato, in the Balsas region of Tierra Caliente and in burials in the Tepalcatepec River area (Kelly 1947) and of course as part of the funerary assemblage of over 19 000 objects in Tomb 2 of Tingambato, where over 90% correspond to this type of bivalve (Valdés Herrera 2018).

On the other hand, the consumption and production of prismatic blades shows a very important change in the region during the Epiclassic. Through archaeometric studies, such as XRF, we have been able to confirm that in the entire region of the Middle Balsas River, cores from the Ucareo-Zinapecuaro area were used for the production of prismatic blades. In addition to its abundant use, it was noticed that its access was quite common. It was also possible to determine that finished prismatic blades of second and third series came from

**Figure 7.5:** Tingambato site (photograph by José Luis Punzo Díaz).

the Sierra de las Navajas in central Mexico, but these were much less common. It is important to note that both types of blades were found in similar residential contexts.

Apparently, things were different in the neighbouring region of the Tepalcatepc River. During the Epiclassic period, obsidian was obtained from the Zinaparo Varal obsidian quarries in northeastern Michoacan. This is interesting when compared to Tingambato during the Epiclassic, which shows evidence of obsidian blades from the three sources mentioned above.

Although it is possible that the production of different types of stone sculptures began in the Classic period, these objects are also characteristic of the Epiclassic. The most common are architectural nails with representations of human faces. These have been found in several sites in the Balsas region of Tierra Caliente such as Cerro del Capire in Las Nueces Turicato, Salitre near Poturo Churumuco, as well as in Mexiquito. Even today, in the modern village of Las Nueces, you can often see these embedded in the walls of modern houses.

Carved stelae are also unique in the area. The most famous of these is the Stela de Santiago, which was originally located in the plaza of the town of Santiago Conguripio, across from the site of Mexiquito on the other side of the Balsas River. Around 1914, the local village priest moved the stela from Mexiquito to the main plaza of Santiago. In 1944, Pedro Armillas examined the stela and recorded its history (Armillas 1944). Towards the 1950s and 1960s this piece was transferred to the Museo Regional Michoacano, in Morelia, where it is now exhibited. The representation of a halved star with five points was interpreted as the five cycles of Venus, corresponding to eight solar cycles. In the lower part of the engraving, separated by a band, there is a reptile, a fleshless anthropomorphic figure. In addition to this relocated stela, there are other monuments that have been reported at Mexiquito. In the 1940s, Osborne (1943) first reported a stela fragment at the site through a photograph that, besides being of poor quality, was published upside down. Thanks to the collection of the photographic library of the Instituto Nacional de Antropología e Historia, we found out that in 1944, Armillas took two photographs that show the same fragment *in situ*. This type of monument has also been reported in the sites along the Balsas River, as well as in Puerto de Allende and the Cerro de los Monos in Tlachapa. The iconography associated in the first place with Teotihuacan led to referred to the area as an enclave of Teotihuacan, but this should be reconsidered, since it may be an event more related

to the Epiclassic period, as has been observed in other sites in Michoacan.

**Tingambato in between the three regions**

The archaeological site of Tingambato is located in an intermediate zone between the Tierra Caliente and the Michoacan Plateau, in an extremely fertile area that has historically connected both regions. According to excavations and surveys around the area open to the public, it must have been at least one square kilometre in size. Unfortunately, most of the ancient city is now buried under the buildings of the present city or among the abundant avocado orchards that dominate the landscape of this region of Michoacan (Punzo Díaz 2023) (Figure 7.5).

The Epiclassic period was the most important and the most visible architectural phase at Tingambato. The presence of a large platform that covered the buildings of the second phase, the Classic, with an approximate area of 5 100 square meters, proves that around AD 550/600, the largest levelling effort took place at the site. Through three excavation units conducted in 2015, 2016 and 2019, we were able to determine that the fill of this platform is between 2.5 and 3.20 meters thick, which gives us an idea of the enormous effort and the large number of people involved in the construction. The structured backfill included the destruction of the Phase 2 buildings, the rubble of which was used for the same structure and planned backfill. It also included at least two types of soil, 80% of which is what is known in the region as Topuri (andosol), a dark soil developed from volcanic ash and with high water retention; the remaining 20% is a red-yellow soil locally called *charanda* (acrisol), a very clayey and plastic soil (Argueta Villamar 2008). These soils were deposited in an organised way by the ancient builders, which resulted in a very stable fill that made it possible to build this enormous platform.

Noteworthy is that the two sunken courtyards and the ballcourt were also built during this period. The latter has the typical I-shape with very well-defined heads. One of its markers was found next to the access stairs on the north side. This type of ballcourt appears in Mesoamerica after AD 600 (Taladoire 2001), which is consistent with the absolute dating that we have obtained. The Tingambato court was built between the two main mounds, East and West, apparently dividing a large plaza that connected both spaces during the Tingambato 1. With the construction of the platform above mentioned in Tingambato 2 and reformed in Tingambato 3, the space was completely divided and the ballcourt was built at its centre. We had the opportunity to examine the personal photographic archive of Kuniaki Ohi and we were able to observe the *talud-tablero* decoration at the head of the courtyard during its excavation in the seventies, before the restoration. The identification of this element is important because it is not until the Tingambato 3 phase that *talud-tablero* decoration appears in the buildings of the settlement, that is, after AD 600 and therefore after the great fire of Teotihuacan (Manzanilla 2019; Manzanilla and López Luján 2001), which is very similar to what occurs in other parts of western Mexico (Beekman 1996). Another important architectural feature of this period at Tingambato is that, unlike the previous phase, the stairs are attached to the platforms, which is consistent throughout the site.

The second space created by the construction of the great platform were the sunken patios, around which various rooms were arranged. The most important example is Sunken Patio 1, excavated in the 1980s (Ohi 2005). The distribution of the rooms and the patio in relation to the rest of the settlement suggests that it was a space reserved for the elite of Tingambato. The plan shows its limited access from the public areas and the corridors that connect it both to the ball game and to Plaza 1, where the east and west mounds are located. In addition, the presence of two altars in Sunken Patio 1 indicates that some private worship must have taken place inside. There are several elements to note in this area. First of all, the walls of the two main rooms that border the east side of the complex exhibit *talud-tablero* facades; also, both rooms have outset stairs that facilitate access to the courtyard; and both have a portico. The northernmost of the rooms contains small rooms that give it a unique shape and complexity. Between the two rooms is a narrow corridor that indirectly leads to Plaza 1 and, through a back door, to the larger room that connects to Plaza 1 and under which Tomb 1 is located.

The rooms on the south side have been excavated, revealing three small rooms that close the direct access to Plaza 1, while to the west two partially excavated or restored rooms close the complex. The only access to the ballcourt is through a corridor in the southwest corner of the complex. To the north are two small rooms, between which one can access Sunken Patio 2, where Tomb 2 is located. Only a narrow passage connects Sunken Patio 1 with 3 in the northeast corner of the complex.

The walls of these rooms are characterised by a thickness of more than 60 centimetres. From what we have been able to deduce, they were constructed of rough stones and slabs joined with earth mortar and possibly plastered with earth. Although these are very similar to those found in previous phases, their current height seems to be the result of successive restorations rather than the reality of the archaeological context.

Unfortunately, we cannot say whether they were made of stone with earth or of earth with wet blocks, as seen in other parts of the site, since the original mortars are only visible up to a maximum height of 50 centimetres. All of this suggests that the Sunken Patio 1 complex was an elite space with small-scale palatial characteristics (Manzanilla 2017; Pillsbury and Toby Evans 2004). The appearance of these palatial spaces in Michoacan seems to be a phenomenon that began in the Epiclassic and that may allow us to explain the important political and social changes that were occurring. During this phase, these areas in Tingambato were restricted. However, if we add to this the presence of rich tombs, it is possible to think of the emergence of an elite social class that distinguished itself at the site.

Most of the excavations conducted in contexts of the Tingambato 3 phase have been carried out on the platform that limits the north of the Sunken Patio 3. The three excavation units located in that area have allowed us to better understand the constructive fills, as mentioned above, but we have also been able to make horizontal excavations that allow us to better understand the possible activities, spaces and construction systems of the rooms that were built there, in addition to giving us the opportunity to obtain samples for the aforementioned dates.

As far as the construction systems are concerned, the results of the geophysical studies have been confirmed by the excavations. Thus, there was evidence of the use of raw earth as the main construction element of floors and walls throughout the area, as well as the presence of wet blocks in thin walls between 20 and 30 centimetres wide. These walls did not have stone foundations, but rested directly on the earthen floor, unlike the thick walls mentioned above. It was in those thin walls that we were able to identify the earthen plaster that gave them a more homogeneous exterior appearance. In the same area, we have been able to find quadrangular spaces delimited by a stone foundation that could have served as a base for the construction of pillars, possibly of square section, like others that can be seen in different parts of the site. Another element that has been identified is the construction of raw earth benches inside the rooms. Thin metates without legs have been found on these benches. On the other hand, important findings have been made with regard to the roofs, since burnt beams with a diameter of 20 centimetres have been clearly identified, which must have been used for the support of the flat roofs. In this regard, we were able to identify fragments of earthen slabs on the burnt remains of these beams. Thus, we can confirm the findings of Piña Chán and Ohi (1982), since the contexts found during our excavations, which correspond to the last phase of the occupation, show abundant layers of charcoal due to possible fires that affected the walls, floors, ceilings, and beams (Piña Chán and Ohi 1982). Note that similar findings, such as adobe walls and charred beams, were reported by Helen Pollard (2001, 2005) at the Urichu and Erongaricuaro sites, respectively, in the same period.

**Funerary customs**

Undoubtedly, one of the subjects that has attracted the most attention in Tingambato is the funerary architecture and the rich offerings these contain.

The first news about the tombs was in the middle of the nineteenth century. Since then, two tombs have been excavated at Tingambato. Tomb 1 was discovered on March 8, 1979 (Piña Chán and Ohi 1982), whereas Tomb 2 was identified in 2011 by Melchor and Landa (Robles and Landa 2012).

In general, the two tombs have a quadrangular plan and their proportions as well as their construction system are very similar to each other. Tomb 1 measures 3.30 meters on its north-south axis and 3.40 meters on its east-west axis, while Tomb 2 measures 3.60 meters by 3.50 meters, respectively. Both were excavated within the fill corresponding to the levelling of the Tingambato 3 phase. From this point on, a vault was built with large slabs joined together with an earth mortar, which gradually came out and closed in its centre, in a dextrorotary circular shape. According to our estimate, Tomb 1 was capped at a height of 2.10 meters while Tomb 2 capped at 2.05 meters. It is worth mentioning that the dome of the latter collapsed during the excavation in 2012. Its doors, which were found walled with vertically placed slabs, are of small proportions. Their average dimensions are only 80 centimetres high and 1 meter wide. Both have a lintel made of a large and very strong slab that carries all the weight. One of the outstanding characteristics of Tomb 1 is that similar slabs were placed over the lintel to give greater stability to the door.

Access to these tombs was by a rough stone and mud staircase, which in the case of Tomb 1 ended in a corridor that was filled in after the tomb was closed. Unfortunately, we have no information about the access to Tomb 2.

It should be noted that although the chambers are generally oriented to the cardinal directions, the entrances are oriented to the adjacent courtyards. For Tomb 1 the entrance is towards the south and for Tomb 2 towards the east. This allows us to suggest that they

were built at the same time as these courtyards, that is, during the construction of the large platform, as shown by the radiocarbon dates exposed.

Another important aspect is their location at the site. Tomb 1 is located under the largest room excavated so far. It has direct access to Plaza 1—the most important public space in Tingambato—and a rear entrance that communicates with Sunken Patio 1. It seems that this tomb was built later than Tomb 2, which we have dated between AD 597 and 670. As expected for this period, this last tomb has a *talud-tablero* decoration on its façade. However, it is very important to note that, unlike Tomb 1, which seemed to have easy access from the surface, as evidenced by the six steps that were found leading to a corridor that reached the door (Piña Chán and Ohi 1982), the construction of the mound blocked any access to Tomb 2, as it was built where the stairs are thought to have been.

From an architectural point of view, this will be the most important difference between the two tombs and, of course, will be directly related to their use. As we will see in the following section, in the first tomb a large number of people were found buried with several offerings. In the second tomb only one person was buried.

## The skeletal remains

Of the graves discovered in 1842, we know through a newspaper of that time, that at least the skeletal remains of one individual were removed, but as mentioned in the article, they were destroyed and turned to dust upon removal.

As for Tomb 2, only 1 female individual, possibly between 16 and 19 years of age, was found lying in an extended dorsal decubitus position with her head to the west and her feet to the east, on a flagstone pavement in the northern half of the chamber. An offering of teeth from at least 2 infantile individuals was found in association with these bone remains. This type of offering was also found during the 2019 season excavations, possibly associated with a greenish-blue stone mosaic (Punzo *et al.* 2019). In an initial study of these skeletal remains (Valdés Herrera 2018), it was possible to determine from the reconstruction of the skull that it presented an erect tabular modification and that the individual had an estimated stature between 1.45 and 1.47 meters. In addition to the presence of a dental modification, it was also possible to identify some pathologies such as anaemia and some inflammatory processes. This woman also underwent imaging studies using computed tomography for 3D reconstruction and for a detailed osteological and paleopathological analyses. In addition, genomic studies of aDNA have been performed, which have so far allowed us to confirm the sex and the group and subgroup of the A2q1 mitochondrial haplotype (Peláez-Ballestas *et al.* 2024).

The opposite is the case of Tomb 1, where a large number of skeletal remains were found scattered throughout the tomb. During the excavation only 1 complete skeleton could be identified. It was found in a sitting position, leaning against the western jamb of the door. In the laboratory, 14 complete skeletons were identified in addition to the aforementioned (Lagunas 1987). The same study concluded that between 50 and 124 individuals were buried in this chamber. It was determined that 108 of these were adults (59 males, 47 females and 2 undetermined), 8 were juveniles and 8 were infants (Lagunas 1987: 11). This work provided an enormous amount of important data for understanding the funerary practices and lives of the ancient inhabitants of Tingambato. For example, various osteopathies were observed in 40 cases (38 adults—5 males and 23 females—and 2 infants); likewise, 13 skulls (28% of the total)—8 males and 5 females—showed erect tabular modification and only 2 individuals had dental modifications. Piña Chán and Ohi (1982) mention that during the excavation of this tomb they were able to identify 32 skulls, some of which had signs of decapitation. An important fact to note is that they found 2 skulls of males with suprainitic lesions. However, Grégory Pereira's (1997) review of this osteological collection has important discrepancies with Lagunas' report. For example, Pereira reduced the number of individuals to 36 in relation to the proportion of skulls and femurs; he also found less evidence of cultural interventions that could serve as a basis for interpretations of dismemberment, as initially suggested by Piña Chán and Ohi. In addition, Pereira found a greater diversity in the types of cephalic modifications, with 7 fronto-oblique-bilobular and 9 tabular erect fronto-occipital with bilobulated variant (Pereira 1997: 7).

## The offerings

The offerings that were found in these burials were very different in each case. From the 1842 report we know that decorated vessels, metates, a possible ocarina as well as lithic and ceramic figurines were recovered. With the exception of the metates, these briefly described materials are generally similar to those found in Tomb 1.

In terms of offerings, this last tomb was the richest. In spite of the large number of objects found and the apparent commingling of the material with the bones, it was possible to distinguish some major concentrations in certain areas. However, the researchers who

excavated it could not determine whether the large amount of soil found inside was the product of seepage over time or derived from some deliberate practice carried out by the ancient inhabitants of Tingambato.

The list of materials is very extensive. It includes more than a hundred complete specimens, as well as thousands of stone and shell beads and earspools The offerings included 47 vessels, vases, pots, lids, a ceramic censer with multiple decorations, five female and male ceramic figurines and five bird-shaped ocarinas. Stone objects were less abundant, including polished plaques with stucco remnants and figurines. Three complete pyrite mirror bases were also found—two circular and one square—as well as the remains of at least four more with their mosaics. Among the shell objects, there are two *Fasciolaria princeps* trumpets, an unmodified *Turbinella angulata* and a *Pleuroploca* (possibly *gigantea*) with scraper-like incisions. These accuracies are relevant to the extent that the first species comes from the Pacific coast, while the latter two correspond to the malacological region of the Caribbean (Valdés Herrera 2018: 90). In addition, fragments of bracelets and rings, also made of shell, were found.

In terms of lapidary artefacts, beads and rings of greenish-blue stone stand out, whose geological identification corresponds mainly to amazonite (blue microcline), a mineral that was abundant in offerings at Michoacan during this period (Barrios 2011; Robles 2004). These types of blue-green stones become abundant during the Epiclassic, particularly amazonite and, to a lesser extent, turquoise. This would suggest that it was at this time that interactions between western and northwestern Mexico began to increase.

From the re-analyses of the objects excavated in Tomb 1 and thanks to the recovery of an important photographic collection from the personal archive of Kuniaki Ohi, in which several stages of the excavation of the complex context of Tomb 1 can be observed, some groups of skeletal remains can be identified.

The first consists of a series of three skulls found in the doorway of the tomb, one of which belongs to the only individual that archaeologists were able to fully identify at the time, leaning against the western jamb of the entrance. In addition to these skulls, there were several fragments of vertebrae and long bones of arms and legs, as well as the most important object: the base of a circular pyrite mirror with three perforations.

The second group was found in the southeast corner. According to Piña Chán and Ohi (1982: 54), clay figurines and conch musical instruments characterise this assemblage. However, other objects found in this assemblage can be mentioned, such as three different vessels with basket handles, two tripod vessels, an annular base vase with negative decoration, a square ceramic plate with the bust of a character, two clay figurines (of very different styles) representing women richly dressed, with headdress, necklaces and earspools. Also found in this set was a tripod jar painted in black and red with a banded pattern, as well as a lid of a figure with an open mouth and a headdress with two elements on the head and a possible incense burner. It is possible that in this sector of the tomb there are images alluding to the female gender; however and considering that we still do not have the elements to link these studies, it would be interesting to see the relationship of these materials to the gender identified in the bone remains.

A third group is located in the northeast corner, consisting primarily of two zoomorphic tripod vessels with basket handles, a quadrangular ceramic plate depicting a quadruped and an annular base vessel.

The fourth group is in the southwest corner and consists of a spherical elongated necked vessel with a composite silhouette and traces of blue pigment, an annular base vase with negative decoration and the fragmented base of a quadrangular pyrite mirror.

Almost as a continuation of the previous group, in the northwest corner, shell ornaments and a shell trumpet were found, as well as several vessels, a lid with modelled decoration, a vessel with a ring base and negative decoration, another circular pyrite mirror and the polished stone head of a mace.

What was found in Tomb 2 was completely different. In this tomb, as mentioned above, only a young woman was found, covered with a burial kit consisting of 18 601 pieces of shell weighing in excess of two kilos. These pieces included beads of various species, especially *Spondylus princeps*, ear plugs, rings, inlays, ornaments, rattles and a composite pendant. There were also five pairs of atlatl handles (four of shell and one pair of greenstones) and 827 lapidary items, including beads and tesserae, mainly of amazonite, but also some turquoise tesserae (Valdés Herrera 2018).

## Archaeological materials

With our excavations, we confirmed what Piña Chán had already pointed out: the archaeological material is very scarce, because after removing cubic meters of earth, we found only a few flakes and sherds, which have now been studied and classified.

Considering that ceramics are relatively more abundant; several classifications have been attempted. The first, by Piña Chán and Ohi (1982), was based mainly on the ceramic material found in Tomb 1. In my opinion, this classification is relevant because we are able to relate some ceramic types and vessel forms to other ceramic complexes, especially similar to some of the types proposed by Isabel Kelly (1947) in Apatzingan, as well as the annular pedestal cups, in this case with negative interior decoration, very common during the Epiclassic period from Michoacan to Zacatecas and Durango.

Laurie Melchor Cruz Hernández made a second ceramic classification proposal within the framework of the Proyecto Especial Michoacan studies using the Type-Variety system (Robles and Landa 2012). Although this was a good attempt at categorisation, the problem is that it was not linked to regional types, so it remained a site-specific effort.

More recently, studies have been carried out that have allowed us to begin to understand the relationship that exists between the ceramic types found in Tingambato and those found in its adjoining areas, such as the Zacapu Region, Apatzingan and the Patzcuaro Basin (Pollard 2004). As a result of these studies, we have been able to establish a total of seven groups with a total of 38 ceramic types (Castañón and Punzo 2017; García García 2017). In Tingambato, the ceramic types that stand out are those found in other sites, such as Agropecuaria Negative-on-red, Cheran, Urumbecuaro Red, Champlevé, Tres Palos Negative-on-orange, Lupe Incised, Tres Palos Red-on-cream and Tres Palos Trichrome. We have also carried out archaeometric studies of fluorescence analysis by induction of ultraviolet light, as well as a study of thin plates. So far and in general, these indicate a local production in the ceramic types studied. This can be seen in the homogeneity of their components of volcanic-lagunas origin. This is typical for the central region of Michoacan, although not specifically for the Tingambato region (Castañón and Punzo 2017).

As for the prismatic blades, it was determined that these were extracted from the cores, possibly by direct percussion. Correction blades were also identified that were used to create edges to correct the prismatic cores. We were able to identify first, second and third series blades from this prismatic blade production process. However, no exhausted or discarded prismatic cores have yet been found in the excavations. It is important to note that our work was carried out only in the nuclear zone of the site, which shows that the production workshops were not located in this area. What we can say is that prismatic blades were undoubtedly produced at Tingambato.

As for the ground stone lithics, two anthropomorphic sculptures were found in the ballcourt during the exploration at the end of the 1970s. There are some figurines and four mirror bases (three of them round and one of them square) that were found in Tomb 1 (Ohi 2005; Piña Chán and Ohi 1982) and we also found a pair of square flat metates *in situ*, on the floor and tilted thanks to a bench in a structure of Tingambato 3 phase (Punzo *et al.* 2019).

## The Epiclassic in Tierra Caliente of Michoacan: First thoughts

Undoubtedly, the Classic period marks the beginning of medium-sized cities and social complexity, identified by new forms and decorations in archaeological objects. In fact, it is the changes around AD 600 that have been the hallmark of an innovative form of social organisation in the region.

For years, the important archaeological sites located along the Balsas River were thought to correspond to Teotihuacan's heyday. However, the possibility that these sites are later has been raised by recent research and new dating studies. The same is the case with Tingambato, a site that was considered an outpost of Teotihuacan, but in fact was not.

The Epiclassic in South Central Michoacan seems to be a time when the Precolumbian cities began a first moment of consolidation, the best examples in the region are Tingambato and Mexiquito. This concerns not only the growth in the size of cities, but also their internal reorganisation. The appearance of palace-like spaces with clearly restricted access and the appearance of rich tombs that may be family crypts, shows us the consolidation of a different power than the one we had seen in the region. Although the DNA analysis of these contexts will give us more clues, for the moment we can say that it seems that after the collapse of Teotihuacan in central Mexico, the political changes in western Mexico were significant.

The appearance of public plazas and transitional spaces between the private and the public, as well as the construction of large ballcourts, some of them with ballcourt rings, are relevant. Although the presence of ball games dates back to 1800/1500 BC at el Opeño (Oliveros 2004), it appears that the first large buildings were constructed for this purpose during the Epiclassic period.

There is still a great deal of research to be done in this region, but for the time being we can see a number of cultural spheres overlapping and blurring during the

Epiclassic period. Through the case study of the Balsas River, we can see how these spheres maintained their own identities, showing this small region of western Mexico as a kind of hinge where the developments of central and western Mexico were intertwined. Something similar happened further north on the Lerma River, but that is another story with its own important peculiarities.

**References cited:**


Argueta Villamar, Arturo

2008 *Los Saberes P'urhépecha. Los animales y el diálogo con la naturaleza*. Universidad Michoacana de San Nicolás de Hidalgo Morelia & Universidad Nacional Autónoma de México & Gobierno del Estado de Michoacán & Universidad Intercultural Indígena de Michoacán & Casa Juan Pablos & Programa de Naciones Unidas para el Medio Ambiente, Mexico City.

Armillas, Pedro

1944 Mexiquito, gran ciudad arqueológica en la cuenca del río de las Balsas. *El México Antiguo* Vol. 6 (7–8): 254–262.

Barrios, Alba

2011 *Estudio arqueomético de la amazonita del sitio de Tingambato Mich. (500-900 d.C.) por medio de las técnicas de espectrometría infrarrojo, Raman y microsonda electrónica*. Master thesis. Universidad Michoacana de San Nicolás de Hidalgo, Morelia.

Beekman, Christopher S.

1996 El complejo El Grillo del centro de Jalisco: una revisión de su cronología y significado. *Las cuencas del Occidente de México: época prehispánica*, edited by Eduardo Williams and Phil C. Weigand, pp. 247–291. El Colegio de Michoacán & CEMCA & Orstom, Zamora.

Castañón, Mijaely and José Luis Punzo

2017 Revisando la investigación cerámica en Tingambato, Michoacán. Una propuesta de caracterización petrográfica. *TRACE*, Núm. 72: 145–164.

Fisher, Christopher T., Helen P. Pollard, Isabel Israde-Alcántara, Victor H. Garduño-Monroy and Subir K. Banerjee

2003 A reexamination of human-induced environmental change within the Lake Pátzcuaro Basin, Michoacán, Mexico. *Proceedings of the National Academy of Sciences of the United States of America*, Vol. 100 (8): 4957–4962.

García García, Gustavo

2017 *El estudio cerámico de Tingambato, Michoacán, como indicador de un desarrollo local*. Licentiate thesis. Universidad Veracruzana, Xalapa.

Israde-Alcántara, Isabel, Victor H. Garduño-Monroy, Christopher T. Fisher, Helen H. Pollard and Miguel A. Rodríguez-Pascua

2005 Lake level change, climate and the impact of natural events: The role of seismic and volcanic events in the formation of the Lake Patzcuaro Basin, Michoacan, Mexico. *Quaternary International*, Vol. 135 (1): 35–46.

Kelly, Isabel

1947 *Excavations at Apatzingan, Michoacan*. Institute of Andean Research, Viking Fund Publications in Anthropology No. 7, New York.

Lagunas, Zaid

1987 Análisis de los restos óseos humanos procedentes de la tumba número 1 de Tinganio, Tingambato, Michoacán. *Avances en Antropología Física, Tomo III*. Dirección de Antropología Física, Cuadernos de Trabajo Núm. 4, pp. 7–72. Instituto Nacional de Antropología e Historia, Mexico City.

Lister, Robert H.

1947 Archaeology of the Middle Rio Balsas Basin, Mexico. *American Antiquity*, Vol. 13 (1): 67–78.

Manzanilla, Linda (ed)

2017 The multiethnic population of Teopancazco: Final comments. *Multiethnicity and Migration at Teopancazco: Investigations of a Teotihuacan Neighborhood Center*, pp. 201–214. University Press of Florida, Gainesville.

2019 *El palacio de Xalla en Teotihuacan. Primer acercamiento*. Universidad Nacional Autónoma de México, Mexico City.

Manzanilla, Linda and Leonardo López Luján

2001 Exploraciones en un posible palacio de Teotihuacan: El Proyecto Xalla (2000–2001). *Tezontle, Boletín del Centro de Estudios Teotihuacanos*, Núm. 5: 4–6.

Meanwell, Jennifer

2007 El Proyecto del Balsas Medio: una Investigación sobre Funcionalidad y Cronología de la Cerámica. *FAMSI Report*.

Ohi, Kunaki

2005 *Tinganio. Memoria de un sitio arqueológico de la Sierra Purhepecha*. Universidad de Estudios Extranjeros, Kyoto.

Oliveros, Jesús A.

2004 *Hacedores de tumbas en El Opeño, Michoacán*. El Colegio de Michoacán & H. Ayuntamiento de Jacona, Zamora.

Osborne, Douglas

1943 An Archaeologic Reconnaissance in South-Eastern Michoacan. *American Antiquity*, Vol. 9 (1): 59–73.

Peláez-Ballestas, Ingris, Alejandro Valdes-Herrera, Carlos Karam-Tapia, Miguel A. Ibarra-López, Alfonso Gastellum-Strozzi, Patricia Rodríguez-Nava, Ernesto Dena and José Luis Punzo-Diaz

2024 Maternal Death as a Representation of the War with Life in Western Mexico: Analysis of Tomb II at Tingambato, Mexico, from the Perspective of the Bioarchaeology of Care and the Model of the Palimpsest in Health. *Arqueología Iberoamericana* Núm. 53: 72–82.

Pereira, Grégory
1997 *Informe sobre el estudio tafonómico y biocultural de los restos humanos de Tingambato, Michoacán*. Unpublished Report. Archivo de la Coordinación Nacional de Arqueología del Instituto Nacional de Antropología e Historia, Mexico City.

Pillsbury, Joanne and Susan Toby Evans (eds)
2004 Palaces of the Ancient New World: An Introduction. *Palaces of the Ancient New World*, pp. 1–7. Dumbarton Oaks Research Library and Collection, Washington, D.C.

Piña Chán, Román and Kunaki Ohi
1982 *Exploraciones arqueológicas en Tingambato, Michoacán*. Instituto Nacional de Antropología e Historia, Mexico City.

Platt Bradbury, John
2000 Limnologic history of Lago de Patzcuaro, Michoacan, Mexico for the past 48,000 years: Impacts of climate and man. *Palaeogeography, Palaeoclimatology, Palaeoecology*, Vol. 163 (1–2): 69–95.

Pollard, Helen P.
2001 *Proyecto desarrollo del Estado Tarasco: Los Señoríos Urichu, Xaracuaro, y Pareo. Cuenca de Patzcuaro, Michacán, 1990-1998. Informe Final*. Unpublished Report. Archivo de la Coordinación Nacional de Arqueología del Instituto Nacional de Antropología e Historia, Mexico City.
2004 La fase Loma Alta en la cuenca de Pátzcuaro: Unas raíces del pueblo purépecha. *Las tradiciones arqueológicas del Occidente de México*, edited by Efraín Cárdenas, pp. 183–193. Colegio de Michoacán, Zamora.
2005 *Proyecto Erongaricuaro. Informe Técnico Parcial al Consejo de Arqueologia, INAH. Temporada 1 (Campo) 2001, Temporada 2 (Laboratorio) 2002-2004*. Unpublished Report. Archivo de la Coordinación Nacional de Arqueología del Instituto Nacional de Antropología e Historia, Mexico City.

Punzo Díaz, José Luis
2023 Cultivo del aguacate en Michoacán y patrimonio arqueológico: aplicación del LiDAR en Tingambato, México. *Arqueología Iberoamericana*, Vol. 52: 15–20.

Punzo, José Luis and Dante Martínez
2021 La Cueva de los Hacheros: an early population site in Michoacán México. *Preceramic Mesoamerica*, edited by Jon C. Lohse, Aleksander Borejsza and Arthur Joyce, pp. 1–20. Routledge Press, London

Punzo, José Luis, Max Ayala, Marcelo Ibarra, Alejandro Valdés and Fernanda Navarro
2019 *Proyecto Arqueología y Paisaje del Área Centro Sur de Michoacán Informe técnico parcial* 2019. Unpublished Report. Archivo de la Coordinación Nacional de Arqueología del Instituto Nacional de Antropología e Historia, Mexico City.

Punzo, José Luis, Mijaely Castañón and Lissandra González
2016a *Proyecto Arqueología y Paisaje del Área Centro Sur de Michoacán Informe técnico 2016*. Unpublished Report. Archivo de la Coordinación Nacional de Arqueología del Instituto Nacional de Antropología e Historia, Mexico City.

Punzo, José Luis, Diego Rangel, Erika Ibarra, Jesús Zarco and Mijaely Castañón
2016b *Informe del Proyecto Salvamento Arqueológico en el Emplazamiento de la Presa Chigüero, en el Municipio de Huetamo, Michoacán*. Unpublished Report. Archivo de la Coordinación Nacional de Arqueología del Instituto Nacional de Antropología e Historia, Mexico City.
2020 Revisiting the Archaeology of the Huetamo Area, Southeastern Michoacán, Mexico. *Ancient West Mexicos: Time, Space, and Diversity*, edited by Joshua Englehardt, Verenice Heredia and Christopher Beekman, pp. 103–130. University Press of Florida, Gainesville.

Robles, Jasinto
2004 *Caracterización Mineral de 721 piezas arqueológicas de Piedra, del sitio Tingambato, Michoacán (México)*. Unpublished Report. Archivo de la Coordinación Nacional de Arqueología del Instituto Nacional de Antropología e Historia, Mexico City.

Robles, Nelly and Olga Landa
2012 *Informe Final. Proyecto especial Michoacán, Mantenimiento y puesta en valor de las zonas arqueológicas de Tzintzuntzan, Ihuatzio, Tingambato, Huandacareo y Tres Cerros. Tomo I: Zona arqueológica de Tzintzuntzan*. Unpublished Report. Archivo de la Coordinación Nacional de Arqueología del Instituto Nacional de Antropología e Historia, Mexico City.

Roskamp, Hans
2003 *Los Códices de Cutzio y Huetamo: Encomienda y tributo en la Tierra Caliente de Michoacán, siglo XVI*. Colegio de Michoacán y Colegio Mexiquense, Mexico City.

Taladoire, Eric
2001 The Architectural Background of the Pre-Hispanic Ballgame: An Evolutionary Perspective. *The sport of life and death: The Mesoamerican ball game*, edited by Michael Whittington, pp. 96–115. Thames and Hudson & Mint Museum of Art, New York.

Valdés Herrera, Alejandro
2018 *Elementos marinos y piedras verde-azules como ajuar funerario en la Tumba II de Tingambato, Michoacán: Intencionalidad, objeto y persona.* Licentiate thesis. Escuela Nacional de Antropología e Historia, Mexico City.

Vázquez, Gabriel, Beatriz Ortega, Sarah Davies and Benjamin Aston
2010 Registro sedimentario de los últimos ca. 17000 años del lago de Zirahuén, Michoacán, México. *Boletín de la Sociedad Geológica Mexicana*, Vol. 62 (3): 325–343.

Watts, William A. and John Platt Bradbury
1982 Paleoecological studies at Lake Patzcuaro on the west-central Mexican Plateau and at Chalco in the basin of Mexico. *Quaternary Research*, Vol. 17 (1): 56–70.

# Chapter 8
# The Monumental Architecture of Rincón de Las Flores (Zacapu, Michoacan) in the Context of the Epiclassic Period in West-Central and Central Mexico

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Following the fall of Teotihuacan, Mesoamerica witnessed the rise of numerous political entities that extended their dominion over vast regions. At the heart of these entities, the power of the ruling groups manifested itself in monumental building programmes. Alongside religious structures such as plazas, pyramidal bases and ballcourts, there were large elite residences, often interpreted as palaces. This architectural component has been extensively studied in the Maya region (Inomata and Houston 2001), Oaxaca (González Licón 2004; Winter 2020) and central Mexico (Alvarado León 2020; Lucet 2020), where its roots seem to trace back to earlier periods, particularly the onset of the Classic period (Manzanilla 2020; Manzanilla *et al.* 2005; Winter 2020). These constructions are typically defined by several key criteria: Residential complexes with restricted access, often occupying elevated topographical positions and consist of one or more interconnected courtyards surrounded by buildings with multiple rooms. These are distinguished from other residential units by their significantly larger size, the complexity of their layout and often using elaborate construction materials or ornamentation. Based on data from Postclassic sources, several types of palaces have been identified. According to Evans (2004, 2020), palaces dedicated solely to elite residence can be differentiated from those that also served administrative, political and economic functions. The latter have been termed "multifunctional palaces" because they combine these functions, which may also include ceremonial and production activities (Manzanilla 2020). They are characterised by a greater diversity of spaces and large buildings, some intended for public activities, others for ritual use and finally, private spaces serving as the residence of the ruler.

While the concept of the palace is well-established in the aforementioned regions, it is not so evident in western Mexico before the rise of the Tarascan state, which is documented by written sources (Pollard 1993; Punzo Díaz 2020). For earlier periods, the idea of the existence of this type of structure is limited, although some authors have identified possible examples, such as Ocomo, Jalisco (Weigand *et al.* 2003), Alta Vista, Zacatecas (Nelson 2004), or Tingambato, Michoacan (Punzo Díaz 2020).

In this paper, I aim to present data from our recent investigations in the Zacapu basin. In this context, we have had the opportunity to thoroughly document a series of sites of great relevance to the chronological period of interest, which had not been documented until recently. These sites should allow a better understanding of the territorial organisation of the area, as they reveal the existence of large, monumental centres exhibiting architectural patterns that have not been previously recorded in the region. In particular, the site of Rincón de Las Flores stands out for the presence of a large complex of interconnected courtyards, whose configuration resembles what is commonly interpreted as a palace in other parts of Mesoamerica. In this paper, I will analyse the form of this complex and place it in its local, regional and supra-regional context, and will also examine the mechanisms that may have influenced the emergence of seemingly related architectural models in distant locations.

## Some notes on the Epiclassic period in West Mexico

In various regions of western Mexico, the Epiclassic period (AD 600 to 1000) was a time of significant change. The traditions inherited from the Formative period, which had given the regions of Jalisco, Colima and Nayarit a unique identity, faded away and gave way to new patterns that could be seen in various aspects, especially architecture, funerary patterns and material production. In central Jalisco, for example, these changes appear to have been abrupt: the use of shaft tombs and the circular architectural pattern that characterised the Teuchitlan tradition were replaced by box tombs and orthogonal architecture, as seen in the El Grillo complex (Schöndube B. and Galván 1978). Several

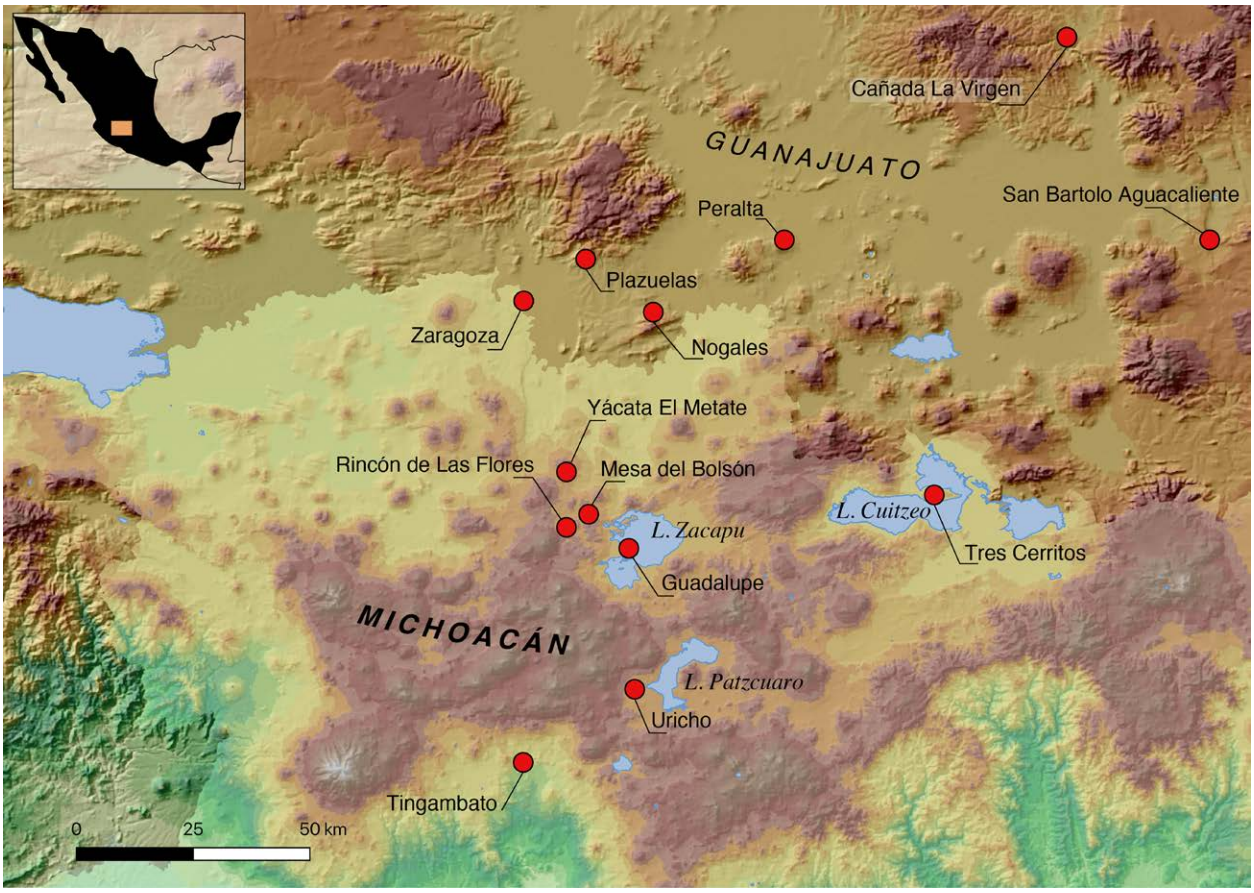


**Figure 8.1:** Map of northern Michoacan and southern Guanajuato with the location of the sites mentioned in the text (map by G. Pereira).

authors have proposed that the transition between the Classic and Epiclassic periods was marked by the collapse of the Teuchitlan tradition and the emergence of another, possibly of foreign origin (Beekman 1996). In the Bajío of Guanajuato and northern Michoacan, the Epiclassic period was marked by continuity with the Classic period, but also by a series of transformations reflected in strong demographic dynamics and the integration of different cultural patterns. Populations that had been concentrated in lacustrine and alluvial zones during the Formative and Early Classic periods began to colonise new areas (Arnauld and Faugère-Kalfon 1998; Braniff 1974; Castañeda *et al.* 1988). A significant intensification of natural resource exploitation can also be observed (Darras 1999; Dorison 2019; Quezada and Darras 2023). The settlement pattern became polarised around large, monumental sites that seem to have functioned as more or less comparable centres of power (Cárdenas 1999; Castañeda *et al.* 1988; Faugère-Kalfon 2009; Pereira *et al.* 2005; Pereira *et al.* 2023). Finally, and on a larger scale, the Epiclassic period was characterised by an intensification of interregional exchange networks (*cf.* Jimenez Betts 2018).

Research carried out over the last four decades in central and northern Michoacan and southern Guanajuato (Figure 8.1) has revealed a significant boom, which manifested itself in the development of an endogenous monumental architecture, defined as the "sunken patio tradition" (Brambila and Castañeda 1993; Cárdenas 1999), with antecedents in the Late Formative (Castañeda and Cano 1993; Darras and Faugère 2010) and Classic periods (Cárdenas 1999; Carot *et al.*1998). In addition to these elements, others inspired by other traditions were integrated. These include:

- Ballcourts (Crespo 1993; Faugère-Kalfon 1996; Fernández-Villanueva 2004; Piña Chán and Ohi 1982; Taladoire 1989).
- *Talud-tablero* architecture found in post-Teotihuacan contexts (Macías Goytia and Vackimes Serret 1989; Piña Chán and Ohi 1982).
- Architectural sculpture related to Central Mexican iconography, as in the case of Plazuelas (Castañeda 2007).
- Buildings with hypostyle halls reminiscent of patterns from northwestern Mesoamerica

(Faugère-Kalfon 1991; Migeon and Pereira 2007; Pereira *et al.* 2005).

In north-central Michoacan, research has also revealed the existence of common funerary practices among the region's elites, characterised by vaulted burial chambers, often collective, containing prestige goods obtained through long-distance exchange (Arnauld *et al.* 1993; Macías Goytia and Vackimes Serret 1989; Pereira 1997, 1999; Piña Chán and Ohi 1982; Pollard and Cahue 1999; Punzo Díaz 2016).

## The Zacapu Region in the Epiclassic period

The studies carried out in the Zacapu region during the successive phases of the Michoacan Project (1983–1997) defined two ceramic-based phases corresponding to the Epiclassic period: the Lupe phase, with its early (AD 600–750) and late (AD 750–850) facets and the La Joya phase (AD 850–900/950) (see Michelet 1993; Michelet *et al.* 1989; Pereira 1999). It is worth noting that the transition from the Classic to the Epiclassic period was particularly marked by the near disappearance of the polychrome ceramic tradition present during the Loma Alta phase. Among the data obtained by this project are some of the general characteristics of the Epiclassic settlement pattern (Arnauld and Faugère-Kalfon 1998; Faugère-Kalfon 1996; Michelet 1990; Michelet *et al.* 1989; Migeon 1998, 2016).

The first remarkable aspect is the increase in the population of the region. From a settlement nucleus located in the lacustrine zone of Zacapu (Arnauld *et al.* 1993; Carot *et al.* 1998), the occupation expanded during the following phases towards the banks and slopes surrounding the basin (Migeon 1998) and towards the Lerma River slope (Darras 1999; Faugère-Kalfon 1996). According to Arnauld and Faugère-Kalfon (1998), there was an increase from 37 dated sites for the end of the Classic period (Loma Alta phases 2–3 [AD 100–500] and Jaracuaro [AD 500–600]) to a total of 89 sites occupied during the Lupe phase, followed by 61 during the La Joya phase.

Another noteworthy feature is the dispersed and rural character of the settlements, which contrasts with the urbanisation processes observed from the Middle Postclassic period onwards, when large urban centres located in the Zacapu Malpaís housed thousands of inhabitants (Forest 2014; Michelet 2000; Migeon 1998, 2016).

Nevertheless, the Epiclassic period also stands out for its orthogonal ceremonial architecture, characterised by the following components: Predominantly square-based pyramidal platforms associated with plazas and altars, monumental platforms, residential complexes with sunken patios and ballcourts. The sites recorded are generally modest in size, although some are distinguished by a more developed monumental core (Faugère-Kalfon 1996, 2009; Migeon 1998; Pereira 2010). Some of these sites will be mentioned in the section on local and regional comparisons.

From these initial studies, an image emerged of an Epiclassic occupation composed mainly of small units scattered over a vast territory. This was despite the observation of some settlement concentrations related to the exploitation of agricultural (Faugère 2009), lacustrine (Arnauld *et al.* 1993), or mineral resources (Darras 1999), as well as a certain hierarchy among the settlements. However, the image of a multiplicity of small, autonomous units prevailed. This image contrasts notably with the information from the Bajío of Guanajuato, where the existence of large, monumental centres had been reported since the 1980s, considered to be part of the sunken patio tradition (Brambila and Castañeda 1993; Cárdenas 1999, 2007).

## The Rincón – La Mesa Area: Settlement pattern and territorial organisation

The work carried out over the last decade as part of the Uacusecha project has provided data that allow us to reconsider some of the previous conclusions, thanks to the study of a previously little-studied area: the sector to the north-west of the Zacapu Malpaís volcanic complex, around Cerro de Las Flores (Pereira *et al.* 2023). New surveys and Lidar remote sensing studies have revealed a significant concentration of undocumented Epiclassic settlements. Among these, the sites of El Rincón de Las Flores and La Mesa stand out for their large-scale monumental architecture. The latter is spread across three main complexes separated by 600 to 1500 m. In another study (Pereira *et al.* 2023), we were able to show that the intervals between these three complexes were occupied by an extensive network of dispersed residential complexes, smaller ceremonial centres, areas developed for agricultural purposes (extensive hillside terraces and plots developed in the volcanic terrain) and mining areas.

The research carried out has allowed us to define the domestic and civic-ceremonial architectural patterns of the area and to demonstrate the existence of a marked social differentiation among the inhabitants, which is particularly evident in the large variations in the size and complexity of the dwelling units.

The overall spatial analysis of the area suggests that the different settlements must have functioned as a coherent socio-political entity, based on a hierarchical network of domestic units and areas of agricultural and mineral resource exploitation, structured around three

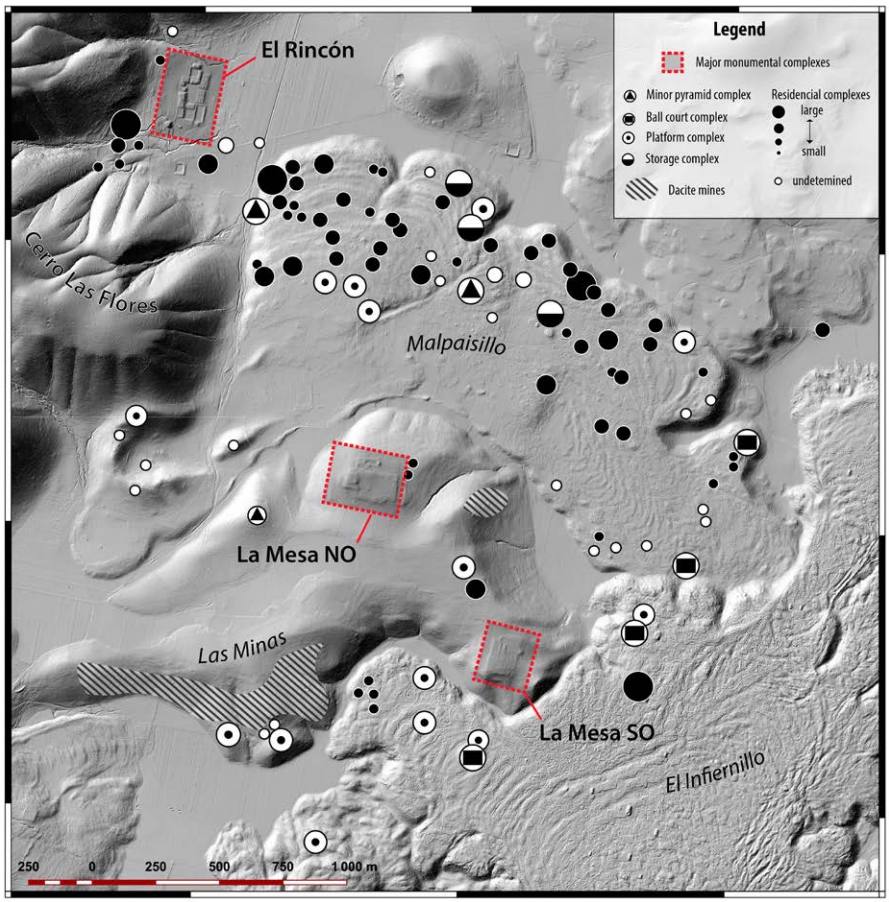


**Figure 8.2:** Settlement pattern in the La Mesa-El Rincón area (map by G. Pereira).

functionally complementary centres (Figure 8.2). This interpretation is based on the architectural analysis of these centres, which show markedly different patterns, leading us to propose that they served different and complementary functions:

- La Mesa/Southwest Complex is the latest in the area, as it appears to have been built during the La Joya phase. It was established at the end of a dacite lava flow that visually dominates the volcanic terrain to the south. It is characterised by the presence of a ballcourt, which shows signs of being unfinished and two open plazas, one of which is associated with a modest pyramidal base (Pereira *et al.* 2023: 743).
- La Mesa/Northwest Complex was located on the highest part of the same promontory and occupies a central position in the area under consideration. It offers visual dominance, especially over the areas located to the north, where the monumental complex of El Rincón and most of the residential areas of the period are located. This complex is notable for an extensive levelling platform that supports a large plaza of almost 9 000 m$^2$, dominated to the west by a stepped platform probably built on a natural eminence (Pereira *et al.* 2023: 740). This arrangement suggests that this place was designed to gather large numbers of people for purposes that are still unknown. To the north and a lower level, there is also a series of smaller courtyards delimited by platforms and a pyramidal base. Finally, the complex is surrounded by an extensive network of terraces, some of which were probably residential but most likely intended for agriculture. It should also be noted that La Mesa/Northwest is located a short distance from the Las Minas site, a large mining complex for the extraction of dacite and the manufacture of lithic preforms distributed throughout the region (Quezada Ramírez 2024; Quezada and Darras 2023). It can be assumed that La Mesa/Northwest controlled part of this activity.
- El Rincón complex, located about 1500 m northwest of La Mesa. It is located at the foot of the eastern slope of Cerro de Las Flores (Pereira *et al.* 2023: 739). It is this last site that we will now focus on.


**Figure 8.3:** Image of the site of Rincón de Las Flores site from LiDAR data with indication of the main architectural complexes (map by G. Pereira; LiDAR data from the Uacusecha project).

## The Monumental Complex of El Rincón de Las Flores

Unlike the La Mesa complexes, the site of El Rincón de Las Flores (Mich. 416) occupies a low-lying area of Cerro de Las Flores (Figure 8.3). As its name indicates, it is located in a corner of the hill where a series of intermittent streams converge, marking natural ravines on the slope of the massif and extending into the alluvial fan on which the monumental centre of the site was built. In fact, the space occupied by this centre is delimited by two main streams that run from west to east and have created deep cuts in the sedimentary deposits. It is interesting to note that one of the streams seems to have been artificially diverted towards the patio complex of Las Majadas, which we will describe later.

The site was located in 2014 by Dominique Michelet during surveys carried out in the area as part of the Uacusecha project. In 2015 and 2016, mapping work was carried out on the central area of the site (topographic map by Céline Gillot and Dominique Michelet) and its periphery (survey by Osiris Quezada). In 2016 and 2017, test pits were first carried out, followed by an extensive excavation operation in the complex known as El Pilastrón, directed by the author of this text. This latter work has allowed us to define an occupation sequence that begins with the Jaracuaro phase (AD 500–600), covers the Lupe phase (AD 600–800) and ends with La Joya phase (AD 800–950).

The total area of the site can be estimated at around 50 hectares. In addition to the monumental centre, there are various structures around it and on the lower slope

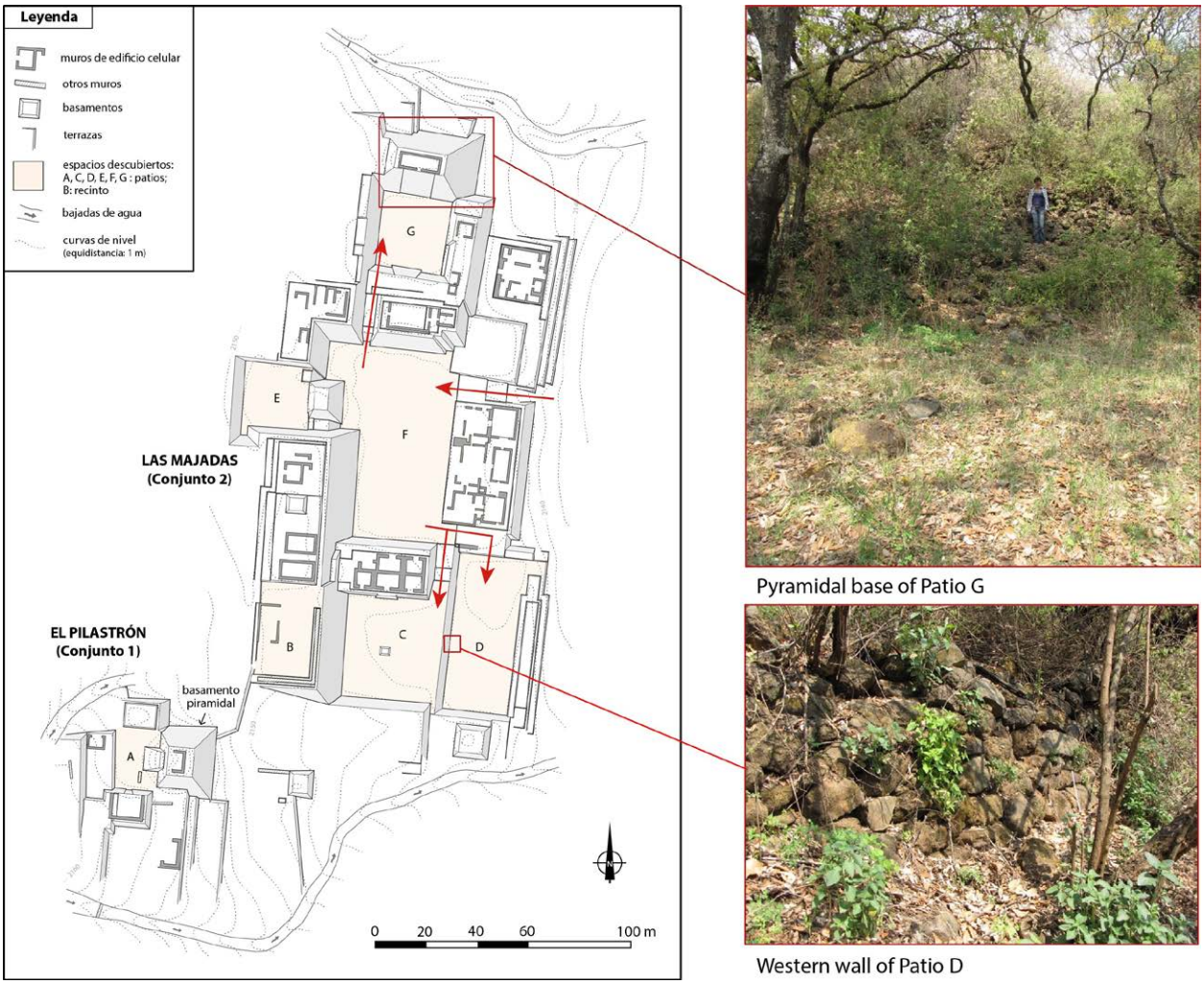


**Figure 8.4:** Plan of the monumental centre of Rincón de Las Flores (map by C. Gillot) indicating the circulation routes (red arrows) and view of some monuments (photographs by G. Pereira).

of the hill, where residential terraces are scattered among terraces that were probably used for agriculture. To the south-east, near the north-western edge of the neighbouring site of Malpaisillo (Mich. 317), there are some Epiclassic residential complexes, also made up of several scattered residential units. It should also be noted that the excavations and material collections carried out at El Rincón have revealed the existence of a high density of carving debris, suggesting the presence of workshops for the manufacture of dacite tools, whose extraction areas have already been mentioned.

The monumental centre itself (Figure 8.4) is composed of two complexes: El Pilastrón complex (Complex 1) and Las Majadas complex (Complex 2).

El Pilastrón is located to the southwest of the central area and has a configuration that suggests a ceremonial and religious function. It consists of a rectangular plaza (Plaza A) closed to the west, north and south by platforms and flanked to the east by a high pyramidal base (29 × 22 m with a height of 6.75 m above the plaza floor), which preserves the remains of a temple on its upper part. Excavations carried out in the plaza and on the western platform have revealed the performance of funerary rites associated with the elite. In fact, three multiple burial chambers have been explored in this location, occupied during the Jaracuaro and early Lupe phases. The materials associated with these contexts show that the local elites were involved in long-distance exchange networks that linked the Zacapu area with northern, central and southeastern Mexico. Chamber 1 is particularly illustrative of this aspect: It contained the remains of 3 individuals (2 women and 1 man) with whom numerous amazonite and turquoise ornaments were found, indicating connections to the north. Muscovite ornaments pointing southeast were also documented, as well as the use of Maya blue on a polychrome vessel showing central Mexican iconography (José Luis Ruvalcaba, pers. comm. 2022), in

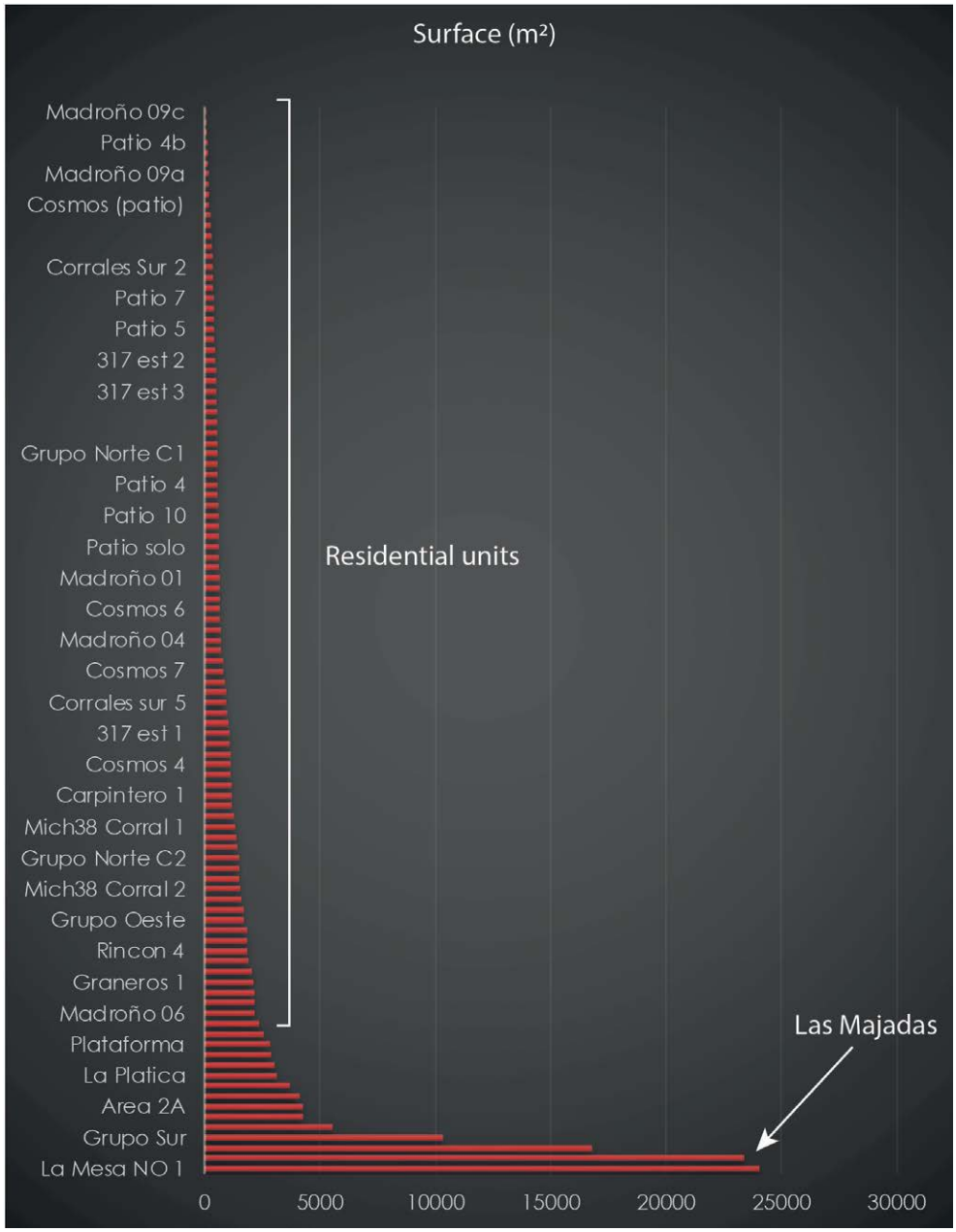


**Figure 8.5:** Histogram showing the distribution of Epiclassic architectural complexes recorded in the La Mesa-El Rincón zone according to surface area (chart by G. Pereira).

which the head of a feathered serpent and the head of a dignitary associated with the Teotihuacan glyph of the storm god stand out.

The Las Majadas complex, located close to the previous one, is undoubtedly the most important in terms of both size and complexity. It covers an area of 2.3 hectares (approximately 270 m NS by 85 m E-W). It is made up of a series of platforms that define four main courtyards (C, D, F, G) distributed along a S-N axis. It also includes two other open spaces of more modest dimensions (B designates an enclosure delimited by walls and E is a kind of sunken space partially delimited).

One of the possible entrances shown on the map is located to the north-east of courtyard F, a large rectangular space measuring 2 700 m². It is surrounded by a series of platforms of varying heights that support several buildings made up of multiple rooms. To the south, courtyard F gives access to two stepped courtyards: courtyard C (1 520 m²) is sub-square in plan and has the remains of an altar in its centre; to the east and further down, courtyard D (1 500 m²) is clearly rectangular in plan (60 m × 25 m) and is flanked to the south by a small square base. To the north, the large courtyard F gives access to courtyard G (795 m²), which is clearly the most restricted access space in the

complex. It is truly a sunken courtyard with a square floor plan, bounded to the north by a building on a high plinth that marks the highest point in the area.

Although only a couple of test pits have been carried out in this enormous complex to date, we can propose some hypotheses based on the configuration of the space visible from the surface. In another published work, we proposed that Las Majadas could constitute a multifunctional palace, such as those reported in other areas of the Mesoamerican world (*cf.* Evans 2004; Fargher *et al.* 2011; Manzanilla 2020; Manzanilla *et al.* 2005). Indeed, it has several elements in common with this type of architectural complex: its access is restricted; it is composed of several courtyards around which were built structures with several rooms, some used as living spaces and others for public, administrative and/or religious activities.

Courtyard F is the largest and is suitable for public activities of various kinds. The buildings surrounding it (especially the eastern one) may have had administrative and economic functions and be associated with the residence of certain elite groups. The stepped courtyards to the south may have been associated with public ceremonial activities, while the northern sector, clearly isolated from the rest, may have been reserved for a smaller segment of society, perhaps for the residence and other activities (audiences, rituals) of the ruling family.

## Comparisons at the local and regional level

The Las Majadas complex is quite exceptional in the region in several respects. On a local scale (i.e. in relation to the surrounding settlements), it stands out for its size. If we rank the complexes recorded in the El Rincón-La Mesa area (N=103) in ascending order of size, we see that Las Majadas occupies the highest position, comparable to the La Mesa NW complex, which slightly exceeds it (Figure 8.5). The disparity between Las Majadas and the other residential complexes is

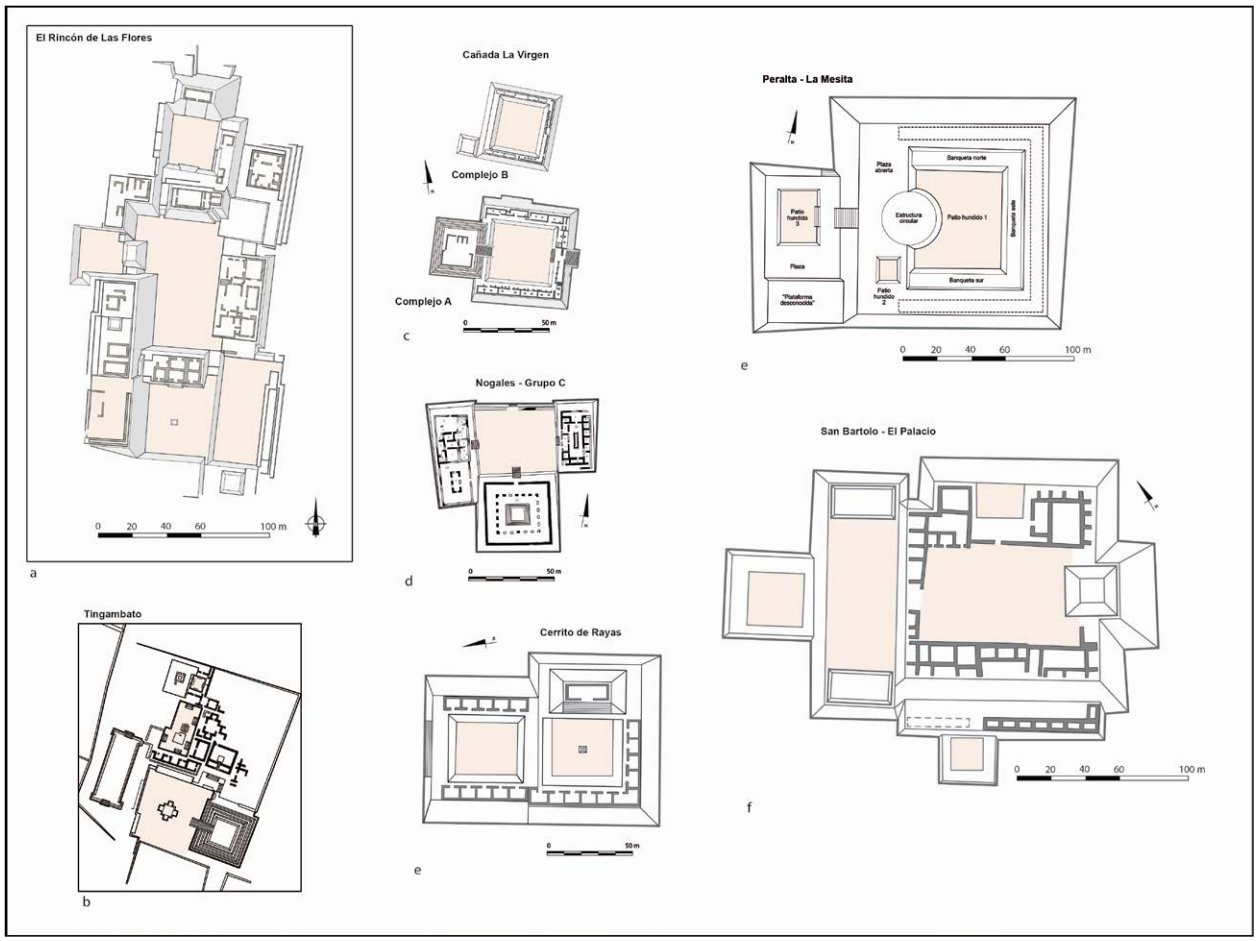


**Figure 8.6:** Comparison between the Las Majadas complex of Rincón de Las Flores and a sample of monumental sites in Michoacan and the Bajío (maps at the same scale; open spaces in salmon colour): **a)** Las Majadas, Rincón de Las Flores; **b)** Tingambato; **c)** Cañada de La Virgen; **d)** Group C of Nogales; **e)** Cerrito de Rayas; **f)** Peralta, La Mesita; **g)** Palacio de San Bartolo Aguacaliente (b: redrawn by S. Eliès after Punzo Díaz 2016; c: redrawn by S. Eliès after Zepeda 2007; d: after Pereira and Migeon 2008; e: redrawn by G. Pereira from Ramos *et al.* 1993; f: redrawn by S. Eliès after Cárdenas 2007; g: redrawn by G. Pereira after Castañeda 1992).

particularly striking: It is 9 to 10 times larger than the most extensive complexes in the area (Complex 3 of El Rincón and Madroño Complex 6 of Malpaisillo, see Figure 8.3).

In the Zacapu region, Las Majadas has no equivalent in terms of its morphology and the complexity of its internal organisation. As far as we know, there are only a few Epiclassic civic-ceremonial centres that have levelled areas of up to one hectare. Among them, we can mention the South Group of the Mesa del Bolsón site (1 ha) or the two sets of rectangular platforms and courtyards of the Potrero de Guadalupe site (1.5 ha), detected by geophysical prospection (Pereira *et al.* 2015). In the Lerma slope area, there are also some centres that occupy large areas, but where the complexes appear to be separated. This is the case of the Yacata del Metate site (Mich. 51), whose ceremonial area covers an area of approximately 2 ha, in which at least three main complexes can be distinguished, spread along the slope of the hill (Faugère-Kalfon 1996: 36). However, these examples also show a different organisation, structured around one or two plazas/courtyards associated in two cases associated with a ballcourt.

To find complexes similar to those at El Rincón de Las Flores, one has to look outside the Zacapu region (Figure 8.6). To the south, there is the monumental complex of Tingambato, known as one of the most important Epiclassic settlements in the region (Piña Chán and Ohi 1982; Punzo Díaz 2016). This site shares similar funerary traditions to those known from Zacapu, characterised by the use of burial chambers built by the elite and accessible through a side entrance.

The monumental area covers at least 1 ha, considering only the area that is currently cleared. The southern part of the complex corresponds to a ceremonial plaza bordered by an imposing pyramidal base and a ballcourt. To the north, there is a large platform that corresponds to a residential area made up of a series of buildings arranged around two courtyards. This area could have served as a palace and it is worth noting that the two burial chambers documented for the site were found in this area.

For the Epiclassic period, however, it is mainly in the Bajío that monumental complexes comparable in size to the monumental area of El Rincón are known. This region is characterised by the development of an extensive network of monumental sites, many of which are associated with the sunken patio tradition (Brambila and Castañeda 1993; Cárdenas 1999, 2007; Ramos *et al.* 1993). Here we will focus on those complexes that have courtyards surrounded by large platforms supporting multi-roomed buildings, interpreted as residential. Note that authors such as Efrain Cárdenas (1999, 2007) have compared these complexes with some palace models from the Late Postclassic period, such as the one shown on the Quinatzin map.

It should be noted that we will not consider other classes of architectural complexes that are more related to a strictly ceremonial sphere, such as the enclosure of Casas Tapadas in Plazuelas, where no evidence of residential architecture has been identified.

Among the monumental complexes with evidence of residential areas, their great variability in terms of format, number of courtyards and the presence of different types of associated buildings is remarkable. The basic model seems to be a single, closed and therefore sunken courtyard, surrounded by a perimeter platform on which the foundations of superstructures opening onto the courtyard are identified and interpreted as residences. An example of this is Complex B of Cañada La Virgen (Zepeda 2007). In a wider range of complexity, we find complexes built in the same way, but also with a building with a ceremonial function. This category includes Complex A of Cañada La Virgen with its pyramidal base (Zepeda 2007), or Group C of Nogales with its large hall with a central atrium (Pereira and Migeon 2008). The latter covers an area of one hectare and has a building with a series of underground rooms that seem to have been used for storage. Finally, in the highest category, we find complexes formed by two or more courtyards integrated into a system of platforms that support both residential structures and ceremonial buildings (altars, pyramidal bases, circular platforms, etc.). An example of this is the site of Cerrito de Rayas (Ramos *et al.* 1993), with its two courtyards, one of which seems to have had a residential function and the other a more ceremonial one. However, the complex of La Mesita de Peralta (more than 2.6 ha and three sunken courtyards, Cárdenas 2007) and the complex of El Palacio de San Bartolo Aguacaliente (Castañeda 1992) particularly stand out. The latter, with an area of around 3.5 ha, combines several stepped courtyards delimited by platforms, multicellular buildings and a pyramidal base.

This brief comparative exercise allows us to suggest that the Las Majadas complex at El Rincón may be related to this tradition of large complexes known in the Bajío, which combine several courtyards with different functions: residential, ceremonial, public, private and probably also administrative. In this context, we can consider that El Rincón corresponds to the highest level of the hierarchy mentioned above, due to its complexity (number of courtyards, functions, variety of structures, etc.) and size (built area of more than two hectares).

**Comparisons with examples in Central Mexico**

Let us now venture to extend our comparison to other areas of Mesoamerica, particularly central Mexico.

Such a comparison is justified, given that, in various aspects, the groups that inhabited northern Michoacan and the Bajío maintained links with central Mexico in various aspects at different points of the pre-Tarascan era. Architecture is one of the indicators that these groups adopted some existing models in the central highlands. The presence of architectural features such as the *talud-tablero* system (Castañeda 2007; Macías Goytia and Vackimes Serret 1989; Piña Chán and Ohi 1982), closed ballcourts with ring-shaped markers or sculptures (Castañeda 2007; Taladoire 1989), or the integration of sculpted *almenas* (decorative merlons) in buildings (Castañeda 2007) shows that the inhabitants of the region had sufficient knowledge of models existing outside the area to integrate these into their own sector.

In this sense, it is interesting to compare the Las Majadas complex at El Rincón with the palatial structures reported for two contemporary sites, Xochicalco (Alvarado León 2020) and Cacaxtla (Lucet 2020). Of course, this comparison is limited by the fact that the Las Majadas complex has not been subjected to extensive excavations and that these are not equivalent in terms of construction or decorative techniques. From this second point of view, the El Rincón site is fully integrated into the Western building tradition, which is based on the use of stone and earth, with mud floors and mortar. However, what is of interests here is the way in which the rooms were organised, both horizontally (juxtaposition and communication between rooms) and vertically (staggered arrangement of rooms).

The case of the "Acropolis" complex at Xochicalco (Alvarado León 2020) is eloquent in this respect. It is a complex that covers an area of about one hectare and involved a considerable investment of labour. It has a compact quadrangular plan, with several rooms grouped around small patios that can be accessed from a larger patio located immediately after the entrance. According to Alvarado León, Structure Ac8 stands out due to its clearly elevated position in relation to the others and as a space of greater hierarchy. In general, the palace of Xochicalco shows a different organisation than that of El Rincón, with the labyrinthine juxtaposition of agglomerated but separate spaces, each with its own courtyard and whose access was controlled by a system

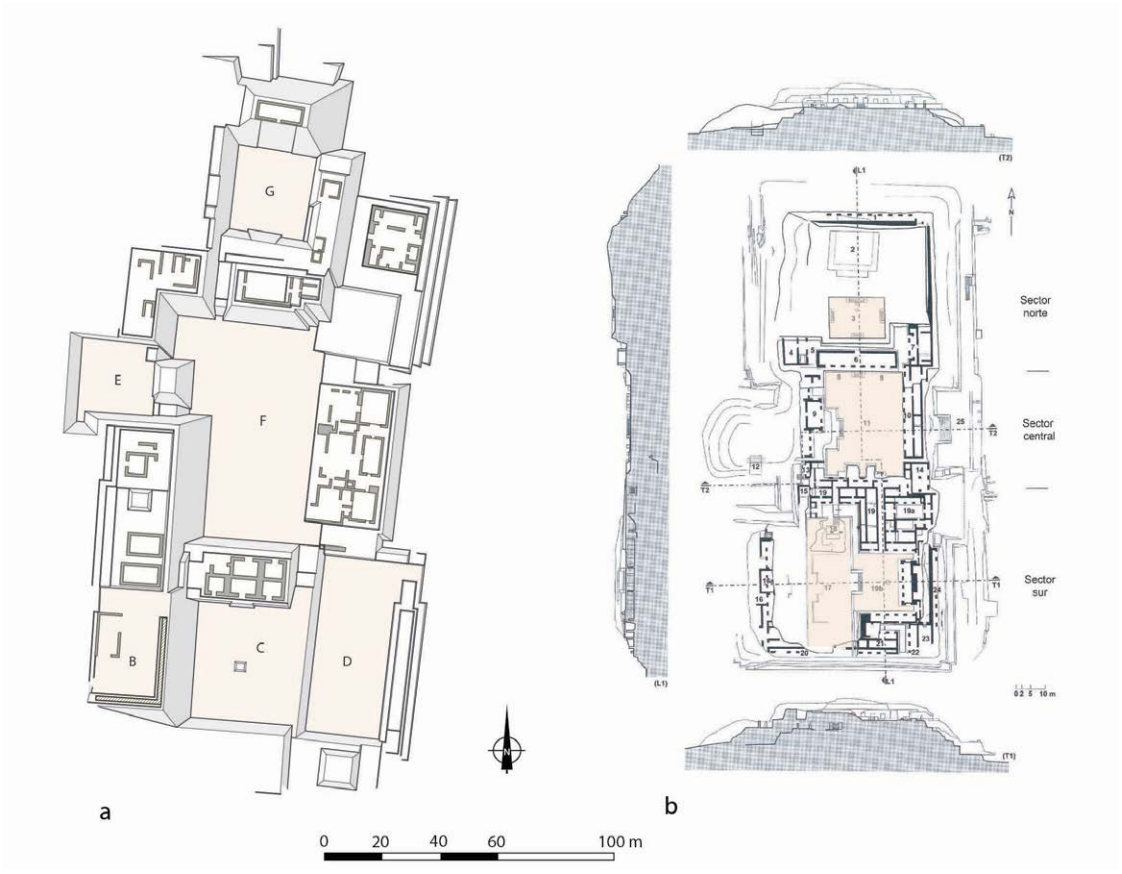


**Figure 8.7:** Comparison between **a)** the Las Majadas complex of Rincón de Las Flores and **b)** the Gran Basamento of Cacaxtla (maps at the same scale; open spaces in salmon colour, map of Cacaxtla after Lucet 2020).

of entrance porticoes and reception courtyards. This pattern is more reminiscent of the large residential complexes of Teotihuacan.

The Gran Basamento of Cacaxtla (Lucet 2020), on the other hand, shows more similarities with the Las Majadas complex at El Rincón de Las Flores (Figure 8.7). This large, elevated space has a north-south orientation, along which several rooms are distributed, organised around courtyards of different sizes. As in El Rincón, the entrance seems to have been from the eastern edge of the space that occupies the central part of the complex, the North Plaza, an open space whose dimensions (870 $m^2$) allowed large groups of people to gather and see the Battle Mural of Structure B and other surrounding buildings. The area to the north had more restricted access and was situated on a higher level. It has a small sunken courtyard (252 $m^2$) and a base at the northern end. Finally, the southern third of the Gran Basamento seems to have been made up of two large, stepped areas, with the Plaza de Los Altares (280 $m^2$) between them, delimited by long porticoed buildings. It is interesting to note that, to the south of the large base, there is another complex formed by a plaza surrounded by three pyramids, which, due to its distance from the palace complex, is somewhat reminiscent of the pattern observed at El Rincón.

In terms of spatial organisation, the similarities between the Gran Basamento of Cacaxtla and the Las Majadas complex of El Rincón are notable, despite the obvious cultural differences and geographical distance. Although it seems premature to propose interpretations of the processes that would explain these similarities (imitation of one by the other or conformity to a common model), it is difficult to believe that these could be the result of mere coincidence. In this sense, excavation data, which are still limited in the case of El Rincón de Las Flores, would be essential to provide clues for understanding.

## Conclusion

The idea of palatial architecture before the Late Postclassic period is not widely present in the interpretations proposed for western Mexico, probably because it is assumed that the societies that inhabited this region were not complex enough to warrant and to build this type of architecture. However, the archaeological data suggest that, at least from the Epiclassic period onwards, monumental architecture was developed at several sites in the area, the scale and configuration of which meet the criteria that are considered to be indicative of palaces in areas further east.

In the case of El Rincón-La Mesa area in the Zacapu Basin, it can be seen that a hierarchical social organisation developed during the Epiclassic period, as evidenced by the variability of the residential units. In this context, three large groups of monumental structures seem to have structured the settlement. Among these, the complex of Las Majadas, in El Rincón stands out for its complex organisation, which suggests that it functioned as a residence for the elite, while at the same time it could have been the seat of public activities, probably administrative, political and ritual. In order to verify this hypothesis, it would be important to be able to carry out extensive archaeological research aimed at defining the function of the rooms and their construction phases.

For now, the data provided by the mapping of the site allows us to compare the site within a broader regional framework, which suggests that it is not an isolated case. On the one hand, we can see that the El Rincón site shows similarities with the Bajío tradition and was part of a network of large settlements that structured the Epiclassic settlement pattern in Michoacan and Guanajuato. On the other hand, we know that this area had links with contemporary societies in northwestern and central Mexico. In this regard, the similarity in the configuration of spaces between Las Majadas and the Gran Basamento of Cacaxtla is striking and remains within the purview of future research. Considering the presence of other elements of material culture that suggest an exchange of materials and ideas with these areas of the central highlands, we should not rule out influence and interactions between these two regions.

## References cited:

Alvarado León, Claudia I.
2020 El poder institucionalizado. El caso del palacio de Xochicalco, Morelos. *Las sedes de poder en Mesoamérica*, edited by Linda Manzanilla, pp. 129–148. Universidad Nacional Autónoma de México & El Colegio Nacional, Mexico City.

Arnauld, Marie-Charlotte and Brigitte Faugère-Kalfon
1998 Evolución de la ocupación humana en el centro-norte de Michoacán (Proyecto Michoacán, CEMCA) y la emergencia del Estado tarasco. *Génésis, culturas y espacios en Michoacán*, edited by Véronique Darras, pp. 13–34. CEMCA, Mexico City.

Arnauld, Marie-Charlotte, Patricia Carot and Marie-France Fauvet-Berthelot
1993 *Arqueología de las Lomas en la cuenca lacustre de Zacapu, Michoacán, México*. Cuaderno de Estudios Michoacanos 5. CEMCA, Mexico City.

Beekman, Christopher
1996 El Complejo El Grillo del centro de Jalisco: una revisión de su cronología y significado. *Las cuencas*

*del Occidente de México: época prehispánica*, edited by Eduardo Williams and Phill C. Weigand, pp. 247–297. El Colegio de Michoacán, Zamora.

Brambila, Rosa and Carlos Castañeda

1993 Estructuras con espacios hundidos. *Cuadernos de Arquitectura Mesoamericana* Núm. 25: 73–78.

Braniff C., Beatriz

1974 Oscilación de la frontera septentrional mesoamericana. *The Archaeology of West Mexico*, edited by Betty Bell, pp. 40–50. West Mexican Society for Advanced Studies, Ajijic.

Cárdenas, Efrain

1999 *El Bajío en el Clásico*. El Colegio de Michoacán, Zamora.

2007 Peralta, Abasolo. Arquitectura monumental de la tradición El Bajío. *Zonas aqueológicas de Guanajuato. Cuatro casos: Plazuelas, Cañada de la Virgen, Peralta y El Cóporo*, edited by Carlos Castañeda, Gabriela Zepeda, Efraín Cárdenas and Carlos A. Torreblanca, pp. 187–249. Gobierno del Estado & Instituto Nacional de Antropología e Historia & Instituto Estatal de Cultura, Guanajuato.

Carot, Patricia, Marie-France Fauvet-Berthelot, Luis Barba, Karl Link, Agustín Ortíz and Albert Hesse

1998 La arquitectura de Loma Alta, Zacapu, Michoacán. *IV Coloquio de Occidentalistas: arqueología, historia y medio ambiente*, pp. 345–351. Universidad de Guadalajara, ORSTOM, Guadalajara.

Castañeda, Carlos

1992 Un antiguo señorío en el Bajío Guanajuatense. San Bartolo Agua Caliente. Licentiate thesis. Universidad Veracruzana, Xalapa.

2007 Plazuelas, Pénjamo. *Zonas aqueológicas de Guanajuato. Cuatro casos: Plazuelas, Cañada de la Virgen, Peralta y El Cóporo*, editado por Carlos Castañeda, Gabriela Zepeda, Efraín Cárdenas and Carlos A. Torreblanca, pp. 21–67. Gobierno del Estado & Instituto Nacional de Antropología e Historia & Instituto Estatal de Cultura, Guanajuato.

Castañeda, Carlos and Yolanda Cano

1993 Los túmulos funerarios de Chupícuaro. El caso de La Virgen, Guanajuato. *Cuadernos de Arquitectura Mesoamericana*, Núm. 25: 23–27.

Castañeda, Carlos, Ana María Crespo, José Antonio Contreras, Juan Carlos Saint-Charles, Trinidad Durán and Luz María Flores

1988 Interpretación de la historia del asentamiento en Guanajuato. *Primera reunión sobre las sociedades prehispánicas en el centro-occidente de México*, pp. 321–355. Instituto Nacional de Antropología e Historia, Queretaro.

Crespo, Ana María

1993 Juegos de pelota en El Bajío. *Cuadernos de Arquitectura Mesoamericana*, Núm. 25: 89–95.

Darras, Véronique

1999 *Tecnologías prehispánicas de la obsidiana: Los centros de producción de la región de Zináparo-Prieto, Michoacán, México*. Cuadernos de Estudios Michoacanos 9. CEMCA, Mexico City.

Darras, Véronique and Brigitte Faugère

2010 Reacomodos culturales en el valle de Acámbaro al final del Preclásico: la fase Mixtlán y su significado a nivel local y global. *El sistema fluvial Lerma-Santiago durante el Formativo y el Clásico temprano*, edited by Laura Solar Valverde, pp. 287–318. Instituto Nacional de Antropología e Historia, México.

Dorison, Antoine

2019 Archéologie des systèmes agraires préhispaniques de la région de Zacapu, Michoacán, Mexique, VIIe-XVe siècle apr. J.-C. Doctoral thesis. Université Paris 1 Panthéon-Sorbonne, Paris.

Evans, Susan Toby

2004 Aztec Palaces and other Elite Residential Architecture. *Palaces of the Ancient New World*, edited by Susan T. Evans and Joanne Pillsbury, pp. 7–56. Dumbarton Oaks Research Library and Collection, Washington, D.C.

2020 Palacios aztecas y sus sedes de poder. *Las sedes de poder en Mesoamérica*, edited by Linda Manzanilla. Universidad Nacional Autónoma de México & El Colegio Nacional, Mexico City.

Fargher, Lane F., Verenice Y. Heredia Espinoza and Richard E. Blanton

2011 Alternative pathways to power in late Postclassic Highland Mesoamerica. *Journal of Anthropological Archaeology*, Vol. 30 (3): 306–326.

Faugère-Kalfon, Brigitte

1991 San Antonio Carupo (centro-norte de Michoacán, México): nuevas evidencias de ciertas transformaciones en el inicio del Postclásico. *Journal de la Société des Américanistes*, Num. 77: 45–61.

1996 *Entre Zacapu y Río Lerma: culturas en una zona fronteriza*. Cuaderno de Estudios Michoacanos 7. CEMCA, Mexico City.

2009 Sociedad y poder en el centro-norte de Mesoamerica (700-1200 d.C.): el caso del norte de Michoacan. *Las sociedades complejas del Occidente de México en el mundo mesoamericano. Homenaje a Phil Weigand*, edited by Eduardo Williams, Lorenza López Mestas y Rodrigo Esparza, pp. 181–224. Instituto Nacional de Antropología e Historia & El Colegio de Michoacán, Zamora.

Fernández-Villanueva, Eugenia

2004 Evidencias de una tradición mesoamericana en Zaragoza. *Tradiciones arqueológicas*, edited by Efraín Cárdenas, pp. 291–305. El Colegio de Michoacán, Gobierno del Estado de Michoacán, Zamora.

Forest, Marion

2014 Approches spatio-archéologiques de la structure sociale des sites urbains du Malpaís de Zacapu. Doctorate thesis. Université de Paris 1 – Panthéon/ Sorbonne, Paris.

González Licón, Ernesto

2004 Royal Palaces and Painted Tombs: State and Society in the Valley of Oaxaca. *Palaces of the Ancient*

*New World*, edited by Susan T. Evans and Joanne Pillsbury, pp. 83–111. Dumbarton Oaks Research Library and Collection, Washington, D.C.

Inomata, Takeshi and Stephen Houston (eds)
2001 *Royal Courts of The Ancient Maya*. Westview, Boulder.

Jimenez Betts, Peter
2018 Orienting West Mexico. The Mesoamerican World System 200–1200 CE. Doctoral thesis. University of Gothenburg, Gothenburg.

Lucet, Geneviève
2020 Cacaxtla. Estudios funcionales desde el estudio de la arquitectura. *Las sedes de poder en Mesoamérica*, edited by Linda Manzanilla, pp. 149–178. Universidad Nacional Autónoma de México & El Colegio Nacional, Mexico City.

Macías Goytia, Angelina and Katina Vackimes Serret
1989 La turquesa de un lago. *Homenaje a Román Piña Chan*, edited by Roberto García Moll and Ángel García Cook, pp. 41–71. Colección Científica 187. Instituto Nacional de Antropología e Historia, Mexico City.

Manzanilla, Linda (ed)
2020 *Las sedes del poder en Mesoamérica*. Universidad Nacional Autónoma de México & El Colegio Nacional, Mexico City.

Manzanilla, Linda, Leonardo López Luján and William L. Fash
2005 Cómo definir un palacio en Teotihuacan. *Arquitectura y urbanismo. Pasado y presente de los espacios en Teotihuacan. Memoria de la Tercera Mesa Redonda de Teotihuacan*, edited by María E. Ruiz Gallut and Jesús Torres Peralta, pp. 185-209. Instituto Nacional de Antropología e Historia, Mexico City.

Michelet, Dominique
1990 El centro-norte de Michoacán en el Clásico: algunas reflexiones. *La época clásica: nuevos hallazgos, nuevas ideas*, edited by A. Cardos de Mendez, pp. 279–291. Museo Nacional de Antropología & Instituto Nacional de Antropología e Historia, Mexico City.
1993 La cerámica de las Lomas en la secuencia cerámica regional. *Arqueología de las Lomas en la Cuenca lacustre de Zacapu, Michoacán, México*, edited by Marie C. Arnauld, Patricia Carot and Marie-F. Fauvet-Berthelot, pp. 149–155. Cuadernos de Estudios Michoacanos 5, CEMCA, Mexico City.
2000 "Yácatas" y otras estructuras ceremoniales tarascas en el Malpaís de Zacapu, Michoacán. *Arqueología, historia y antropología: In memoriam José Luis Lorenzo Bautista*, edited by Jaime Litvak King and Lorena Mirambell, pp. 117–137. Colección Científica 415. Instituto Nacional de Antropología e Historia, Mexico City.

Michelet, Dominique, Marie-Charlotte Arnauld and Marie-France Fauvet-Berthelot
1989 El proyecto del CEMCA en Michoacán. Etapa I: un balance. *TRACE*, Núm. 16: 70–87.

Migeon, Gérald
1998 El poblamiento del Malpaís de Zacapu y de sus alrededores del Clásico al Posclásico. *Génesis, culturas y espacios en Michoacán*, edited by Véronique Darras, pp. 36–45. CEMCA, Mexico City.
2016 *Patrones de asentamiento del Malpaís de Zacapu (Michoacán, México) y de sus alrededores en el Posclásico*. Paris Monographs in American Archaeology 46. Archaeopress, Oxford.

Migeon, Gérald and Grégory Pereira
2007 La secuencia ocupacional y cerámica del Cerro Barajas, Guanajuato y sus relaciones con el Centro, el Occidente y el Norte de México. *Relaciones entre el Occidente y el Centro de México*, edited by Brigitte Faugère, pp. 201–230. El Colegio de Michoacán & CEMCA, Mexico City.

Nelson, Ben A.
2004 Elite Residences in West México. *Palaces of the Ancient New World*, edited by Susan T. Evans and Joanne Pillsbury, pp. 59–77. Dumbarton Oaks Research Library and Collection, Washington, D.C.

Pereira, Grégory
1997 Costumbres funerarias y sociedad del Clásico tardío en la cuenca de Zacapu, Michoacán. *Arqueología*, Núm. 18: 61–84.
1999 *Potrero de Guadalupe: anthropologie funéraire d'une communauté pré-tarasque du nord du Michoacán, Mexique*. BAR S816. British Archaeological Reports, Oxford.
2010 Arqueología de un lugar de pasaje hacia el inframundo. *TRACE*, Núm. 58: 19–28.

Pereira, Grégory, Antoine Dorison, Osiris Quezada, Céline Gillot and Dominique Michelet
2023 Nueva perspectiva sobre el sistema de organización territorial epiclásico en la región de Zacapu, Michoacán. *Ancient Mesoamerica*, Vol. 34 (3): 728–751.

Pereira, Grégory, Dominique Michelet, Antoine Dorison, Véronique Darras, Brigitte Faugère, Luis Barba, Mélaine Stévanato, Osiris Quezada and Jorge Blancas
2015 Proyecto Uacúsecha. Informe sobre los trabajos de campo realizados en el sitio El Malpaís Prieto y otros asentamientos de la región de Zacapu, Michoacán: temporada 7 (2014-2015). UMR 8096, CNRS, 203 p., 170 figs.

Pereira, Grégory and Gérald Migeon
2008 El Cerro Barajas, Guanajuato. *Arqueología Mexicana*, Núm. 92: 48–51.

Pereira, Grégory, Gérald Migeon and Dominique Michelet
2005 Transformaciones demográficas y culturales en el Centro-Norte de México en vísperas del Posclásico: los sitios del Cerro Barajas (suroeste de Guanajuato). *Reacomodos demográficos del Clásico al Posclásico en el centro de México*, edited by Linda Manzanilla, pp. 123–136. Universidad Nacional Autónoma de México, Mexico City.

Piña Chán, Román and Kunaki Ohi
1982 *Exploraciones arqueológicas en Tingambato, Michoacán*. Instituto Nacional de Antropología e Historia, Mexico City.
Pollard, Helen
1993 *Taríacuri's legacy: the prehispanic Tarascan state*. University of Oklahoma Press, Norman.
Pollard, Helen P. and Laura Cahue
1999 Mortuary Patterns of Regional Elite in the Lake Patzcuaro Basin of Western Mexico. *Latin American Antiquity*, Vol. 10 (3): 259–280.
Punzo Díaz, José Luis
2016 Nuevas evidencias de la ocupación de Tingambato durante el Clásico y el Epiclásico en el Occidente de Mexico. *Arqueología Iberoaméricana*, Núm. 30: 10–15.
2020 El palacio de Tzintzuntzan. Primeros datos arqueológicos e históricos para su estudio. *Las sedes de poder en Mesoamérica*, edited by Linda Manzanilla, pp. 352–376. Universidad Nacional Autónoma de México & El Colegio Nacional, Mexico City.
Quezada Ramírez, Osiris
2024 La minería prehispánica de la dacita en la cuenca de Zacapu. Economía de una materia prima. Master thesis. Universidad Nacional Autónoma de México, Mexico City.
Quezada, Osiris and Véronique Darras
2023 Acercamiento a un paisaje de minería prehispánico. El sistema de extracción de dacita de Las Minas, Zacapu, Michoacán. *Ancient Mesoamerica*, Vol. 34 (3): 797–825.
Ramos, Jorge, Lorenza López Mestas and Carlos Santos Rodríguez
1993 Conjuntos habitacionales en los sitios del Noroeste de Guanajuato. *Cuadernos de Arquitectura Mesoamericana*, Núm. 25: 41–49.
Schöndube B., Otto and Javier Galván
1978 Salvage archaeology at El Grillo-Tabachines, Zapopán, Jalisco, Mexico. *Across the Chichimec See: Papers in Honor of J. Charles Kelley*, edited by Carroll L. Riley and Basil C. Hedrick, pp. 144–164. Southern Illinois University Press, Carbondale.
Taladoire, Eric
1989 Las canchas de juego de pelota de Michoacán (CEMCA: Proyecto Michoacán). *TRACE*, Núm. 16: 88–99.
Weigand, Phil C., Acelia García de Weigand and Erick Cach
2003 El Palacio de Ocomo: Tecpán monumental en el Occidente de México. *Antropología de Jalisco. Una visión actual 13*. Secretaría de Cultura Gobierno de Jalisco, Guadalajara.
Winter, Marcus
2020 Palacios y poder en Monte Albán. *Las sedes de poder en Mesoamérica*, edited by Linda Manzanilla, pp. 93–128. Universidad Nacional Autónoma de México & El Colegio Nacional, Mexico City.
Zepeda, Gabriela
2007 Cañada La Virgen. *Zonas aqueológicas de Guanajuato. Cuatro casos: Plazuelas, Cañada de la Virgen, Peralta y El Cóporo*, edited by Carlos Castañeda, Gabriela Zepeda, E. Cárdenas and Carlos A. Torreblanca, pp. 21–67. Gobierno del Estado & Instituto Nacional de Antropología e Historia & Instituto Estatal de Cultura, Guanajuato.

# Chapter 9
# The Linguistic Panorama of the Epiclassic: Placing Nahuan among the Languages of Western Mesoamerica

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The archaeological record seems to suggest that the Epiclassic was a period of realignments and reorientations, as the population of Teotihuacan and its allied city-states gradually moved towards new urban centres that could better attract commerce and population. This process would have increased the importance of long-distance trade networks (and the power to access and control them), and this economic and political dynamic would have caused migrations and created new connections between distant regions and ethnic groups. Clearly, this must also have been a period that altered the linguistic landscape of Mesoamerica, and one in which new cultural dynamics emerged. This would suggest that linguistically, the Epiclassic was a period of dispersal, disintegration and divergence of language families and of increased contact between unrelated languages, with resulting loans and borrowings between them.

This chapter summarises some proposals of what the linguistic landscape in Western Mesoamerica may have been like in the period from the Classic to the Postclassic, with particular attention to the place of Nahuan languages. The central questions that I pose are: 1) What can linguistic evidence tell us about the linguistic landscape of Western Mesoamerica during the Epiclassic? 2) Speakers of Nahuan languages expanded throughout Mesoamerica in the Postclassic, but where was the ancestral Nahua speech community most likely located in the Epiclassic? While this question continues to be daunting and cannot be conclusively answered, I review various previous hypotheses about the location of early Nahuan, and the evidence these are based upon, before proposing a new hypothesis based on a reassessment of the linguistic evidence. This new model suggests that proto-Nahuatl developed in the Valley of Mexico in the Classic, and that the Nahuan expansion began in the Epiclassic as Nahua speakers moved eastward from an area in the vicinity of Teotihuacan. Note that I define Nahuan languages as those languages that descend from proto-Nahuatl (including all Nahuan languages spoken today, and also the historical Pochutec); proto-Nahuatl in turn is defined by the change of (certain instances of) Uto-Aztecan *t to *tl, whereas pre-Nahua (with no final *-tl* since this had not developed yet) is the Uto-Aztecan language that eventually developed into proto-Nahuatl.[1]

In the absence of writing, archaeological evidence does not speak for itself. Material culture cannot tell us the language of those who elaborated it. For it to speak it requires interpretation, and interpretation requires context. We cannot simply assume that boundaries between archaeologically observable material cultures necessarily reflect ethno-linguistic borders, just as we cannot assume that observing homogeneity in material culture indicates ethnolinguistic homogeneity. In the ideal case, hypotheses about boundaries between archaeological material cultures and ethnolinguistic groupings could be independently corroborated by linguistic and archaeological (and other) lines of evidence. Consequently, this paper seeks to look at the linguistic evidence without taking the archaeological evidence into account in the argumentation.

Unfortunately, the methods of historical linguistics offer a limited set of tools for making arguments about the locations of language communities in the past and none that allow precise, absolute dating. The most relevant methods are: 1) Evidence of sequences of splitting events forming a phylogenetic signal that can be mapped on to known geographic locations. 2) Linguistic borrowing between unrelated languages, as evidence of contact, which can then be matched with specific nodes on a phylogenetic model. These methods provide the possibility of creating a relative chronology of splitting events, contact events and migrations. Dating, however, is more complicated, as the traditional method of lexicostatistical glottochronology cannot be trusted for this purpose (even if some scholars continue

[1] This is also the reason for the distinction between "Nahuatl-speakers" (i.e. speakers of a Nahua variety with -tl, such as those who spoke proto-Nahuatl or those who speak contemporary Nahuatl varieties with tl) and "Nahua-speakers" (i.e. speakers of Nahuan languages, either before the change of *t to tl, or including both speakers of tl- and non-tl varieties).

to see it as a useful heuristic tool), and it is hard to assess the reliability of modern methods of lexicostatistical dating that use Bayesian methods, without further testing and corroboration. Rather, dating would have to rely either on fitting linguistic models onto datable archaeological data, or on the chance finding of datable writing in an identifiable language. The model offered here is therefore primarily a hypothesis, that seeks the best way to account for the linguistic evidence.

This paper contains several language maps. Language maps are always and by definition, misleading, because languages are not physical things that can be fixed and located spatially or geographically. Especially not in the absence of a written record that could encrust the immaterial structures of language into physical matter. Therefore, the reader is warned that none of these maps are meant to give precise or exhaustive information about the geographical positions of all languages in any given period of Mesoamerican history. Rather, they are meant to give an overview, and a general sense of what might be a reasonable estimation of where language groups could have been spoken in relation to each other and in relation to the geography, based on what past scholars have speculated, surmised, and argued in their publications.

## What we know about the linguistic situation at the time of conquest and before

In mapping Mesoamerican languages, we must start from the earliest documentation, which is from the early Colonial period. The main obstacle for understanding the population movements and language distribution before European colonisation, is that there are reasons to believe that there were considerable population shifts in the Epiclassic and Postclassic, which means that the distribution in the Classic period could have been very different from what we see at contact, without mentioning the millennium that elapsed from the Classic to the Conquest. This must be kept in mind when extrapolating from the colonial data.

The earliest documentation of the geographic distribution of different languages in Western Mesoamerica are the *Relaciones Geográficas de Nueva España*, which are responses to a survey sent by the king of Spain to collect information about his newly acquired possessions in the New World (Acuña 1982–1988). In 1569, the survey was sent to administrators in all provinces of the colonies, and among the many questions asked in the survey was the languages spoken by the natives of each province. The quality of answers

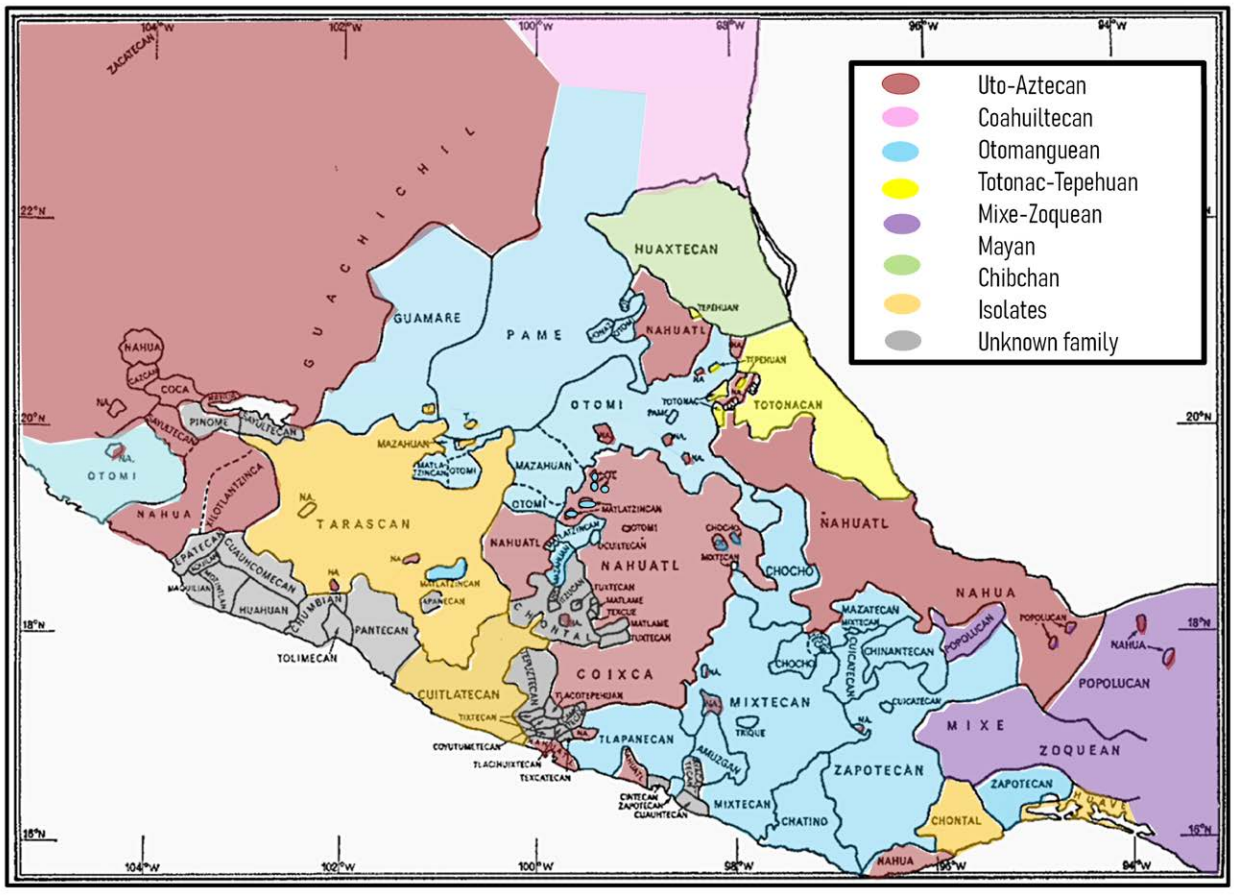


**Figure 9.1**: Map which is based on the linguistic survey in the *Relaciones Geográficas* (map by M. Pharao Hansen adapted from Gerhard's [1983] "A guide to the historical geography of New Spain". Colours indicate language family affiliations).

varies enormously, and so does the degree of detail and knowledge with which the questions about language were answered. For the purposes of language history, the *Relaciones Geográficas* are invaluable, but they also present challenges for interpretation. Chief among these is the fact that linguistic diversity declined precipitously during the first centuries of the colony, as entire linguistic groups became extinct due to epidemics and the violence of colonisation. This means that in many cases, highly local language labels are given that are no longer in use, and in these cases, we cannot know if the language was really a variant of some other better known language, or if they were a unique language which might be related to one of the major language families, or perhaps an isolate without any affiliations to other families. In other cases, some language names are ambiguous and are known to have been used for different languages, which are not necessarily closely related, and we may not be able to confidently say what language the label describes. Additionally, of course, many populations are multilingual, and the maps do not allow for multiple languages in a single area. This does affect particularly the distribution of Nahuatl, which is known to have been widely used as a vehicular language for interethnic communication, learned as a second language by speakers of other languages. Peter Gerhard (1983) has mapped the languages given for each surveyed province (adding informed guesses for those provinces for which the *Relación* has been lost or does not give language information). Though subject to the difficulties of all language maps, the resulting map is good point of departure for estimating the distribution of the Indigenous languages of Mexico at the time of the Conquest. Figure 9.1 presents the language distribution as represented by Gerhard, colouring it in to show the family affiliations of each language.

To go further back in time than the *Relaciones* (and other individual sources from the same period), we have to rely on what ethnohistorical sources tell us about the migrations of different ethnic groups in combination with what historical linguistics can tell us about probable population movements and dispersal. This is an exercise in weighing different types of evidence and arguments against each other to arrive at the most plausible scenario(s).

In the following section, I give an overview of the most likely locations of the major language families during the Classic period, discussing some of the major outstanding questions.

## Likely locations during the Classic period

This section presents a map of hypothesized locations of Mesoamerican languages during the Classic period (Figure 9.2)—representing what the distribution of languages may well have looked like at the beginning of the Epiclassic.

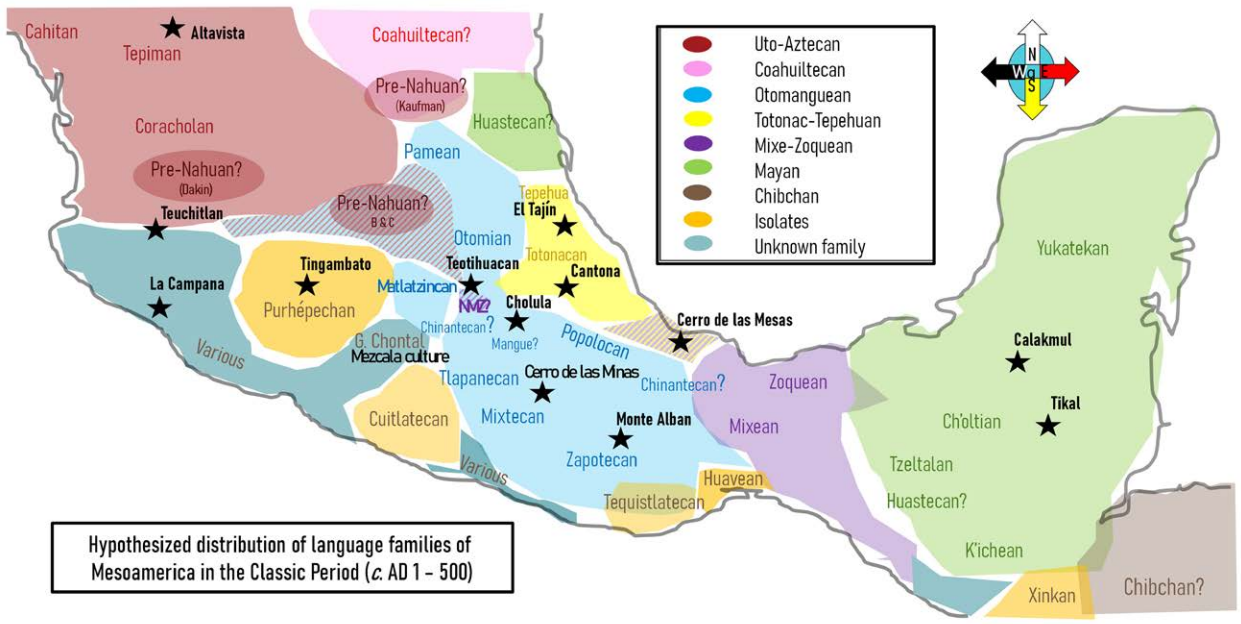


**Figure 9.2:** "*Grosso modo*" map of the hypothesized distribution of language families and isolates in Mesoamerica during the Classic period (*c.* AD 1–550). The label "various" refers to a score or so languages named in the *Relaciones Geográficas* for which we have no information that would allow us to determine their affiliation. The area of unknown affiliation on the Pacific Coast of Guatemala, refers to the fact that archaeologists do not see typically Maya material culture in this area until the Postclassic period (Christophe Helmke, pers. comm. 2024), and Kaufman does not place any Mayan groups there in the Classic period. The striped areas show areas that are likely to have been shared between two linguistic groups (map by M. Pharao Hansen).

The only Mesoamerican language for which we have unquestionable documentation prior to European colonisation is the Ch'olan language documented in the Maya inscriptions (Houston *et al.* 2000; Law and Stuart 2017). All other languages and their positions must be extrapolated from other data sources, such as: 1) The distribution at contact as documented in ethnohistorical sources, 2) current distribution for those language for which we have few or no colonial sources, 3) historical linguistic analysis of past language contact and migrations as evidenced by splits between languages and dialects, and finally 4) correlations with archaeology and genetics. For constructing a hypothesis about earlier language locations, it is useful to adopt a uniformitarian hypothesis, holding that in the Classic period, languages were spoken in the same areas where they were spoken at earliest documentation, *unless* there is evidence suggesting that a language has moved from an earlier position. This uniformitarian hypothesis is very often right, but we must also assume that it does lead to errors—which we cannot however detect without evidence for migrations.[2]

For most language families there is a consensus at least about the most likely centre of their range during the Classic period. The Mayan area is well established, the Mixe-Zoquean languages on the Isthmus of Tehuantepec, the Otomanguean languages centred in Oaxaca, the approximate location of the Totonac-Tepehuan languages in northern Puebla, and the Uto-Aztecan languages in the northwest. But for some branches of language families, there is no clear consensus. Specifically, based on his analyses of loanword exchange between language families coupled with glottochronological dates, Terrence Kaufman (2020) has proposed early locations for Totonac-Tepehua, Chinantec, Huastec, and Mixe-Zoquean that are quite different from where the languages are recorded, and which may be (and in some cases have been) challenged.

Other than these specific proposals by Kaufman, the major outstanding question remains the location of the ancestor of Nahuan languages: Here there are three different scenarios, and the choice between them determines much of how one would see the development of the linguistic landscape in the Epiclassic. Below I describe the questions regarding Huastecan/Téenek, Totonac-Tepehua, the postulated northern branch of Mixe-Zoquean and Otomanguean. The different scenarios for the locations of Nahuan, I deal with in the final section of the paper.

**Huastec/Téenek**: The only Mayan language spoken in western Mesoamerica is Téenek (Huastec/Wastek Maya), which is spoken in Northern Veracruz and Southern San Luís Potosí. According to Kaufman, Téenek has been in the area where it is spoken now, for as long as four millennia (Campbell and Kaufman 1985; Kaufman 2017, 2020). In Kaufman's phylogenetic analysis of Mayan developments, he has Huastecan as the first branch to break off from the proto-Mayan language, based on glottochronological dating, suggests that this happened prior to 2000 BC. Glottochronological dating is, as mentioned earlier, not accepted by most linguists as a valid means of dating, and so this date in itself is not a strong argument. The early split of the Huastecan branch of Mayan has been contested by Robertson and Houston (2015) who find that the language shares several features with the languages of Cholan-Tzeltalan branch, which implies a later split, and may explain why the Chicomuceltec language, which is closely related to Téenek was spoken in Chiapas far from the Huastec region. Law (2017) has suggested that even if Huastecan did break off from proto-Mayan early, it might have been spoken in Chiapas in contact with Cholan-Tzeltalan languages before traveling north along the Gulf Coast. This makes it hard to say whether the ancestor of Téenek was spoken in the Huasteca region and across the Gulf Coast in the Classic period as Kaufman suggests, or whether they only arrived there later, during the Epiclassic or perhaps even the Postclassic.

In Figure 9.2, the current Téenek territory, which is also where Téenek place names abound, is marked in green. However, the map does not assume that Téenek was spoken on the Gulf Coast where Totonacan languages were spoken in the sixteenth century. If Kaufman's scenario is correct, Téenek would have been the main language of Classic Veracruz culture spoken also at El Tajin and perhaps all the way down to Cerro de las Minas. Following the uniformitarian principle this map assumes that Totonacan languages were on the central Gulf plains, south of Téenek and north of the Mixe-Zoquean languages.

**Totonac-Tepehuan languages**: In the sixteenth century, Totonacan languages were spoken on the central Gulf Coast and all the way into the Puebla highlands. The Tepehua languages that are the sister languages of Totonac are spoken in the highlands of Puebla south of the Huasteca region. Kaufman (2020) considers Totonacan languages to have been originally spoken in the northern part of the Valley of Mexico, with Totonac people being among the original population of Teotihuacan, together with his proposed community

[2] This is especially true in cases where languages may have arrived in Mesoamerica by seaborne migrations, which could in principle have happened at any point before, during or after the Classic period. This is an intrinsic problem for our understanding of the isolate and undocumented languages on the Pacific Coast, where there is increasing evidence for intense coastal trade between Mesoamerica, Central and South America beginning in the Preclassic and continuing until contact (Beekman and McEwan 2022; Hopkins 2023).

of northern Mixe-Zoquean speakers. This would mean that Totonac and Tepehua speakers were pushed out of central Mexico in the Epiclassic, moving towards the Gulf Coast where they took over territory that had once been inhabited by the Huastec Maya. An alternative scenario proposed by Davletshin (2024), based on glottochronological dating and analysis of the spread of Totonacan and Tepehuan languages, locates the split of Totonacan from Tepehuan in the Preclassic, with the shared homeland in the north Puebla highlands. According to Davletshin, the split of proto-Totonacan into its branches began with the migration of Misantla Totonac speakers to the Gulf Coast during the Classic period.

**Northern Mixe-Zoquean**: There is no documentation of Mixe-Zoquean languages having been spoken in Central Mexico, but Kaufman has suggested that they were present in the Classic period and before. A Mixe-Zoquean presence in Central Mexico could be implied if one accepts the hypothesis that Olmec culture was driven by speakers of early Mixe-Zoquean languages (Campbell and Kaufman 1976; Wichmann *et al.* 2008). Kaufman (2020) hypothesized that early proto-Mixe-Zoquean speakers inhabited central Mexican sites like Cuicuilco, Tlapacoya, and Chalcatzingo, but eventually disappeared leaving no other traces than potential linguistic influence in the surrounding languages. The main argument is that these lost languages would have been the source of Mixe-Zoquean loanwords that he considers having diffused into other languages of that region at an early date. For Kaufman these "northern Mixe Zoqueans" would have been centred at Cuicuilco, moving north into contact with Totonac speakers at Teotihuacan when Cuicuilco was destroyed by the eruption of Xitle volcano around AD 245. There are, however, reasons to be skeptical of the arguments for a Mixe-Zoquean presence in Central Mexico and a conservative reconstruction of the family proposes no such northern branch (Wichmann 1995). The arguments against the proposal are: There is little reason to think that the Olmec culture as defined archeologically would necessarily represent a single linguistic group. Additionally, many of the loans of culture-words from Mixe-Zoquean into other Mesoamerican languages proposed by Kaufman, if they do indeed come from a Mixe-Zoquean source (several of his proposed loans can be contested (see e.g. Dakin 2003; Pharao Hansen forthcoming a; Wichmann 1999), could equally well be diffused through intermediate languages without requiring direct contact. The final argument that Kaufman (2020) supplies for a Mixe-Zoquean presence in Central Mexico is the syntax of signs on the stela of Xochicalco—which he sees as evidencing verb initial syntax, suggesting either a Mixe-Zoquean language, or Nahua (or Totonac according to Davletshin (pers. comm. 2024, who reconstructs verb initial syntax for proto-Totonac-Tepehuan, or it could be another unknown language). The possibility of a Mixe-Zoquean language in central Mexico in the Epiclassic is a kind of wild card, which could be used to explain some linguistic facts, but all these facts could also be explained in other ways, which do not require positing a Mixe-Zoque "ghost" population. The proposal of northern Mixe-Zoqueans is essentially unfalsifiable, and currently rests on only circumstantial evidence that can be explained by other factors (though perhaps ancient DNA could provide some concrete evidence for or against these postulations in the future).

**Otomanguean-Chinantecan and Tlapanec-Mangue**: Kaufman (2020) proposes that the ancestral homeland of the proto-Chinantecan language would be in Morelos, rather than in the current territory of the Chinantecos in northern Oaxaca on the Veracruz border. His argument is that Chinantecan has a high percentage of Mixe-Zoquean loans, he argues that if his hypothetical placement of northern Mixe-Zoquean in the southern Valley of Mexico is correct, then Chinantecan would likely have been spoken in close contact with that language, in the Morelos valley immediately south of the Valley of Mexico. This proposal seems highly speculative, and unnecessary, since the current Chinantecan territory is very close to the Mixe-Zoquean heartland, and they could have received the loans in their current location.

Tlapanec (Mè'phàà) languages are spoken today in Eastern Guerrero but may have been much wider distributed prior to the arrival of Nahua-speaking populations. Subtiaba is a language that was spoken in Nicaragua, it is considered closely related to Mangue and Chiapanec. Mangue speakers are generally considered to have migrated south in the late Epiclassic and Early Postclassic around the same time the Pipil Nahuas did so (Fowler 2019). Though spoken on the Pacific Coast of El Salvador, Honduras, Nicaragua and Costa Rica, Chorotega-Mangue has been proposed to have an association with the central Mexican city-state of Cholula, (the word *chorotega* seems to be from the Nahua word *chololtecah* meaning 'inhabitants of Chololan', suggesting that Nahua-speakers considered them to have their origins there). Nahuan ethnohistorical sources tell of a conquest of Cholula by Nahua-speakers who expelled the previous inhabitants at some point in the Postclassic (see *Historia Tolteca-Chichimeca* 1976; McCafferty 2021; Testard 2017). Chorotega-Mangue is closely related to the Chiapanec language of Coastal Chiapas, which presumably represents a remnant population form the same southward migration originating in Central Mexico. If these migrations took place in the late Epiclassic and Early Postclassic) as argued by Fowler (2019), this implies that a continuum of Tlapanec-Manguean languages would have been

spoken in Guerrero and southern Puebla in the Classic period, before being pushed out or assimilated by Nahuatl. This group might also have occupied a larger area perhaps extending into the valley of Morelos.

The distribution given in Figure 9.2, has been extrapolated by rolling back migrations that are generally assumed to be late Epiclassic and Early Postclassic (e.g. Mangue migration to Central America), in combination with a uniformitarian principle which assumes that languages will have been spoken at their colonial locations unless there is evidence suggesting they were not. For pre-Nahuan, Chinantecan and Huastecan, I include several possible locations, because there are competing hypotheses about their early locations.

## The question of the timing of Nahua arrival and the languages at Teotihuacan

We know, that by the end of the Postclassic, Nahuatl speakers inhabited and politically dominated a considerable part of Central Mexico (the red zone in Figure 9.1). The point of contention is whether Nahuas or their immediate ancestors were already inhabiting Central Mexico during the Classic period (in which case they would have participated in some way in the Teotihuacan state), or whether they only arrived in the Teotihuacan region during the decline of the state in the mid-sixth century. Given that the locations and movements of Nahua speakers in the Classic period cannot be identified by the archaeological record, we have to rely on other means to answer these questions.

Lexicostatistical dating has dated proto-Nahua to the period AD 300–800 using traditional glottochronology (Wright-Carr 2016: 25), or from *c.* 1000 BC – AD 500 using Bayesian methods (Greenhill *et al.* 2023). However, the only method for absolute dating of linguistic states would be to find epigraphic evidence of Nahuan or pre-Nahuan presence at Teotihuacan or other sites that employed writing systems in the Classic and Epiclassic. There are examples of words written phonetically in Maya inscriptions from the Classic period that have been suggested to represent a language associated with Teotihuacan, and it has been suggested that this language may be Nahuan (e.g. King and Gómez Chávez 2004; Stuart 2000). I have myself reviewed the proposed evidence and concluded that several of the words proposed as Teotihuacano words in Maya inscriptions at Tikal and elsewhere may represent a pre-Nahuan variety (Pharao Hansen forthcoming a). Additionally, several epigraphers have proposed that the largely logographic writing system of Teotihuacan may have encoded an early Nahuan language (Cowgill 1992; King and Gómez 2004; Taube 2000; Whittaker 2012, 2021). In a recently published work, Pharao Hansen and Helmke (2025), propose motivated phonetic readings of some Teotihuacan logograms, which suggest that one language encoded in Teotihuacan writing was a variety of proto-Corachol-Nahuan, specifically the pre-Nahua variety that eventually developed into proto-Nahuatl. This line of evidence, if widely accepted, is the one way one would be able to definitively demonstrate a Nahuan presence in Central Mexico in the Classic period. This, however, has not yet been integrated into the general view of Nahuan language history.

Previous studies of Nahuan language history have focused on relative dating, based on contact between different stages of Nahuan languages and other languages of the Mesoamerica. If proto-Nahuatl as reconstructed by comparative historical linguists shows signs of having been influenced by certain other languages, either in the form of loanwords or grammatical influence, then we may conclude that those languages were in contact with pre-Nahua. If influence from a specific language can be reconstructed only in some Nahuan varieties, or in one of the two branches of Nahuan, then we may conclude that the contact took place after that variety or branch had split off from its previous stage. These arguments, based on evidence of contact and the timing of different developmental stages of Nahuan constitute much of the basis of the models of early Nahuan migrations (see e.g. Dakin and Wichmann 2001; Kaufman and Justeson 2007, 2009). However, a close analysis of data from loan words in proto-Nahuan is outside of what can reasonably fit in this paper (see Pharao Hansen forthcoming b).

## The Two-Wave Model of Nahuan migrations

Since the 1980s, the consensus among previous models of Nahuan origins have been based on the idea that Nahua originates outside of Mesoamerica and migrated into in Mesoamerica in two successive waves. The first wave has been considered likely to be associated with the Toltec expansion in the Early Postclassic. The second wave has been understood to represent the arrival of the so-called Aztlan migrants, a group of Nahuatl speaking tribes who migrated from a place mentioned by the migration myths as *Aztlan*, and which developed into the Tepaneca, Acolhua, Colhua, Xochimilca, Chalca, and Mexihca, groups that all lived in the Valley of Mexico, around the lake of Texcoco at the time of European invasion (see e.g. Canger 1988; Monzón and Roth Seneff 1990). The two-wave model is supported primarily by the concordance between the fact that Nahuan languages are divided into an Eastern and a Western branch, and by Nahuan migration narratives that describe the Nahuan inhabitants of the Valley of Mexico as recent arrivals who replaced earlier groups, some of which were also Nahua speaking. There are, however, also other scholars who have argued that

Nahuas must have had a longer presence in Central Mexico and that early Nahua-speakers would likely have been present at Teotihuacan, including Dakin (2003, 2017, 2021; Dakin and Wichmann 2001); and the above-mentioned scholars who have suggested Nahua readings for Teotihuacan writing (Cowgill 1992; King and Gómez Chávez 2004; Taube 2000; Whittaker 2021).

Among the two-wave models, the main outstanding questions have been: 1) The exact location of the proto-Nahua community, and 2) when the migrations took place.

Regarding the location of Proto-Nahuatl, the existing proposals are: Either a proto-Nahua homeland on the northern edge of Mesoamerica between Coracholan and Pamean (in the area labeled Guachichil in Figure 9.1) as proposed by Kaufman (2020), who favours a late arrival in Central Mexico around the fall of Teotihuacan in the sixth century; or a homeland in Nayarit, together with Cora and Huichol, as proposed by Dakin (2017). A third proposal, by Beekman and Christensen (2003) based on archaeological evidence for population movements from the Bajío into the Valley of Mexico in the sixth century, has suggested the Bajío area as a potential place of origin for the proto-Nahuas. This suggestion has not been backed by any specific linguistic arguments, but it is potentially compatible with both Dakin's model and my own. These three proposed proto-Nahua or pre-Nahua homelands are represented in Figure 9.2.

**Kaufman's model**

The most detailed description of Kaufman's model of Nahuan migrations is provided in his 2020 manuscript, entitled "Olmecs, Teotihuacaners, and Toltecs: Language History and Language Contact in Meso-America".

Kaufman posits the Nahuan homeland on the Northern edge of Mesoamerica, north of Pamean languages and between the Huastec, and Coracholan languages (in the area where Guachichil is spoken on Figure 9.1, more or less in what is today San Luís Potosí). He proposes that proto-Nahuas migrated in a single group into Mesoamerica after AD 500 (around the time of Teotihuacan's collapse) and settled around Tula, Hidalgo and the northern part of the Valley of Mexico. Pochutec moved south to the Oaxacan coast soon after that and Eastern Nahuas moved out of the Valley of Mexico starting around AD 800. The Western Nahua expansion first into the valley of Toluca and then towards the Pacific coast began around AD 1000. Kaufman suggests an identification of the Toltec of Tula as a continuation of the original proto-Nahuas, and the first politically dominant Nahua city-state (Figure 9.3).

There are two elements of Kaufman's model that are very particular (and perhaps even peculiar). One is that he proposes a migration of proto-Nahuas in bulk from the northern edge of Mesoamerica and into the Valley of Mexico. The other is that rather than considering the late-coming Chichimec "barbarians" described by the ethnohistorical migration narratives to have been late-coming Nahuas and the ancestors of the Mexica, he suggests that they may have been Otopame speakers who only adopted Nahuatl once they arrived in the Valley of Mexico after AD 1200 (Kaufman 2020: 25). Both elements strike me as being so counterintuitive that they require a good deal more argumentation than Kaufman provides. And they also seem mutually contradictory: The argument that Kaufman makes for the move of proto-Nahua from San Luís Potosí region to the Valley of Mexico in bulk, is that this is required to explain the presence and sequence of loans first from Téenek and then northern Mixe-Zoque and Totonac. As Kaufman postulates that these loans must have entered before proto-Nahua split, it would require a single migration from a place adjacent to the Huastec region into contact with northern Mixe-Zoque and Totonacan. Another option would surely be that proto-Nahuatl developed in a multi-lingual environment, in contact with speakers of both Totonac and Huastec at the same time (and/or that the number of borrowings is perhaps overstated). Secondly, if the Mexica ancestors switched from a non-Nahuan, probably Otopamean language, to Nahuatl, then why does the Nahuatl spoken by the Mexica and other late-coming tribes not show any signs of an Otopamean substrate? Surely the Chichimecs would have had to transfer some traits from their original mother tongue to their new one, especially given how different these language families are. But to the contrary Kaufman completely rejects the notion of any Otopamean loans in proto-Nahua (I have myself identified about five borrowed lexical roots, and suggested two borrowed grammatical morphemes borrowed from Otopamean/proto-Otomian into pre-Nahua (Pharao Hansen forthcoming b).

One of several weaknesses of Kaufman's model for Nahuan language history is that it does not build on a systematic dialectological analysis of the distribution of different traits among the Nahuan varieties. He plainly states that he does not intend to justify his internal classification of Nahuan with data but refers to Canger (1988) for data and arguments (which he nevertheless also states that he does fully not agree with [Kaufman 2020: 22]). A deeper critique of other methodological weaknesses of Kaufman's method, particularly his method for positing loans between languages and for inferring early locations of languages from his posited loans, is beyond the scope of this paper.

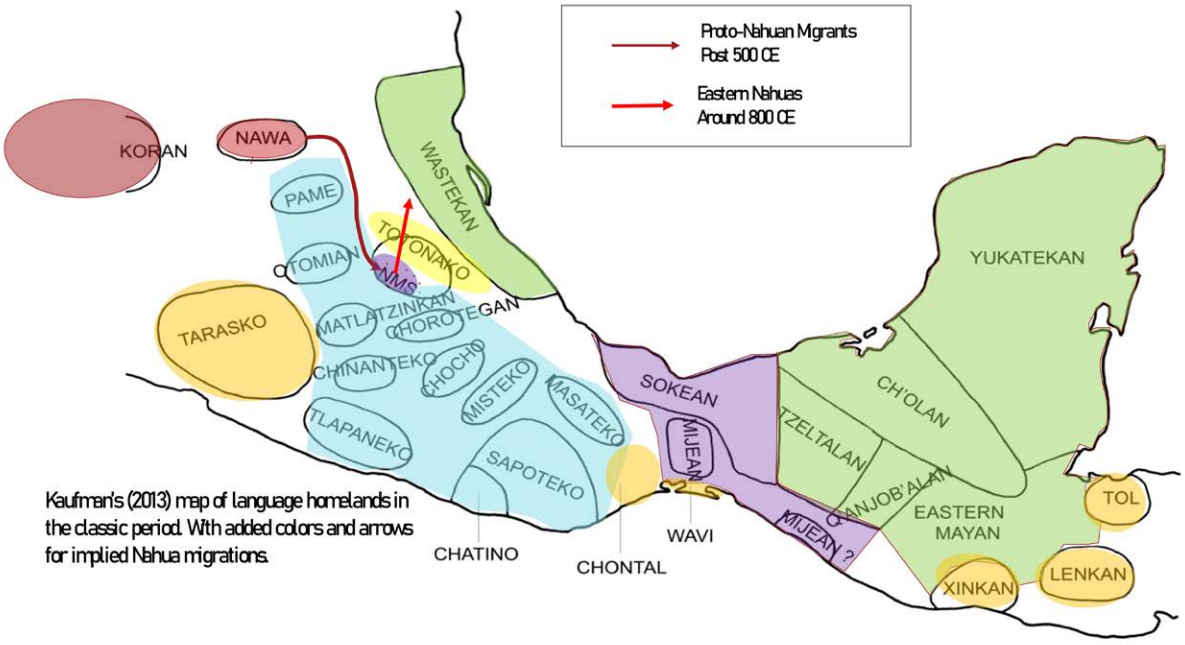


**Figure 9.3:** Map of Kaufman's proposed home territories of various branches of Mesoamerican language families. Since Kaufman sees all these groupings as having been formed by AD 1000 or long before presumably this also represents approximate locations proposed for the families during the Classic period (note Kaufman's use of alternative spellings for groups mentioned with traditional spellings in this paper). I have added colours and the arrows demonstrating the route Nawas (Nahuas) could have taken into the Valley of Mexico at around AD 500 (map by M. Pharao Hansen adapted from Kaufman 2020).

Since Kaufman's model builds mostly on evidence from loan words, the primary way to argue against it is by demonstrating which of his proposed loans are questionable (already done by Wichmann [1999] and Dakin in several works) and arguing against his overall assessment of the intensity of loans from various sources into proto-Nahua. A close analysis of Kaufman's proposed borrowings is given in Pharao Hansen (forthcoming b) where I show that many (in fact most) of his proposed borrowings can equally well be considered to be either inherited from earlier stages of Uto-Aztecan, to be late borrowings into regional varieties of Nahua, or to be borrowed in the opposite direction from Nahua. Later in this paper, I propose an alternative model of Nahuan migrations, this model agrees with Kaufman that the basic split between East and West Nahuan must have happened near the Valley of Mexico, but it disagrees with his timing of the entry of Nahuas into this area, and with his proposal of influence from an undocumented Mixe-Zoquean language.

## Dakin's Model

Dakin's model is developed in several publications but presented in coherent form in her recent works (Dakin 2017, 2021). Her model, as given in Dakin (2017) (Figure 9.4), posits a Nahuan homeland together with the Coracholan homeland in Nayarit/Jalisco/Durango, but she sees Nahuan as a separate linguistic group from Coracholan within Uto-Aztecan. She proposes that Eastern Nahuan moved southeast already before the Classic period and came to be one of the major languages of Teotihuacan during its apogee. Dakin's view of Nahua at Teotihuacan is based on her proposal of several early loans from Nahua into other Mesoamerican languages, particularly Maya. She then suggests that Western Nahuan remained in close contact with Corachol speakers adopting several linguistic traits from them, before beginning their migrations south along the Pacific coast (becoming the western peripheral dialects) and inland towards Central Mexico (becoming the central Nahuatl of the "Aztlan migrants"). Through the Epiclassic, Western-Central Nahuas would then gradually push Eastern Nahuas further eastward and come to dominate Central Mexico in the Postclassic.

Dakin's analysis is based on consideration of the distribution of dialect traits between the eastern and western branches. She sees the traits defining the western branch as innovations, likely resulting

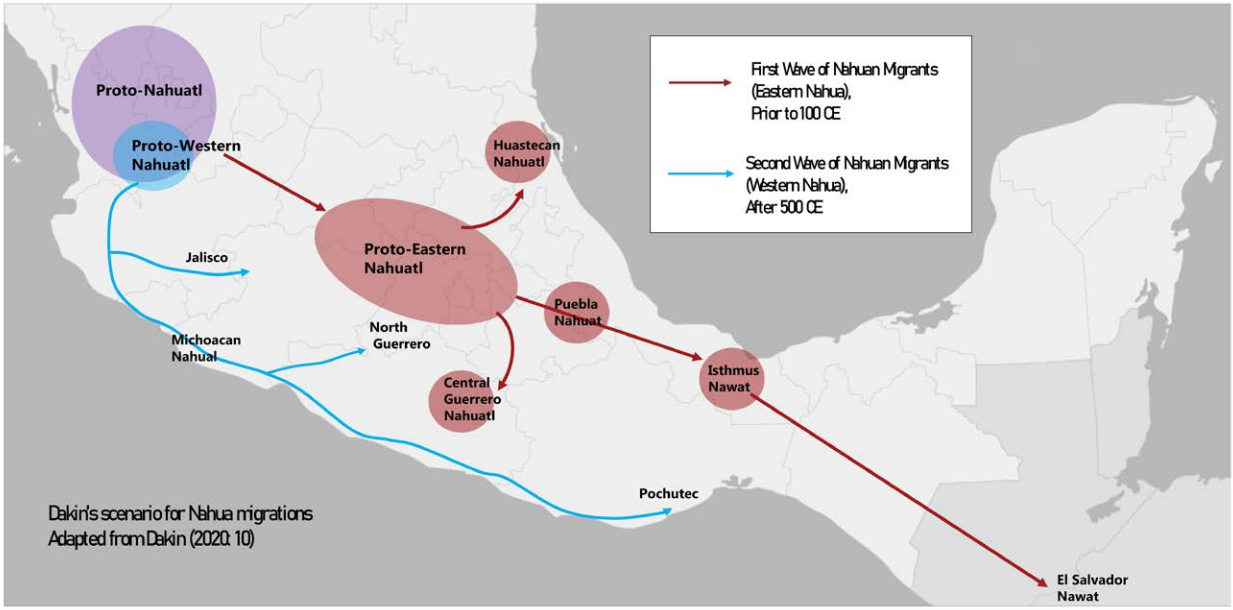


**Figure 9.4:** Map of Dakin's model for Nahua migrations (map by M. Pharao Hansen adapted from the Dakin 2021: 2183).

from contact between Corachol and Western Nahua.[3] But I have myself argued against this interpretation demonstrating that most of the traits Dakin suggests to be Corachol influence in Western Nahua are not in fact exclusive to that branch, but rather must be reconstructed for proto-Nahuatl as a whole, and for proto-Corachol-Nahua (Pharao Hansen 2024).

Dakin does not agree with Campbell and Langacker (1978) that proto-Nahua has passed through the same phonological developments as Coracholan, which would make proto-Corachol-Nahuan a genetic grouping from which proto-Nahua would have then split. She also does not seem to accept my grammatical, lexical and phonological arguments for the grouping (Pharao Hansen 2020, 2024).

In Dakin's internal classification of Nahuan, an important element (with which I agree) is the rejection of Pochutec as a particularly early split-off from proto-Nahua. Instead, Dakin has consistently argued that Pochutec is best located within the western peripheral branch, most closely related to the languages in Michoacan, Durango and northern Guerrero.

In other work, Karen Dakin (1981, 1996) has also been a proponent of the existence of a Nahua *lingua franca* spoken among long distance traders in the Postclassic. This lingua franca would be the source of many of the Nahuan loan words in Mayan languages (both highland and lowland). This proposal is not specifically tied to her more recent migration models, although I think it probably should be.

From my point of view the biggest problem with Dakin's model is that she considers the Postclassic Nahua migrations of the Western branch to begin in Nayarit. This is squarely contradicted both by the distribution of dialectal isoglosses as I show below, but also by the evidence that strongly suggests that the Nahuan dialects of the Western Periphery are most likely communities that learned a central Nahuan variety as a second language, representing a Westward expansion from Central Mexico and not the other way round. The Central Nahuan variety that these communities adopted, might very well be the lingua franca proposed by Dakin herself.

## New Model: Proto-Nahuatl centred in the Valley of Mexico

The new model of the Nahua expansion has developed gradually in a process in which I have worked to achieve a full view of the Nahuan dialect panorama and their relations with other Uto-Aztecan languages. The aim has been to develop an understanding distribution of historically significant dialect traits, which are innovations, and which are retentions, and of their

[3] For example, she considers that the presence of the past tense augment proclitic *o-* in western Nahua and its absence in Eastern Nahua, suggests that this was borrowed from the Coracholan past tense prefix /*wa-*/*-u-*/ after the split-off of Eastern Nahua. Similarly, she considers that Western Nahua words that begin in /*ye-*/ but which begin with /*e-*/ in Eastern Nahua, suggests that these words have been influenced by the Coracholan cognates that begin with /h-/, with Western Nahuas mimicking the initial /*h-*/ (which doesn't exist initially in proto-Nahuatl according to Dakin) by adding an initial /*y-*/.

geographical distribution. But just as archaeological facts do not tell their own story, neither do linguistic facts, they also need interpretation and for my interpretation several insights that I have from other scholars have proven crucial.

First, the status of classical Nahuatl. "Classical" Nahuatl is what most people think of as "Nahuatl", but it is, in reality, simply one variety of Nahuatl and one that arose under very specific socio-historical conditions in a very specific environment. Una Canger (2011) has argued that what we know as Classical Nahuatl is really a colonial written form of the spoken language that developed in the metropolis of Tenochtitlan, where speakers of all the various Nahuan varieties interacted. For me this was an important insight because it means that we should not work to classify colonial written Nahuatl as ether belonging to the Eastern or Western branch of Nahuatl—because it is inherently a dialect mixture exhibiting traits from both branches. At the same time, regardless of where they are produced, colonial Nahuatl texts are usually written in this Central Mexican variety—because this was what was taught as a written language, and written texts do therefore not represent the spoken variety of the location where they were written (though they may have subtle influences from the local spoken variety). This means that to understand the distribution of dialectal traits we should focus on data from contemporary spoken Nahuatl, even though it is registered much later.

Second, when comparing with the other Uto-Aztecan languages, Nahuatl evidences a completely different typological profile. This is of course due to extensive contact with the Mesoamerican Linguistic Area, where unrelated languages have come to share many features through centuries or millennia of contact (Campbell *et al.* 1986). The features of the Mesoamerican language area are found in all Nahuan varieties, also the ones spoken on the northern edge of Mesoamerica such as those in Durango (which cannot be explained by Dakin's model). This means that these features must be reconstructed for proto-Nahuatl—making proto-Nahuatl already a fully Mesoamerican language. The intensity of linguistic changes that must have taken place in the process that changed pre-Nahuan from a Southern-Uto-Aztecan language into the fully Mesoamericanised proto-Nahuatl are truly staggering and are of the kind that can only be explained by very intense language contact. At the same time, proto-Nahuatl also had a full and rich vocabulary associated with all aspects of maize agriculture, which is not easily explainable if proto-Nahuas inhabited the arid plains of San Luis Potosi as suggested by Kaufman. This, to me, suggests that it is highly unlikely that proto-Nahuatl developed on the edge of Mesoamerica spoken by nomadic hunter-gatherers, rather it must have developed in the heart of the Mesoamerican cultural and linguistic area (as also argued by Hill 2019).

Another important piece of the puzzle supplied by Canger is her argument that the varieties of the Western Periphery (Durango, North Guerrero, Jalisco, Michoacan and Toluca) do not represent an ancient layer of Nahuan. Canger (2017) argues that these varieties represent communities that originally spoke other languages but learned Nahua as a second language in the Late Postclassic (during the Aztec expansion). There is specific historical evidence for this in the case of northern Guerrero, where colonial records tell that the population was originally speakers of Chontal but were replaced by Nahuatl speakers by the Aztec Tlahtoani Ahuitzotl after a failed rebellion against Aztec hegemony (Canger 2017). On the coast of Michoacan, where Nahual is spoken today, the *Relaciones Geográficas* specifically mention that the communities that are today Nahuatl-speaking were speakers of other languages in the sixteenth century, but that they also spoke "Nahuatl corrupto" as a second language used for interethnic communication (Harvey 1972). If the western peripheral varieties are late and represent the westward expansion of a Nahua linguistic hegemony under the Aztec, then the centre of dispersal of Western Nahua is not in Nayarit, but in Central Mexico. Consequently, the original split between East and West would have also happened in Central Mexico.

The final crucial piece regards the place of the Pochutec language within the Nahuan family tree. Pochutec was a Nahuan variety spoken on the Pacific Coast of Oaxaca and documented by Franz Boas in 1912, when the language was already in decline. It is, at least superficially, very different from the better-known varieties of Nahuatl, and therefore it has been generally assumed that Pochutec represents a very early branch of Nahuan, splitting before all the others, including many conservative traits. Already in 1983, Dakin argued that some of these traits were not conservative, but better understood as innovative and that rather Pochutec shows many of the traits of the Western Branch. In earlier work, I found it to be safer to follow the consensus established by Campbell and Langacker (1978) that saw Pochutec as the earliest branch (e.g. Madajczak and Pharao Hansen 2016; Pharao Hansen 2014), but a better appreciation of Dakin's arguments and a closer analysis of the Pochutec data has meant I can no longer sustain this conclusion. If, instead, we see Pochutec as a highly innovative language developing from the varieties of the western periphery in close contact with the Otomanguean languages of Oaxaca, then that means that Pochutec is not, after all, a crucial variety for reconstructing the earliest layers of Nahuan. In traditional glottochronology, which estimates the splitting date between varieties from the percentage

of shared vocabulary, Pochutec often appears very ancient, because of its many borrowings. However, this is precisely an example of the inherent weakness of this method: in situations of intense language contact, languages may adopt a lot of borrowed vocabulary very quickly—for example, when a language is acquired as a second language by a parent generation, and then passed on as a first language to the next generation. Considering Canger's argument that the languages of the Western Periphery are precisely learned in this way, we should expect a relatively high percentage of borrowings in these languages. Interestingly, as will be shown below, Pochutec also shares most of its other diagnostic features with the western peripheral branch.

All in all, taken in combination, these insights suggest the possibility of proto-Nahuan developing in Central Mexico prior to the split between Eastern and Western branches, and that glottochronological results suggesting a very old splitting date for Pochutec must be regarded as misleading. The next section provides an overview of the dialectological data that is relevant for this argument.

## Dialectological data

In various publications both separately and jointly, Dakin and Canger have provided the dialectological basis for distinguishing between the Eastern and Western branches of Nahuan (Canger 1988; Canger and Dakin 1985; Dakin 2000). The main diagnostic traits established by Canger and Dakin are:

| | **West Nahua** | **East Nahua** |
|---|---|---|
| Words beginning with *e/ye* (including words for 'wind', 'blood', 'three', 'skunk', 'liver') | */ye/* (*yehyekatl, yestli, ye:yi, yelli*) | */e/* (*ehekatl, estli, e:yi, elli*) |
| Words with vowel pattern *i-i* vs *i-e* pattern (words for 'maize', 'stomach', 'nail', 'grind', 'maize-masa') | *i-e* (*sentli, ihte, iste, tesi, textli*) | *i-i* (*sintli, ihti, isti, tisi, tixtli*) |
| Absence or presence of past tense prefix *o-* | presence (*o:wets* 'he/she fell') | absence (*wetski* 'he/she fell') |
| Modal clitics (*ok, san, ya*) preceding or following the clause they modify | preceding | following |
| Use of plural suffix *-tin* | yes, but also *-meh* | no, preference for *-met* (except *-tinih* in la Huasteca) |

To these criteria, I have been able to add several additional traits that follow the same pattern (Pharao Hansen 2014):

| | **West Nahua** | **East Nahua** |
|---|---|---|
| Vowel harmony turning forms with *e-a* vowel pattern into *a-a* | *e-a* *yeka* 'nose', *wehka* 'far', *seppa* 'once', **yeha* 'he/she/it. | *a-a* *yaka* 'nose', *wahka* 'far', *sappa* 'once', *yaha* 'he/she/it' |
| Negation with *ahmo* or primarily with other forms. | *ahmo* 'no/not' | various forms |
| Pronouns with the form *-ehwa* vs *-eha/-aha* | *-ehwa* *yehwa* '3.p.sg. pronoun' | *-eha/-aha* *yeha/yaha* '3.p.sg. pronoun' |

The basic East-West split as described by the isoglosses mentioned above, is by now very well supported, and must be considered the deepest and most significant division within the Nahuan family. But there are also subdivisions within each area that can be defined by other isoglosses.

Within the Eastern branch, there are several important isoglosses: The easternmost varieties, in the central highlands of Puebla, on the Isthmus, in Tabasco, in Guatemala (as seen in the Nahua sermon *Teotamachilizti*) and in El Salvador (and the varieties of Nicaragua, etc.) have all changed the proto-Nahuatl *tl*-sound to a plain /t/. Contradicting earlier classifications that saw the *tl-t-l* division to be the major distinction among Nahuan languages, Canger (1988) argued that this should not be considered a basic diagnostic feature, as it is very likely to occur independently in different varieties. Nevertheless, given that the eastern *t*-varieties share a number of other features and are found in a geographically contiguous area (at least historically), the *tl>t* change seems to have been very likely inherited among them, representing a continuous migration. Within Eastern Nahua this changes the Isthmian branch from the Eastern dialects of the Huasteca and central Puebla. Another distinction is the use of locative verbs. The Huasteca, central Puebla and Isthmus varieties use locative verbs based on the verb *ok* (Huasteca *itstok/eltok*, central Puebla *yetok*, Isthmus *onok*) but the varieties in Tabasco, Guatemala and El Salvador use the verb *nemi* (Posadas Benuto and Pharao Hansen 2024).

| | **Eastern Core** | **Eastern Periphery /Isthmian** |
|---|---|---|
| **Change of *tl* > *t*** | /tl/ conserved in la Huasteca and Guerrero | /tl/ changed to /t/ in Central Puebla, Isthmus, Tabasco, Guatemala, El Salvador |
| **Locative verbs** | verbs with *ok* in la Huasteca, Central Puebla, Isthmus | *nemi* in Tabasco, Guatemala and El Salvador |
| **Negations** | *ax-* (Huasteca), *x-* C. Guerrero), *ah-* (Isthmus), *xa* (central Puebla) | *ayak* (Isthmus, Guatemala, Tabasco), *até* (Tabasco), *nite* (Tabasco, *inte, tesu* (El Salvador) |

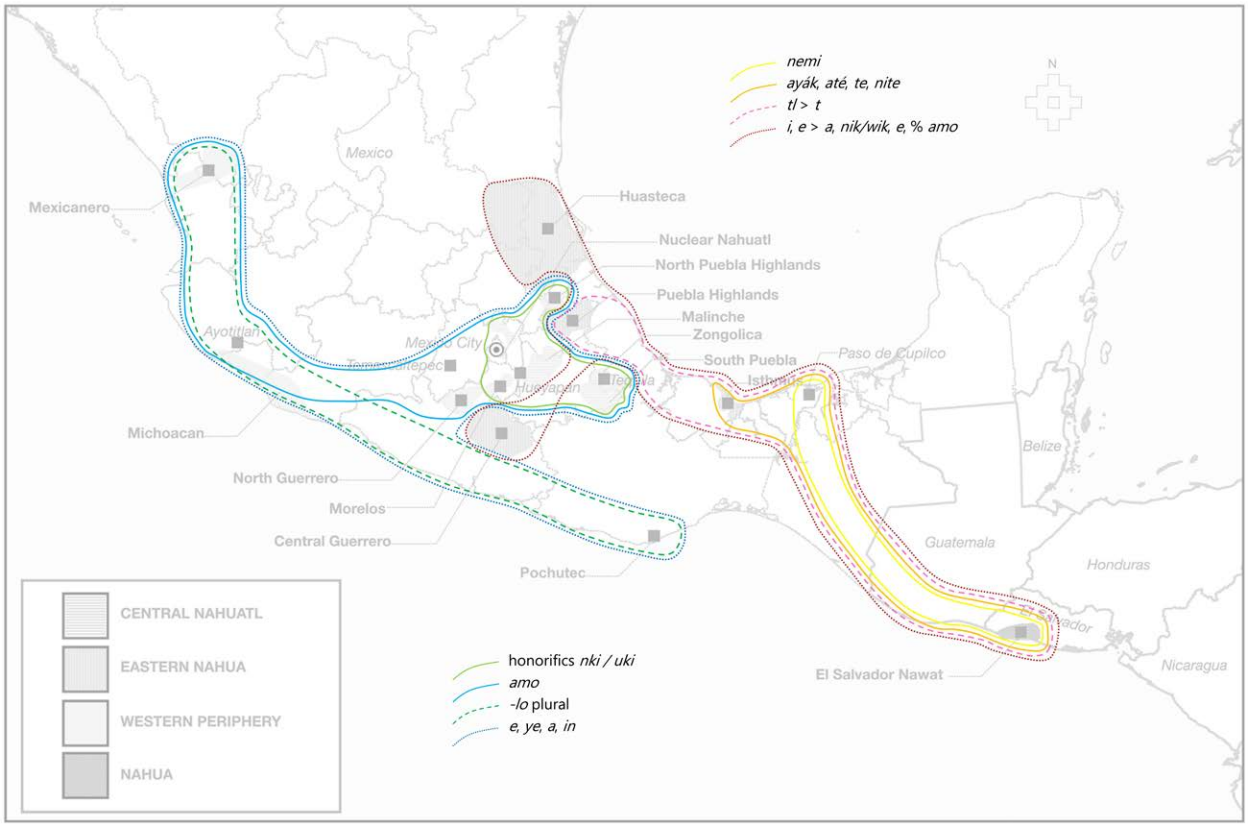


**Figure 9.5:** Map of linguistic isoglosses that define the distribution of Western and Eastern branches of Nahuan. The two regions overlap in southern Puebla, which can be proposed as the centre of diffusion of Eastern Nahuan with the overlap being caused by subsequent eastward expansion of Western/Central Nahuas. The nesting of the isoglosses suggest that the peripheries are innovative, and that the spread happens from Central Mexico and towards the peripheries (map by M. Pharao Hansen and Christophe Helmke).

These changes are nested within the Eastern branch and describe a dialect chain, emerging from central Puebla, with changes progressively advancing as the Eastern branch extended southward. This pattern strongly suggests a chain migration with an original population expanding eastward from Puebla to the Isthmus, south through Chiapas and Guatemala until it arrived in El Salvador and deeper in into Central America. Each location along the way introducing its own innovations that are inherited by those further down the chain, but not shared with those behind.

Within the Western branch there is a distinction between the Western periphery which has introduced a new plural subject marker *-lo* for verbs in the present tense to instead of the /*-h*/ or /*-ʔ*/ used in other varieties. The western peripheral dialects also frequently change /**tl*/ to /l/ or /ɬ/ or /t/, but since they do not agree in this, it seems to be independent innovations. The *-lo* plural isogloss includes both Durango, Jalisco, Michoacan, north Guerrero, and importantly, Pochutec. The Central dialect area is defined by the use of complex honorific systems that are mostly lacking both in the Eastern branch and in the Western Periphery, and which is likely an innovation that arose in Tenochtitlan in the thirteenth to fourteenth centuries (the different central varieties employ very different honorific systems). Also, a feature of the Central area is the use of preterit-type adjectives ending in *-nki* and *-wki* (e.g. *toto:nki* 'hot' rather than *toto:nik, xoxo:wki* 'green' rather than *xoxo:wik*) (originally described by Canger 1980).

Figure 9.5 plots the distribution of the main isoglosses that set apart and link the Eastern and Western branches and their sub-branches. Demonstrating the pattern of overlap in Central Mexico, with nesting expansions towards the east and west. The nesting of these isoglosses, seen in combination with their geographical distribution provides strong support for a scenario in which proto-Nahuatl was spoken within the area currently occupied by the Central

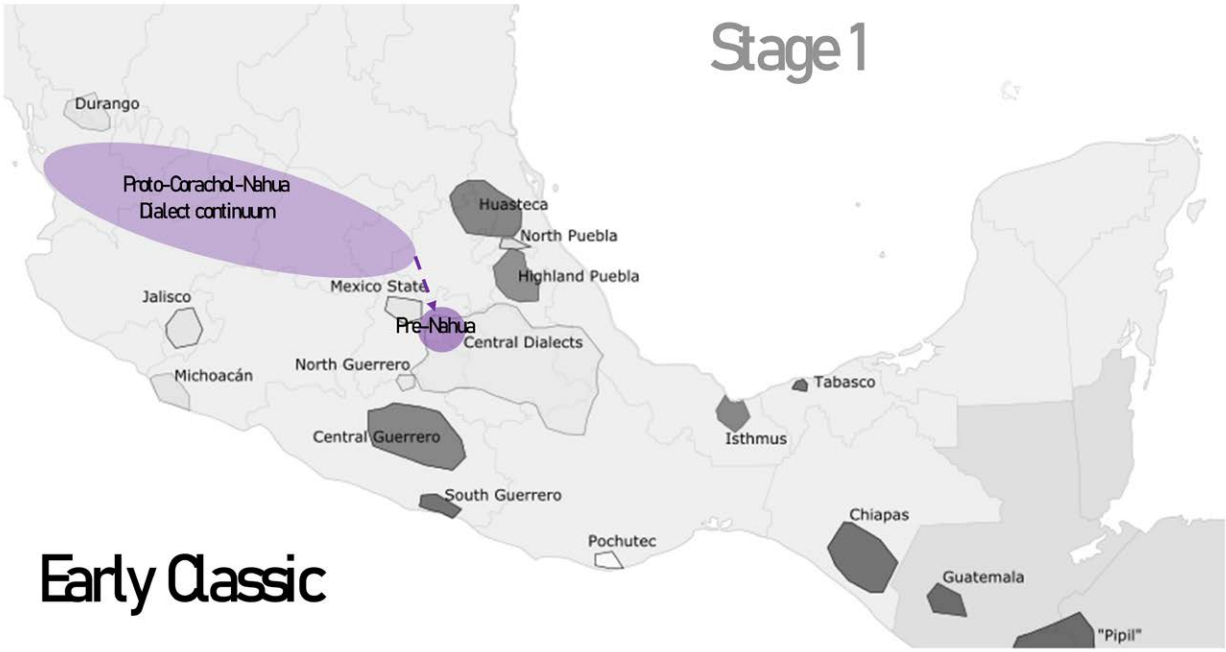


**Figure 9.6:** Split of pre-Nahuan from Proto-Corachol-Nahuan in the Early Classic, overlaid on a map of the distribution of documented Nahuan varieties (map by M. Pharao Hansen).

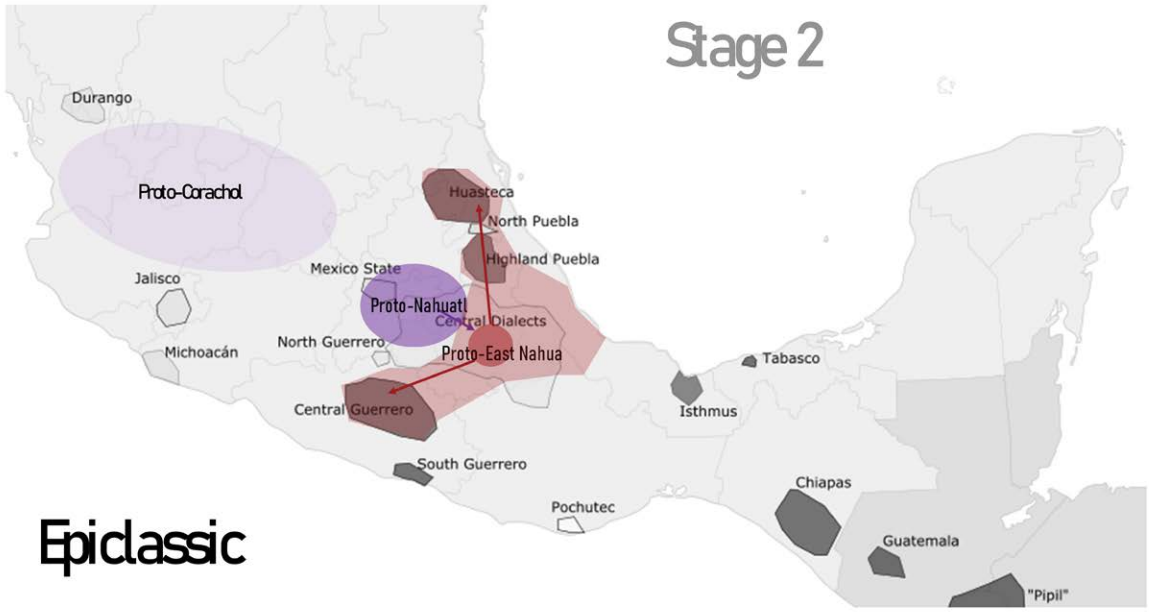


**Figure 9.7:** Model of the split-off of proto-East Nahua from Proto-Nahuatl at the beginning of the Epiclassic, and the subsequent expansion of the East Nahuas into adjacent regions (map by M. Pharao Hansen).

dialects, and mostly likely in the Valley of Mexico. Nahuan languages would then have begun to spread, from Central Mexico, first towards the east in the Epiclassic and then towards the west in the Postclassic.

### A scenario for Nahuan spread in the Epiclassic

Based on these arguments, a scenario for the spread of Nahuan, which sees proto-Nahuatl as developing in the Valley of Mexico would include three stages:

In stage one (Figure 9.6), in the transition from Preclassic to Early Classic, pre-Nahuas make up the south-easternmost section of a proto-Corachol-Nahuan dialect continuum, which reaches into Central Mexico by the Early Classic. Here pre-Nahuas come into contact with inhabitants of Teotihuacan and whichever language(s) were spoken by the majority of the population there—likely Otomanguean and possibly Totonacan and Huastecan languages (less likely Kaufman's proposed Mixe-Zoquean-speakers). Here, through contact with these languages during the Classic period, the pre-Nahuan language is Mesoamericanised, turning it into proto-Nahuatl.

In stage two (Figure 9.7), at the decline of Teotihuacan, the Nahua-speakers of Teotihuacan split, with one group moving East into the valley of Puebla towards Cholula and Cantona - becoming the proto-Eastern Nahuas and consolidate in southern Puebla in the first part of the Epiclassic. The proto-East-Nahua language was characterised by *i*-forms of words like *sintli, istitl, ihti,* and *e*-forms of words like *estli*, *epatl* and *ehekatl*. Gradually it began a process of vowel assimilation in which vowels /i/ and /e/ would assimilate to the vowel of the subsequent syllable (**yeha* > *yaha*, etc.). This explains the distribution of these traits in the Huasteca and Guerrero.

Simultaneously, the connection between the Nahuas and the Coracholan languages is severed as peoples (speakers of Western Nahuatl) of the Bajío area move southeast toward the Valley of Mexico perhaps bringing with them the Coyotlatelco ceramic complex (as argued by Beekman and Christensen 2003).

Eastern Nahuas now located in southern Puebla begin to expand south into Guerrero where they come into contact speakers of Cuitlatecan and Chontal, north into Puebla and La Huasteca in close contact with Totonac and Huastec speakers, and southeast into central and southern Veracruz in contact with Mixe-Zoque speakers. They also substituted both the negation **ka* and the locative verb **ka(t)* with other forms, varying form area to area.

In stage three, the Postclassic (Figure 9.8), Western Nahuatl expanded both westward and eastward. This expansion could perhaps be seen as associated with the rise of the Toltec high culture at Tula Hidalgo (i.e. linking them with Western Nahua rather than Eastern Nahua as Kaufman and Canger have done). This spread could perhaps also be understood as the spread of a trade language (*lingua franca*) along the western trade routes. This trade language would have been a simplified version of Central Nahuatl, showing the signs of simplification suggested by Canger (2017). Speakers of other languages who began to tap into the Western Nahua trade network would have learned this variety of Nahuatl as a second language in places like Toluca, Jalisco, Colima, Michoacan, Nayarit—and all the way down the Pacific coast to Pochutla, Oaxaca.

Simultaneously, Central Nahuas begin to spread southward into the valley of Morelos and eastward

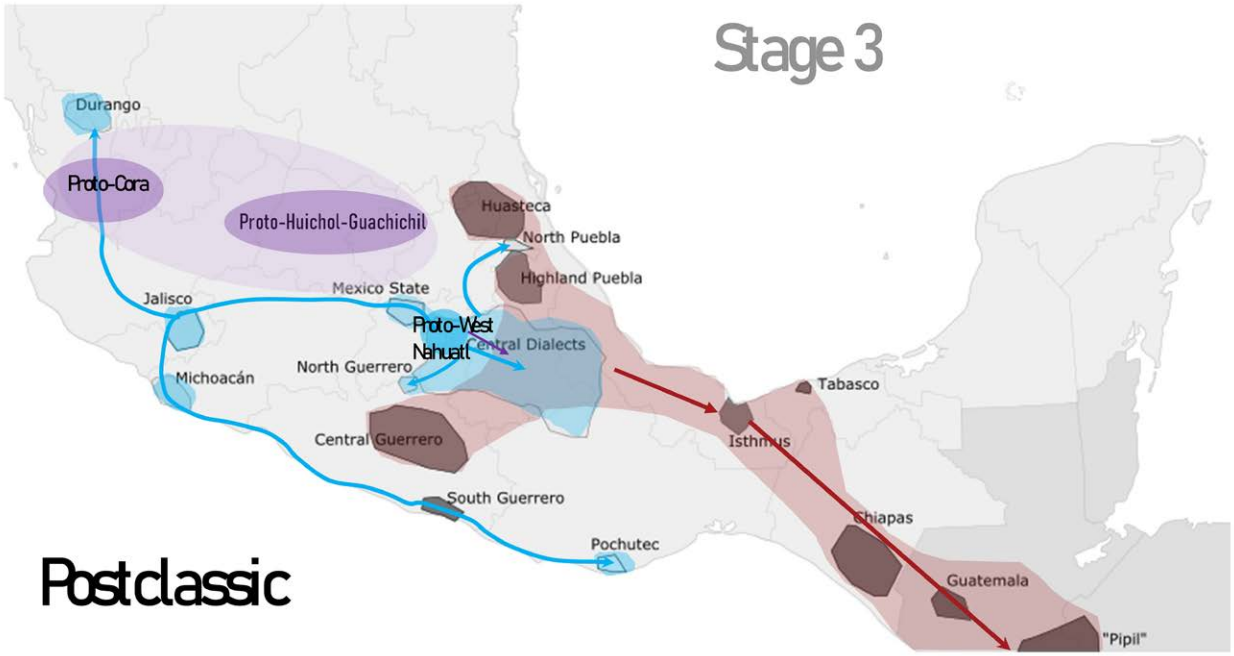


**Figure 9.8:** Postclassic expansion of Western Nahuas into the Western Periphery, and the formation of the central Nahuan dialect region, and the migrations of displaced East Nahuas into central America (map by M. Pharao Hansen).

into the valley of Puebla, where they push out Eastern Nahuas (and perhaps other groups such as Chocho-Popoloca speakers, and perhaps Chorotega-Mangue). This can be seen in the mixture of Eastern and Western traits in the eastern part of the Central Nahua area, suggesting an Eastern substrate (see e.g. Hasler Hangert 1996). Having been pushed out, the Eastern Nahua of Puebla (presumably speakers of a *t*-dialect of Nahua) would have moved southeast to the Isthmus, in southern Veracruz and Tabasco. From there, Eastern Nahuas perhaps accompanied by Chorotega-Mangue speakers, moved further southeast into Central America, establishing themselves in Guatemala, El Salvador, Nicaragua, and Costa Rica.

The main difference between this model and Kaufman's is that Nahuas arrived in Central Mexico at the beginning of the Classic period instead of at the end of it, and that the Nahua expansion begins already in the Epiclassic rather than only during the Postclassic. The main difference to Dakin's model is that the proto-Nahuatl homeland from where the Nahua migrations begin is located in Central Mexico, and not to the northwest.

The principal arguments against this model would be, the following:

If Corachol-Nahuan is not accepted as a valid genetic grouping within Southern Uto-Aztecan (contrary to Campbell and Langacker 1978; Greenhill *et al.* 2023; Pharao Hansen 2020, 2024), that would require a model with a separate pre-Nahua homeland outside of Mesoamerica from which their migrations would begin. This would be more similar to and align with Kaufman's and Dakin's models.

If we interpret the Nahuan migration narratives of the ethnohistorical sources to represent a historical migration of Western Nahuatl speakers into Mesoamerica, this would also suggest a model closer to Dakin or Kaufman's. However, while this is the traditional interpretation of the sources, the migration narratives do not actually state that the migrations were over long distances starting outside of Mesoamerica, rather than taking place between different locations in Central Mexico. This is an interpretation that comes from generations of scholars reading the narratives in the light of the knowledge that Nahuas must have originally come from the north, but without specific knowledge of their origins nor the timing of that process. While the ethnohistorical narratives are likely to have historical elements, and probably do preserve historical memory of migrations and ties to northwestern Mexico and the northern margins of Mesoamerica, we know that they were re-narrated and adapted to fit whichever was the most recent migration of the ethnic group recounting it, linking local dynasties with legendary rulers and even deities. The basic model of the narrative could already have been told among the pre-Nahuas of Teotihuacan describing their migrations from the Bajío into the Valley of Mexico, and subsequently reframed and retold by every subsequent Nahua ruling family who wished to use it to bolster their power.

**Implications for understanding the Epiclassic**

If the archaeological evidence shows the Epiclassic as a period of re-orientation and long-distance communication and trade, the linguistic evidence of Nahua expansions fit right in. In a period of only a few centuries, the Nahuas extended across Mesoamerica from the northwestern Pacific coast and deep into Central America. Observing the map of expansion of the Eastern and Western Nahua branches (Figure 9.8), it is conspicuous that the expansions seem to follow some of the major trade routes.

Eastern Nahuas expanded from the Epiclassic urban centres in southern Puebla towards the merchant port of Xicallanco on the Tehuantepec Isthmus, where they would have come into contact with Maya trade networks. To reach their eventual destinations in Central America, where trade goods such as quetzal feathers and Motagua valley jade originated, they would have had to travel through Maya territory, passing by such Maya Terminal Classic sites such as Seibal and Ucanal. They also moved north into La Huasteca and the Pacific Coast, source of the prized feathers of the scarlet macaw (*Ara macao*), and they also extended their trade network south into Guerrero along the Río Balsas.

Western Nahuas, in turn, seem to have maintained their trade ties westward and begun to develop them in the Early Postclassic, likely interacting directly with the Aztatlan tradition on the Pacific Coast (perhaps playing a role in it). On the Pacific Coast, they would have tapped into the trade in shells and been able to access feathers of the green macaw (*Ara militaris*). Central Mexico would have been a central hub between the Eastern and Western trade networks, and the apparent competition between Eastern and Western Nahuas might well have been a struggle to dominate the trade of exotic luxury goods that moved primarily from the southeast to the northwest.

In the archaeological interpretations, there has been a tendency to adopt the ethnic labels given in the ethnohistorical record. But most of this record is produced by those Western Nahuas who had come to dominate Central Mexico in the Postclassic, rather than by the Eastern Nahuas who had by then been pushed towards the peripheries. We may benefit from having this in mind when we try to figure out who

ethnohistorical groups like "*Olmeca-Xicallanca*" were in ethnolinguistic terms (remembering as cautioned by Testard 2017 that all mentions this group is from the colonial period, were applied retrospectively). Olmeca-Xicallanca means, in Nahuatl, 'people of *Olman* and *Xicallanco*'. In this, *Olman* of course refers to the Gulf coast of the Isthmus of Tehuantepec, and *Xicallanco* to the primary trade centre of that region. The sources were written at a time when these regions were inhabited by Eastern Nahua speakers who were the descendants of the people who were pushed out of southern Puebla in the Postclassic. When the sources say that the Olmeca-Xicallanca lived in the Cholula region in the Epiclassic, this may simply refer to the Eastern Nahuas (and Chorotegas) who were pushed eastward by the Western Nahua expansion in the Postclassic.

Among the Aztec, the different groups of long-distance traders were named in the same ways as ethnic groups from particular places, for example *Pochteca* 'people from *Pochtlan*' and *Oztomeca* 'people from Oztoman'—and, interestingly, among the barrios of Cholula were exactly Pochtlan and Oztoman (Ashwell 2004: 7, 11). If the Eastern Nahuas of the Cholula region, were working the trade routes towards the Gulf Coast, then they would have been likely to come to be known as Olmeca-Xicallanca by the Western Nahuas of the Valley of Mexico. This fits the argument of McCafferty (2021) who sees Cholula as a trade-hub oriented towards the ports of trade on the Gulf Coast.

This story of Nahua-speakers expanding as long-distance traders dominating trading posts along the major trade routes, differs from the more traditional narrative of Nahuas as a warrior people expanding their territory through military conquest. But perhaps it aligns better with the archaeological evidence, which seems to show increased communication and trade at long distances, and the emergence of new urban centres in visually conspicuous locations, but which has limited evidence of widespread warfare.

For archaeologists and historians, it may be frustrating that there are at least three different models for the Nahua expansion, and that it is not easy to determine which is more likely to be correct, without having a degree of specialised linguistic knowledge. Nevertheless, there are different kinds of evidence from disciplines other than linguistics that can be used to support or challenge this narrative.

First of all, the study of writing in Teotihuacan could potentially consolidate the model of proto-Nahuas originating there. If the proposed readings of Teotihuacan glyphs in a variety of proto-Corachol-Nahua are accepted, then this conclusion seems inescapable. If, in the future, other languages emerge as more likely candidates, whether Otomian, Totonacan (but omitting an unknown Mixe-Zoquean variety as implausible), then it can probably be rejected.

Similarly, population genetic studies may be able to find traces of population movements and different types of admixtures in different parts of Mexico. If Nahuas expanded through trade rather than conquest and demic expansion, we would probably expect a high degree of admixture with local populations, perhaps to the degree that Nahuas might be genetically indistinguishable from the original (now neighbouring) populations of the territories they inhabit. This would happen if the usefulness of Nahuatl as a language of trade, and its prestigious association with luxury goods, caused local populations to switch to Nahuatl over time. Alternatively, if Nahuas have an identifiable genetic profile, closely related to Uto-Aztecans in northwest Mexico, this would probably indicate a more recent expansion of entire communities, pushing away original Mesoamerican populations.

Finally, archaeological evidence may be able to support or contradict specific elements of the various scenarios. For example, there may be evidence of specific population movements that fit parts of some of the scenarios but not others. For example, the movements of people from the Bajío towards the Valley of Mexico at the end of the Classic period that described by Beekman and Christensen (2003), do seem like a probable movement of Uto-Aztecan speakers towards Central Mexico. This could be compatible with Dakin's model if these migrants were speakers of Eastern Nahua, but also with my model if the movement represents the entire proto-Nahua community shifting Eastward as part of the East-West split.

While I, of course, feel that my model is already better supported by evidence than the two previous ones, other scholars may not necessarily be so convinced. But as new evidence from epigraphy, genetics and archaeology emerges in the future, the probability of each of the three scenarios will change, perhaps allowing scholars to eventually feel confident that one model is much more likely to be correct than the others. Until then, we will continue to be intrigued and puzzled by the ethnolinguistic dynamics of Central Mexico during the Epiclassic.

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**References cited:**

Acuña, René
1982–1988 *Relaciones Geográficas de la Nueva España*. 10 vols. Universidad Nacional Autónoma de México, Mexico City.

Ashwell, Anamaría
2004 Cholula: su herencia es una red de agujeros. Parte II. *Elementos: Ciencia y Cultura*, Vol. 11 (54): 3–13.

Beekman, Christopher S. and Alexander F. Christensen
2003 Controlling for Doubt and Uncertainty Through Multiple Lines of Evidence: A New Look at the Mesoamerican Nahua Migrations. *Journal of Archaeological Method and Theory*, Vol. 10 (2): 111–164.

Beekman, Christopher and McEwan, Colin (eds)
2022 *Waves of influence: Pacific maritime networks connecting Mexico, Central America, and northwestern South America*. Dumbarton Oaks Research Library and Collection, Washington, D.C.

Campbell, Lyle and Terrence Kaufman
1976 A linguistic look at the Olmecs. *American Antiquity*, Vol. 41 (1): 80–89.
1985 Mayan linguistics: Where are we now? *Annual Review of Anthropology*, Vol 14: 187–198.

Campbell, Lyle and Ronald W. Langacker
1978 Proto-Aztecan vowels: part I, II, III. *International Journal of American Linguistics*, Vol. 44 (2–4): 85–102, 197–210 and 262–279.

Campbell, Lyle, Terrence Kaufman and Thomas Smith-Stark
1986 Meso-America as a linguistic area. *Language*, Vol. 62 (3): 530–570.

Canger, Una
1980 Five studies inspired by Nahuatl verbs in –oa. *Travaux du Cercle Linguistique du Copenhague.* Vol. 19. Copenhagen Linguistic Circle, Copenhagen.
1988 Nahuatl dialectology: A survey and some suggestions. *International Journal of American Linguistics*, Vol. 54 (1): 28–72.
2011 El nauatl urbano de Tlatelolco/Tenochtitlan, resultado de convergencia entre dialectos, con un esbozo brevísimo de la historia de los dialectos. *Estudios de Cultura Náhuatl* Vol. 42: 243–258.
2017 A Nawatl Dialect with a Shallow History. Unpublished paper. https://www. researchgate. net/publication/317887931_A_Nawatl_Dialect_with_a_Shallow_History_or_Is_the_Nawatl_dialect_area_known_as_the_Western_Periphery_a_True_Dialect_area_2017. Accessed June 15, 2018.

Canger, Una and Karen Dakin
1985 An inconspicuous basic split in Nahuatl. *International Journal of American Linguistics*, Vol. 51 (4): 358–361.

Cowgill, George
1992 Teotihuacan glyphs and imagery in the light of some early colonial texts. *Art, ideology, and the city of Teotihuacan*, edited by Janet C. Berlo, pp. 231–246. Dumbarton Oaks Research Library and Collections, Washington, D.C.

Dakin, Karen
1981 The characteristics of a Nahuatl lingua franca. *Texas Linguistic Forum*, Vol. 18: 55–68.
1983 Proto-Aztecan vowels and Pochutec: An alternative analysis. *International Journal of American Linguistics*, Vol. 49 (2): 196–203.
1996 El náhuatl de las Memorias: los rasgos de una lingua franca indígena. *Nuestro pesar, nuestra aflicción, tunetuliniliz, tucucuca*, edited by Karen Dakin and Christopher H. Lutz, pp. 167–189. Universidad Nacional Autónoma de Mexico, Mexico City.
2000 Proto-Uto-Aztecan *p and the e/ye isogloss in Nahuatl Dialectology. *Uto-Aztecan: Structural, Temporal, and Geographic Perspectives*, edited by Eugene Casad and Thomas Willett, pp. 213–219. Universidad de Sonora, Hermosillo.
2003 Uto-Aztecan in the linguistic stratigraphy of Mesoamerican prehistory. *Language Contacts in Prehistory*, edited by Henning Andersen, pp. 259–288. Amsterdam Studies in the Theory and History of Linguistic Science Series 4. John Benjamins Publishers, Amsterdam.
2017 Western and Central Nahuatl Dialects: Possible influences from contact with Cora and Huichol. *Language Contact and Change in Mesoamerica and Beyond*, edited by Karen Dakin, Claudia Parodi and Natalie Operstein, pp. 264–300. John Benjamins, Amsterdam.
2021 La Diversificación de la Lengua Nahua: Isoglosas Tempranas en Contexto. *La diversidad de las situaciones sociolingüísticas. Historia sociolingüística de México*, vol. 4, edited by Pedro Martín Butragueño and Rebeca Barriga, pp. 2173–2204. El Colegio de México, Mexico City.

Dakin, Karen and Søren Wichmann
2001 Cacao and chocolate: A Uto-Aztecan perspective. *Ancient Mesoamerica*, Vol. 11 (1): 55–75.

Davletshin Albert
2024 La clasificación léxico-estadística y la glotocronología de las lenguas tepehua-totonacas. *Estudios antropológicos en Veracruz: El Instituto de Antropología a 67 años*, edited by Yamile Lira López, pp. 333–377. Universidad Veracruzana, Xalapa.

Fowler, William R.
2019 The Pipil Migrations in Mesoamerica: History, Identity, and Politics. *Migrations in Late Mesoamerica*, edited by Christopher Beekman, pp. 285–326. University Press of Florida, Gainesville.

Gerhard, Peter
1983 *A guide to the historical geography of New Spain*. University of Oklahoma Press, Norman.
Greenhill, Simon J., Hannah J. Haynie, Robert M. Ross, Angela M. Chira, Johann-Mattis List, Lyle Campbell, Carlos A. Botero and Russell D. Gray
2023 A recent northern origin for the Uto-Aztecan family. *Language*, Vol. 99 (1): 81–107.
Harvey, H. R.
1972 The Relaciones Geográficas, 1579-1586: Native languages. *Handbook of Middle American Indians, Volume 12: Guide to Ethnohistorical Sources, Part One,* edited by Robert Wauchope and Howard F. Cline, pp. 279–323. University of Texas Press, Austin.
Hasler-Hangert, Andrés
1996 *El náhuatl de Tehuacán-Zongolica*. Centro de Investigaciones y Estudios Superiores en Antropologia Social, Mexico City.
Hill, Jane H.
2019 How Mesoamerican Are the Nahua Languages? *Migrations in Late Mesoamerica*, edited by Christopher Beekman, pp. 43–65. University Press of Florida, Gainesville.
*Historia Tolteca-Chichimeca* (1547–1560)
1976 Edited and translated by Paul Kirchhoff, Lina Odena Güemes and Luis Reyes García. Centro de Investigaciones Superiores del Instituto Nacional de Antropología e Historia & Instituto Nacional de Antropología e Historia, Mexico City.
Hopkins, Nick A.
2023 Language Isolates and Trade Routes in Pre-Columbian America. *Mexicon*, Vol. 45 (4): 87–95.
Houston, Stephen, John Robertson and David Stuart
2000 The Language of Classic Maya Inscriptions. *Current Anthropology*, Vol. 41 (3): 321–356.
Kaufman, Terrence
2017 Aspects of the lexicon of proto-mayan and its earliest descendants. *The Mayan Languages*, edited by Judith Aissen, Nora C. England and Roberto Zavala Maldonado, pp. 62–111. Routledge, London.
2020 (2013) Olmecs, Teotihuacaners, and Toltecs: Language History and Language Contact in Meso-America. Unpublished manuscript: https://www.researchgate.net/profile/Terrence-Kaufman/publication/340721651_MALP_2020/links/5e9a4336299bf13079a24ec9/MALP-2020.pdf
Kaufman, Terrence and John Justeson
2007 The history of the word for cacao in ancient Mesoamerica. *Ancient Mesoamerica*, Vol. 18 (2): 193–237.
2009 Historical linguistics and pre-Columbian Mesoamerica. *Ancient Mesoamerica*, Vol. 20 (2): 221–231.
King, Timothy and Sergio Gómez Chávez
2004 Avances en el desciframiento de la escritura jeroglífica de Teotihuacan. *La costa del Golfo en tiempos teotihuacanos, propuestas y perspectivas. Memoria de la Segunda Mesa Redonda de Teotihuacan*, edited by María Elena Ruiz Gallut and Arturo Pascual Soto, pp. 201–244. Instituto Nacional de Antropología e Historia, Mexico City.
Law, Danny
2017 Language contacts with (in) Mayan. *The Mayan Languages*, edited by Judith Aissen, Nora C. England, and Roberto Zavala Maldonado, pp. 112–127. Routledge, London.
Law, Danny and David Stuart
2017 Classic Mayan: An overview of language in ancient hieroglyphic script. *The Mayan Languages*, edited by Judith Aissen, Nora C. England and Roberto Zavala Maldonado, pp. 128–172. Routledge, London.
Madajczak, Julia and Magnus Pharao Hansen
2016 Teotamachilizti: an analysis of the language in a Nahua sermon from colonial Guatemala. *Colonial Latin American Review*, Vol. 25 (2): 220–244.
McCafferty, George G.
2021 Cholula: The Mall of [Meso] america. *Archeological Papers of the American Anthropological Association*, Vol. 32 (1): 54–65.
Monzón, Cristina and Andrew Roth Seneff
1990 La Dialectología de Toltecayotl y Mexicayotl? *Relaciones*, Vol. 11 (44): 119–156.
Pharao Hansen, Magnus
2014 The East-West split in Nahuan dialectology: Reviewing the evidence and consolidating the grouping. Paper given at the *Annual meeting of the Friends of Uto-Aztecan*, Tepic.
2020 ¿Familia o vecinos? Investigando la relación entre el proto-náhuatl y el proto-corachol. *Lenguas yutoaztecas: historia, estructuras y contacto lingüístico: homenaje a Karen Dakin*, edited by Rosa H. Rosales Yáñez, pp. 73–107. Universidad de Guadalajara & Centro Universitario de Ciencias Sociales y Humanidades & Unidad de Apoyo Editorial, Guadalajara.
2024 Sapir's Law and the Role of Accent in the Reconstruction of Proto-Corachol-Nahuan. *International Journal of American Linguistics*, Vol. 90 (2): 227–267.
forthcoming a Nahuan Relative Chronology: What would pre-Nahua have been like in the Classic period. *Relative Chronology*, edited by Florian Wandl and Thomas Olander, Advances in Historical Linguistics. LangSci Press, Berlin.
forthcoming b Loan Word Exchange in Western Mesoamerica. *Beyond recorded history: Unlocking the past through contact linguistics*, edited by Marwan Kilani and Rasmus Bjørn. De Gruyter, Berlin.
Pharao Hansen, Magnus and Christophe Helmke
2025 The Language of Teotihuacan Writing. *Current Anthropology*, Vol. 66 (5): 705–739.

Posadas Benuto, Paulina and Magnus Pharao Hansen
2024 *The diversity of Nahuan locative constructions* (preliminar version). https://www.academia.edu/121910184/The_diversity_of_Nahuan_locative_constructions_versi%C3%B3n_preliminar_mayo_2024_

Robertson, John and Stephen Houston
2015 The Huastec Problem. *The Huasteca: culture, history, and interregional exchange*, edited by Katherine A. Faust and Kim N. Richter, pp. 19–36. University of Oklahoma Press, Norman.

Stuart, David
2000 The "Arrival of Strangers": Teotihuacan and Tollan in Classic Maya History. *Mesoamerica's Classic Heritage: From Teotihuacan to the Aztecs*, edited by David Carrasco, Lindsay Jones and Scott Sessions, pp. 465–514. University Press of Colorado, Boulder.

Taube, Karl
2000 The Writing System of Ancient Teotihuacan. *Ancient America*, Vol. 1: 1–56.

Testard, Juliette
2017 Arqueología, fuentes etnohistóricas y retóricas de legitimización: un ensayo reflexivo sobre los olmecas xicalancas. *Anales de Antropología*, Vol. 51 (2): 142–153.

Whittaker, Gordon
2012 The names of Teotihuacan. *Mexicon*, Vol. 34 (3): 55–58.
2021 *Deciphering Aztec Hieroglyphs: A Guide to Nahuatl Writing*. University of California Press, Oakland.

Wichmann, Søren
1995 *The relationship among the Mixe-Zoquean languages of Mexico.* University of Utah Press, Salt Lake City.
1999 A conservative look at diffusion involving Mixe-Zoquean languages. *Archaeology and Language II: Archaeological Data and Linguistic Hypotheses*, edited by Blench Roger and Matthew Spriggs, pp. 297–323. Routledge, London.

Wichmann, Søren, Dimitri Beliaev and Albert Davletshin
2008 Posibles correlaciones lingüísticas y arqueológicas involucrando a los Olmecas. *Olmeca. Balance y perspectivas. Memoria de la Primera Mesa Redonda*, edited by María Teresa Uriarte and Rebeca B. González Lauck, pp. 667–683. Universidad Nacional Autónoma de México & Consejo Nacional para la Cultura y las Artes & Instituto Nacional de Antropología e Historia & New World Archaeological Foundation, Mexico City.

Wright-Carr, David C.
2016 *Lectura del Náhuatl: Versión revisada y aumentada*. Instituto Nacional de Lenguas Indígenas, Mexico City.

# Chapter 10
# The Identification of Exogenous Models in the Visual Culture of the Central Highlands: Approaches to Emulation Processes in the Figurative Systems of Cacaxtla-Xochitecatl and Xochicalco

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**Introduction**

For more than five decades, the Epiclassic in the Mesoamerican Central Highlands has been recognised as a period of intense cultural interactions and the emergence of an eclectic figurative system, a complex hybridisation and emulation of systems from different cultural areas such as the Maya area, as well as other Mexican regions, such as the Gulf, Oaxaca, West, and Guerrero (Berlo 1989; Brittenham 2015; Foncerrada de Molina 1990; Helmke and Nielsen 2013; Kubler 1980; Nagao 1989, 2014; Testard 2014a, 2018, 2023; Turner 2016).

To address the problem of cultural interactions that allows us to understand the emulation of figurative systems during the Epiclassic, the identification of models, that is, canonical objects that serve to emulate others, represents a pragmatic alternative. In fact, this approach allows us to deepen some of the questions proposed for the Copenhagen Round Table, in particular the way in which the city-states interacted and to specify their relational modalities: the concrete transmission of figurative objects and systems, in synchrony and in space. It also allows us to think about diachronic transmission and to consider how the Epiclassic period was framed within the historical dynamics of the Classic (continuities), while at the same time announcing many of the mechanisms of the early Postclassic and, in particular, the emergence of the famous "International Postclassic style" (ruptures and innovations). Finally, it raises broader anthropological questions about memory and the (re)production of history.

I will use the pragmatic and concrete claim of the term "model": The one belonging to the semantic, technical and technological field. The term "model", from the Latin *modellus* (from *modulus*, 'mould'), refers to "a figure created to be reproduced". From an etymological point of view, the word produces a whole series of semantic connotations and associations, in particular that of an entity recognised as an original standard or canon, which, because of the cultural value attributed to it, tends to be adapted, imitated or copied (Magnani and Russo 2010).

While in art history the identification of models goes hand in hand with that of the artist's identity (Borlée and Terrier Aliferis 2018), in Mesoamerican archaeology it is usually something more complex, mainly for reasons inherent to the conception of Amerindian art and because artistic identification is more complicated. However, there are several Mesoamerican studies, among which stand out the one on the signatures of Maya scribes-painters and sculptors as clues to the personality of the artisans (Inomata 2001; Montgomery 1995; Vega Villalobos 2016) and the detailed study by Brittenham (2006) on the different painters of the Battle mural of Cacaxtla (Tlaxcala).

The identification of moulds for the manufacture of figurines and ceramic vessels is a precise way to approach the question of models. In Mesoamerica, it is rare to find moulds and even rarer to find moulds and positives in the same archaeological context. However, inferences from measurements and observations of identical objects are operative not only to think about mass production processes and their implications for production considerations, their economic and social corollaries, but also to evaluate the problem of models and, in particular, their circulation (see in this regard the work of Halperin 2009: 381–387; LeMoine *et al.* 2022: 12–13, 16–18).

From a more general perspective, the identification of models allows us to reflect on the various reconfigurations made from them and the multiple adaptations that produce a new object (Testard 2014a: 76–86; 2023: 24–30). From this perspective, adoption,

imitation, or copying always reveals active choices that produce new social, ethnic, cultural, and gender identities, among others. Indeed:

> the act of copying, far from being a slavish and sterile reproduction, reveals creation and invention, as well as a play with the codes of the established graphic system, all with a view to a new production of meaning, shared and understood [in turn] the creative power of copying allows a stacking of senses and the infinite updating of the model (Duclos-Grenier and Russo 2012: 4, 11).

It is paramount to identify the *codes* of representation embedded in the models, for it is precisely these that make them canonical models (see Duclos-Grenier and Russo 2012: 20). The artisans who emulate a model thus choose among its salient *codes* in order to be able to refer to these directly or indirectly, without being able to clearly perceive their origin or their historical veracity, in the sense we give to it in contemporary societies (see Umberger 1987). Finally, in this process of emulation, one must take into account the adaptations of techniques, supports, and volume, which can move from possible two-dimensionality to three-dimensionality (Borlée and Terrier Aliferis 2018). All these variants reveal the wide range of innovation and creativity generated by the exchange of styles, themes and figurative configurations.

Chronological resolutions, one of the outstanding problematics of the discussions of the roundtable, are also essential to our theme, since in the identification of models or prototypes (the earliest of the types), anteriority or posteriority makes it possible to define the order of imitation, of copying in synchrony, or of the same type of phenomenon in diachrony (Joyce 2004: 17; see also the first part in Testard 2023). Unfortunately, a detailed Epiclassic chronology is not yet available for the sites of Cacaxtla-Xochitecatl (Tlaxcala), Xochicalco (Morelos), Cholula, or Cantona (Puebla).

However, little is known about the orign of raw materials and technological traditions for the majority of artefacts from Cacaxtla-Xochitecatl and Xochicalco (but see Alvarado León *et al*., in prep.). More detailed knowledge of all artefact attributes (material, technique, iconography) (see Testard 2018) would allow us to clearly distinguish an import from a copy or an imitation.

Despite these gaps, it is appropriate to study and try to identify, in a more specific and systematic way, the concrete models of transmission, approaching cultural interactions, as they allow us to be more precise in terms of actors, modalities and, finally, to approach the reasons why the exchange of objects, styles and ideologies took place (Testard 2014a, 2023).

In Mesoamerica, it has been empirically recognised that the transmission of figurative codes (style, theme, technique) probably took place thanks to small portable objects. These could serve as models, but also as intermediaries, reproducing monumental objects that, because of their size, nature, or configuration, could not be transported over long distances, especially in a cultural area where goods were carried on the backs of people. However, most of these small portable objects were not preserved in the archaeological record, as was the case with the codices. Lacadena (2010: 393–394) suggested that, given the formal proximity between the International Postclassic style murals of northern Yucatan and the later codices, older now-lost versions would have played a crucial role in the transmission of styles and symbols. Under the same heading, Helmke and colleagues (2017: 119) have emphasized that the Mesoamerican cartographic tradition was represented both in the codices (which served as transmission media) as well as in murals and (at times) on carved monuments. This is also the case with textiles and other artefacts made of perishable materials such as leather or wood. More familiar to the archaeologist are ceramic artefacts and small lapidary objects (figurines, masks, ornaments). Among the many modalities of supra-regional cultural interaction during the Epiclassic, the existence of these portable models in the hands of itinerant artisans or their exchange in the context of relations between elites (alliances, marriages, diplomacy) is among the most feasible (Testard 2018, 2023).

I will explore here some preliminary reflections on possible models that served as sources of inspiration in the ceramic, sculptural, and painted iconography of Cacaxtla-Xochitecatl and Xochicalco. It is a complex task, since it requires a broad panorama of Mesoamerican figurative sources, in addition to taking into account the contingencies of conservation of the archaeological record. Consequently, the objective of this paper is to open perspectives and to highlight the guidelines that seem to me fundamental for thinking about the interaction and the modalities of exchange, evaluated from the Epiclassic images that have come down to us. The considerations presented here are not in themselves intended as a definitive analysis of the particular artefacts I present.

Two types of configurations in the identification of the models will be evaluated. The first is the identification in synchrony, for the Epiclassic or Late/Terminal Classic, and remembering that this chronological resolution is relative, considering what was mentioned above (see also Alvarado León, this volume). The second

is the identification in diachrony, which is better documented, especially among the Mexica. The exercise will focus on the identification of models in artefacts from Cacaxtla-Xochitecatl and Xochicalco; I will also propose some reflections on the existence of models for non-portable images of the monumental visual culture of the sites; in turn, I will offer some hypotheses about natural elements that can be considered as models used to produce images of the markedly naturalistic style of the period (Testard 2013).

## The identification of models in the relative synchrony of the Epiclassic

### *The use of live models: an etiological observation?*

To explain the realism in the representation of terrestrial and aquatic fauna in the Cacaxtla mural paintings, Polaco's (1994: 80) biological and taxonomic study suggests the use of live models. Subsequent archaeozoological and paleobotanical studies of these murals have reached the same conclusion (Guerrero Martínez 2013; Michener 2013; Moreno Guzmán 2013; Navarijo Ornelas 2013). Although no archaeozoological analyses of animal bone have been carried out for materials of the Gran Basamento at Cacaxtla, the investigations carried out for more than a decade by the projects directed by Mari Carmen Serra Puche and Carlos Lazcano Arce in Nativitas, the residential areas of the Cacaxtla-Xochitecatl settlement, do provide interesting information. These results revealed that several artisanal activities of bone industry (tools) had been conducted in the habitational terraces, especially from deer and pronghorn. In turn, the capture of ducks, water snakes, and turtles—local species that were probably exploited in the Rosario Lagoon, which dried up in the mid-twentieth century—was identified from bone remains (Lazcano Arce 2006; Serra Puche and Lazcano Arce 2011). These elements indicate that, at least for these species, the painters of the Cacaxtla murals had local living models to refer to, which explains to some extent the degree of realism of the paintings (Polaco 1991).

Other faunal elements in the Cacaxtla murals indicate, this time, a detailed knowledge of animals that did not live in the local ecosystem. These include certain exotic birds and felines from the tropical zones of the Gulf and the Pacific. The information available for the Postclassic period shows that the feathers of tropical birds and the hides of big felines were considered to be of very high value, in addition to being imported as tribute to the capital of the Mexica Empire (Berdan 1987, 2006). Recent analyses show that captivity of such wild animals, was a very old practice in Mesoamerica. Cruz and colleagues (2023) showed that species from the tropical lowlands were bred and kept in captivity far from their places of origin. In a cave in Chihuahua, the authors found the mummified remains of an *Ara militaris* (macaw) dated to 1929–2057 *c.* BP, from at least 125 km away (Cruz *et al.* 2023). Traces of cages have been found in the offerings of the Pyramid of the Moon at Teotihuacan, also suggesting that animals were kept alive prior to sacrifice or treatment as part of ritual events (Sugiyama and López 2006). Recent discoveries in the Templo Mayor of Tenochtitlan also show that there were places to keep these exotic species (López Luján and Matos Moctezuma 2022), suggesting that etiological observation was a known and established practice in Mesoamerica since ancient times.

The analysis of the birds represented in the Cacaxtla paintings (Navarijo Ornelas 2013) allowed the identification of three exotic species: the *Ortalis sp*. (chachalaca) from the Gulf area; the *Ara militaris* (macaw) found in warm areas of the Pacific, Gulf and Maya; and the *Ardea alba* (white heron), known from areas below 1500 m in altitude. The quetzal (*Pharomachrus mocinno mocinno*) appears very often in the paintings as a fowl, as do its feathers, as part of the clothing and especially on the headdresses of the characters. Given their symbolic importance in the murals of the site, Nagao (2014: 98) proposed that the *conejera*, a structure of the Gran Basamento of Cacaxtla with small cells made of adobe, could have been used as a place to raise valuable feathered birds, as documented in Paquime (Chihuahua) (Somerville *et al*. 2010).

On the other hand, the biological and iconographic analyses by Alvarado León and Corona-M. (2020) of Xochicalco materials, led them to propose the existence of caged felines at the site and etiological knowledge about these animals, given the different attitudes and postures represented in various artifacts, especially in the stone reliefs of the so-called Ramp of the Animals. This management of faunal resources would also have facilitated the supply of skins, symbols of rank and highly prized by members of the elite. This practice is consistent with the ubiquity presence of feline limb bones in the faunal assemblage of Xochicalco (Alvarado León and Corona-M. 2020). It is therefore possible that the skins were prepared while preserving the paws and claws, just as they are represented on some of the victorious figures of the Battle Mural, as well as the murals of Building A, and with the old man of the Red Temple of Cacaxtla (Eduardo Corona, pers. comm. 2022).

In sum, the realism mobilised in the depiction of fauna and flora of Cacaxtla-Xochitecatl and Xochicalco shows a detailed knowledge of natural species that probably served as models for the representations, both pictorial and sculptural. There is also some evidence that exotic species were kept in captivity at both sites, demonstrating the opulence of the social groups that

inhabited these complexes. By favouring these highly realistic images of different species, the elites valued their relationship with the world around them, but also expressed their relationship with exotic species, further enhancing their prestige by representing goods that were difficult to access (Testard 2023: 231).

### *The use of vessels as models: some cases of interpretation in ceramic artefacts*

Four effigy vessels with complex iconographies of richly attired figures have been found in and around the Gran Basamento of Cacaxtla (Brittenham and Nagao 2014; Delgadillo Torres 2006). These anthropomorphic representations were made by modelling, moulding, and appliqué. Although there is still no agreement on their function, Brittenham and Nagao (2014) formulated some proposals based on the information provided by Delgadillo Torres (2006). It is, of course, very likely that these vessels served as containers and pourers for offerings, especially based on the lids found at Cacaxtla and the shape of their rims (Testard 2018).

Now, Nagao (1989: 70) suggested that at least two of these vessels were made of a local clay (Figure 10.1 a–c). Nevertheless, it is clear that these types of vessels disrupt the earlier pottery traditions of the Central Highlands.

In fact, there are Late Teotihuacan-phase vessels in which the central part bears a modelled and extruded anthropomorphic figure (Testard 2014b: Fig. 2), or simply a face whose volume is only partly pronounced. However, as noted by Nagao (1989: 70), the closest specimens to the Cacaxtla vessels are from the East, suggesting that the forms of these effigy vessels would find their equivalents in censer models from Tajipulalpa, Tabasco; and I would also add, from the neighbouring site of Teapa, Tabasco, or even from sites in the vicinity of Palenque, in Chiapas.

Indeed, the tradition of effigy vessels in the Maya lowlands are already known from the Late Preclassic (see Rice 1999: 35). Effigy cylinders are common at sites in the Usumacinta (Palenque and Tonina, Chiapas) (Palka *et al.* 2023) and have also been reported at the Department of Quiche, Tikal and Copan for the Late Classic (Fash 2011: 36; Miller 1986: 76–77; Schmidt *et al.* 1998: Fig. 378). Precisely because effigy vessels have a long tradition in the Maya region that can be traced back to the Preclassic, it is very possible that the Tabasco specimens served as models for the Cacaxtla vessels, especially since the area of the Usumacinta River and the Río de la Pasión was the major source of Maya inspiration for the site's famous paintings (Foncerrada de Molina 1993; Helmke and Nielsen 2013).

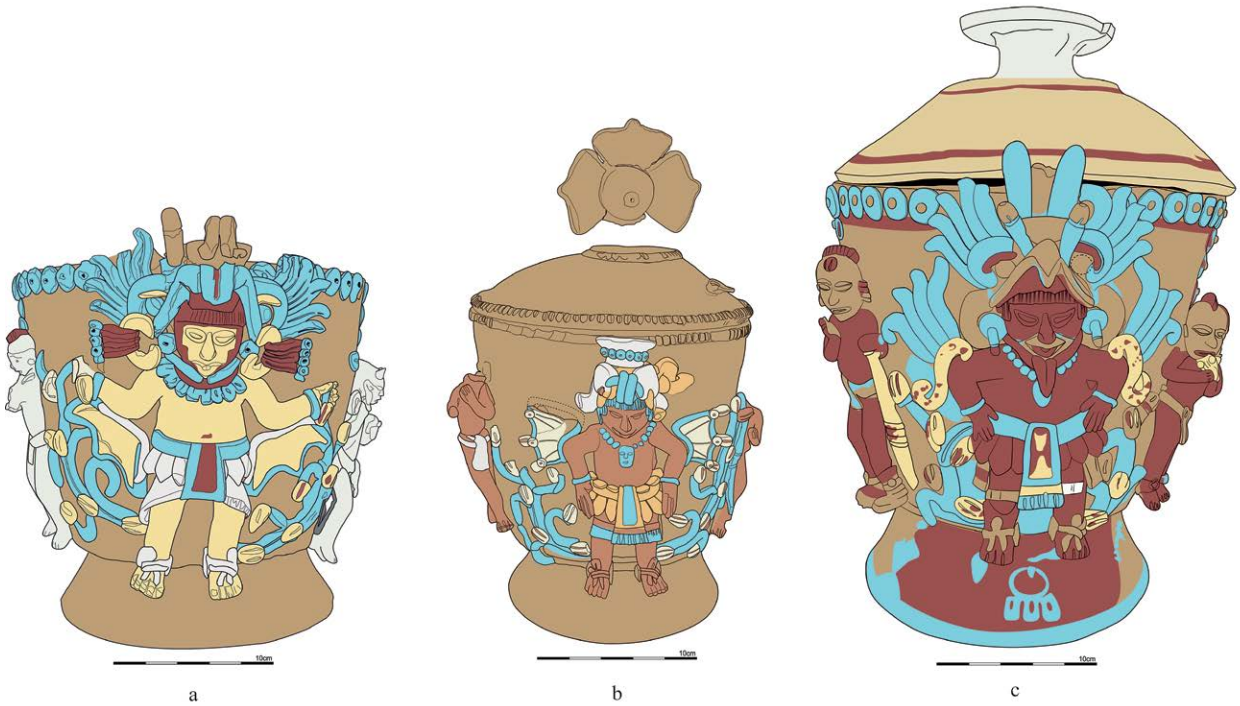


**Figure 10.1:** Effigy vessels from Cacaxtla, representing warriors and their attendants: **a)** Vessel found in the southern stairway, Palace Plaza; **b)** Vessel reported in the upper slope of the northeast section; **c)** vessel found in the fill of Structure E. Regional Museum of Tlaxcala (a) and Cacaxtla Site Museum (b-c) (drawings by Sylvie Eliès).

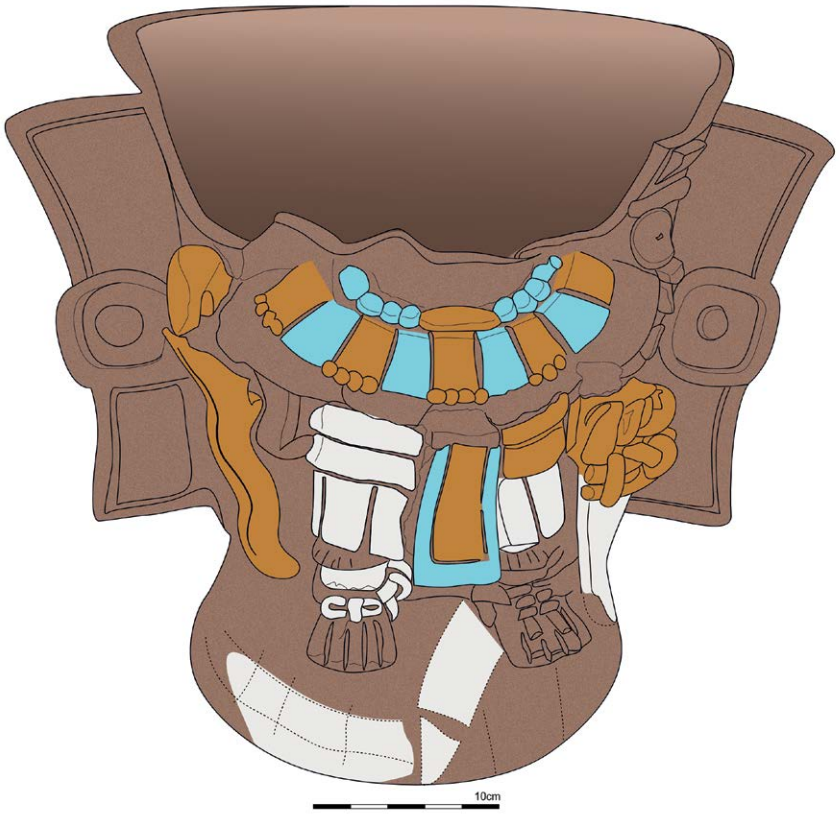


**Figure 10.2:** Effigy vessel from the southeast of the Gran Basamento of Cacaxtla, representing a figure with the attributes of the Storm God. Cacaxtla Site Museum (drawing by Sylvie Eliès).

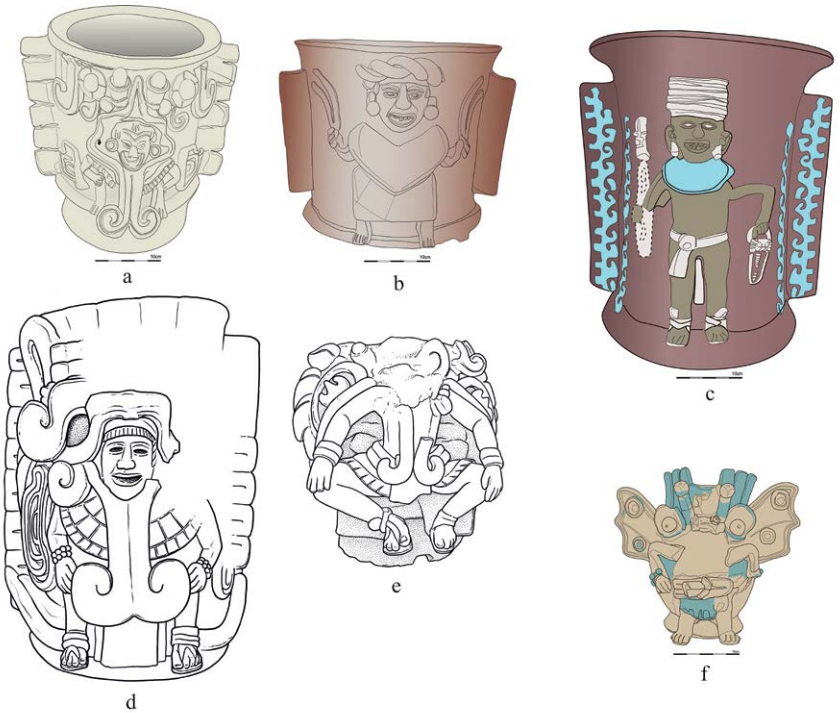


**Figure 10.3:** Anthropomorphic effigy vessels from Xochicalco: **a)** Sector B, Element 1A, Xochicalco Site Museum; **b)** Loma Sur, Structure 1 Poniente, S5, Element 19, Xochicalco Site Museum; **c)** Sector H, Xochicalco Site Museum; **d), e), f)** Centro INAH Morelos, Xochicalco Project (a, b, c, f: drawings by Sylvie Eliès; d, e: drawings by Nicolas Latsanopoulos, after González Crespo *et al.* 2008).

Now, although there are parallels between the vessels from Tabasco and Tlaxcala, the former have a much more complex iconography than the latter; the basic shape of the Maya vessel is either cylindrical or hourglass-shaped as opposed to the more open shape of those from Cacaxtla; and flanges are present only on one large vessel from Cacaxtla (Figure 10.2) and in the examples of the same composition that come from Xochicalco (Testard 2018, 2023: 132) (Figure 10.3a-d).

Other effigy vessels from Xochicalco (Figure 10.4), especially the large ones that can measure up to 1 m in height, appear to be more specifically related in shape, size, and iconography to the Palenque censers or censer-holder tradition (see Rice 1999: 34; Robertson 1991: Fig. 135).

Aside from this possible source of inspiration in the Maya lowlands, other evidence seems to point to the Guatemalan highlands. Indeed, a jaguar effigy vessel was found in a funerary context at the site of Chijoj (Ichon 1992: 130), very similar to the examples of feline effigy vessels from Xochicalco (Testard 2023: Fig. 2.43 d–e). According to Ichon (1992: 200), the tradition of effigy vessels in this area corresponds to the Classic and falls into disuse during the Epiclassic, so from a purely chronological point of view, Guatemalan examples could have been remembered in the Central Highlands and served as a model for those of Xochicalco.

This similarity is also supported by the fact that the hourglass shaped vessels from Cacaxtla and Xochicalco (Figure 10.3 a) are more similar to those from the Department of Quiche, especially the rim, the base, and in some cases, the flanges. Unfortunately, the vessels from the Department of Quiche are found in museum collections (Samayoa Chinchilla and Barthel 1967; Schmidt *et al.* 1998: Fig. 378) and lack secure chronologically assignments. Thus, whereas it is possible that they belong to the Classic period, it is also possible that they date to a later, early Postclassic tradition, a time of strong internationalisation (Hill Boone and Smith 2003; Smith 2003; Testard 2022).

Considering all these parameters, it is plausible that the vessels from Tabasco, the Usumacinta region, and the Guatemalan highlands collectively served as models for those from Cacaxtla and Xochicalco. However, it is clear that they influenced only part of the local imitation, especially in the type of plastic organisation (anthropomorphic figure standing in high relief as an effigy), style (naturalism and proportions of the figures), technical type (modelling and appliqué) and shape of the vessel (hourglass or cylinder).

**Figure 10.4:** Xochicalco effigy vessels with attributes of Maya deities: **a)** Centro INAH Morelos, Xochicalco Project; **b)** Sector G or Structure G5, room 2D, Centro INAH Morelos, Xochicalco Project (drawings by Nicolas Latsanopoulos, after González Crespo *et al.* 2008).

Two bowls found at Cacaxtla-Xochitecatl and Xochicalco tell a quite different story (Figures 10.5 - 10.7). An alternative interpretation of the Xochicalco vessel is proposed elsewhere in this volume (Helmke *et al.*, this volume). Our colleagues discuss their iconography in detail. Here we are interested in analysing the ways in which both vessels represent examples of possible model use, considering also that they may have been produced in a foreign area and imported to Cacaxtla-Xochitecatl and Xochicalco.

These bowls belong to a broad tradition of moulded-carved pottery the distribution of which spans the Gulf Coast and the Maya region, and which also exhibit eclectic iconography inspired by both regions and by figurations from the Central Highlands (see Bishop *et al.* 2005: 26–27; LeMoine *et al.* 2022: 4). The discussion of the extent of this ceramic tradition is beyond the scope of this study, and we refer the reader to the works of Von Winning and Gutiérrez Solana (1996), Wyllie (2008: 243–251), and Ladrón de Guevara (2020) for the Gulf Coast. Regarding the Maya specimens, see the holistic contributions led by Helmke and colleagues Helmke (2001; Helmke and Reents-Budet 2008; Helmke and Ting 2017; Ting *et al.* 2015) and a more recent study by LeMoine and colleagues (2022).

For our discussion, it is important to mention several elements. The moulded-carved vessels were produced using a hybrid technique; moulds were first used and the ceramics obtained then could be modified by incisions, which allowed considerable room for creativity and


**Figure 10.5:** Moulded-carved vessel from the Portico Building of Terrace 4 of Nativitas II in context (photographs courtesy of Carlos Lazcano Arce).

variation among different specimens, including those cast from the same mould.

The tradition of moulded vessels from southern Veracruz comes predominantly from the Río Blanco region and is dated between AD 700 and 900. These were probably made close Huachin, near the sites of Nopiloa, Dicha Tuerta and Los Cerros. The forms of these vessels are of bowls with straight or convergent walls with a flat base (see, for example, the vessels conserved in the Anthropological Museum of Xalapa No. 00151; 001329). Their most common iconographic themes are the ballgame, its relationship to sacrifice, and processions of dignitaries and merchants; some scenes also show Maya gestural codifications (Koontz 2008: 333; Testard 2014a: 540; Von Winning and Gutiérrez Solana 1996: 19, 129–130; Wyllie 2008: 247). Ladrón de Guevara (2020: 181) indicates that this tradition was later adopted by El Tajín, whose potters seem to have produced a variant of the type with compositions including repeated panels instead of the continuous narrative representation of the south-central region.

On the other hand, the most prominent types in the Maya area are the Pabellon and Sahcaba Moulded-carved ceramic types, first identified in the material culture of Uaxactun by Smith and Gifford (1966: 160, 162; see also Helmke and Reents-Budet 2008: 37). The Pabellon type has the widest distribution, covering most of the Maya Lowlands since the early ninth century (Bishop *et al.* 2005: 38). In the eastern Lowlands of the Peten and sites in Belize, Helmke (2001) recognised a distinct type designated Ahk'utu' Moulded-carved. These vessels are divided into two petrographic traditions, and are predominantly cylindrical with ovoid rattle supports, exhibit identical decorative panels, and are dated between AD 830 and 950. These were likely exchanged as part of elite alliances and are a clear marker of the collapse of Classic Maya societies (Helmke and Reents-Budet 2008; Helmke and Ting 2017; Ting *et al.* 2015).

Returning to the two vessels at hand, the first was found in the portico building of Terrace 4 at Nativitas II (Figure 10.5). It is a straight-walled bowl with a small ring base. Serra Puche and Lazcano Arce (2004,

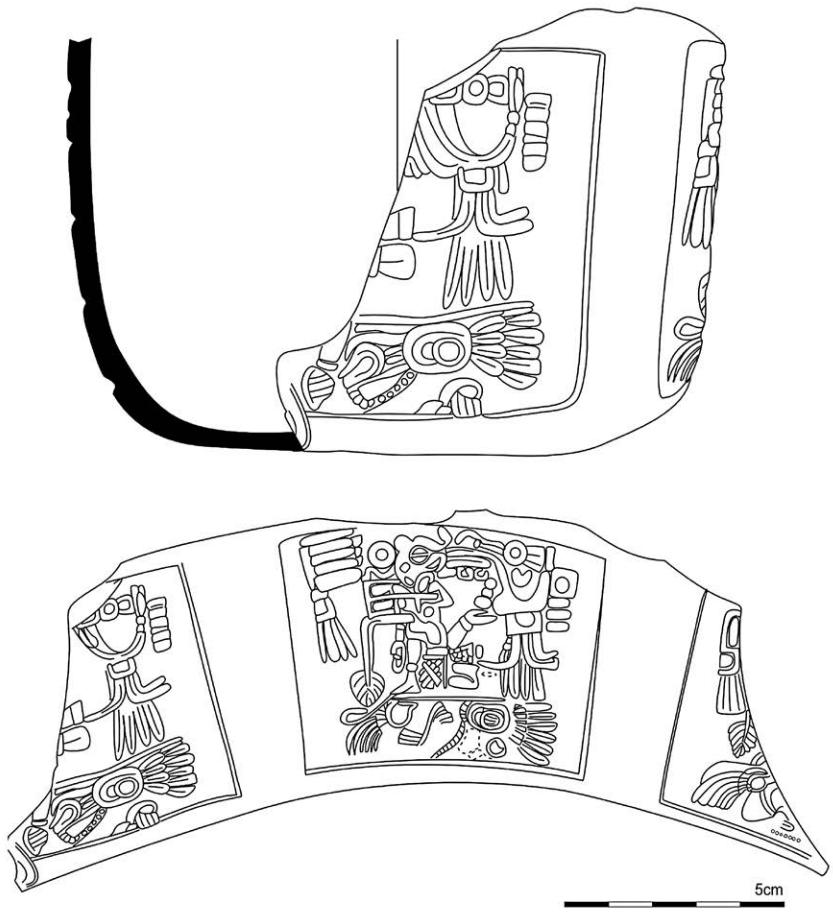


**Figure 10.6:** Moulded-carved vessel found in the Portico Building of Terrace 4 of Nativitas II (redrawn by Sylvie Eliès, after Serra Puche and Lazcano Arce 2011: Fig. 127).

2011: 136–137) considered that its style of iconography was particularly close to classical ceramics from Morgadal Grande or San Andrés Tuxtla, Veracruz, with an evocation of a possible Maya deity (Figure 10.6). However, its depiction is framed into repeated panels, in contrast to the continuous representations specific to the southern part of Veracruz. Furthermore, the composition suggests that the bowl found at Nativitas was actually an import or emulation from the region of El Tajín (Testard 2023: 134–135).

The bowl found in Xochicalco (Figure 10.7), on the other hand, has curved walls with a flat base and also resembles the moulded vessels of Río Blanco (Veracruz), with a narrative representation and a base with a zoomorphic figure, as documented on examples by Von Winning and Gutiérrez Solana (1996: 15). However, its iconography is clearly inspired by Maya themes and styles, with codes specific to this region (see Helmke *et al.*, this volume). In this sense, it seems to be an eclectic and unprecedented figurative creation. This aspect is also reinforced by the fact that the bowl was covered with cinnabar (Alvarado León *et al.*, in prep.) and on its edges there are some traces of stucco to which a green pigment was applied, perhaps malachite, identified in other contexts at Xochicalco (see González Crespo *et al.* 2008: 310–317). Interestingly, this type of decorative treatment is reminiscent of the stuccoed and polychrome vessels of Teotihuacan tradition.

In conclusion, although it is possible that the Cacaxtla-Xochitecatl and Xochicalco vessels were imported from the Gulf or the Maya area, it is more likely that they were local productions, emulations and original creations that sought to imitate vessels strongly anchored in the processes of elite legitimisation. From a more general point of view, although it seems that the Río Blanco tradition predates the various Maya types, this is a question that still awaits more definitive solutions. The two bowls from the Central Highlands correspond to forms more closely related to those of the Gulf, and only Maya Pabellon Moulded-carved includes bowls with comparable forms and iconography (Smith and Gifford 1966; see also Helmke and Reents-Budet 2008). The two


**Figure 10.7:** Moulded-carved vessel from Xochicalco
(redrawn by Sylvie Eliès, after Garza Tarazona and González Crespo 2006: Fig. 10).

moulded-carved vessels from Cacaxtla-Xochitecatl and Xochicalco represent a *stack* of codes as they combine forms related to the Gulf tradition, Maya iconography and decorative techniques typical of Teotihuacan vessels (in the case of the Xochicalco vessel). As LeMoine and colleagues (2022: 16) have pointed out, the moulded tradition of Terminal Classic vessels in the Maya area (i.e. the relative ease of their (re)production) and their simultaneous presence in several societies translate their function of relating societies. In turn, the various analyses carried out by Helmke and Reents-Budet (2008) indicate that these vessels were exchanged and given as gifts in elite environments; the contexts in which they were found in Cacaxtla-Xochitecatl and Xochicalco are wholly consonant with these observations.

### *The use of other portable objects: cases of sources of inspiration for wall painting and sculpture*

Since the discovery of the Cacaxtla murals in 1975, several proposals have been made to explain their peculiar style, especially regarding their sources of inspiration. Two authors have formulated specific hypotheses about the models used. Donald Robertson (1985) suggested that the artisans used models and sketches imported from the Maya region, especially for the costumes and ornaments of the anthropomorphic figures of the Battle Mural (Structure B) and Structure A. Quirarte's analysis (1983: 217), on the other hand, showed that on the Battle Mural there was a particular articulation of space in which the figures were grouped in autonomous sets according to a tripartite organisation, with standing figures framing others that lie along the groundline. Each compositional unit is structured by a series of weapons arranged to create diagonal axes (see also Foncerrada de Molina 1993: Fig. 3b; Lombardo de Ruiz *et al.* 1991). It turns out that this type of composition is very common in Maya polychrome vessels, where only a quarter of the available space is free of cylindrical distortion (see also Robertson 1985: 293). This technical limitation would have led artisans to group figures in the centre of the viewer's line of sight (Testard 2014a, 2023: 83–84).

**Figure 10.8:** Life-size anthropomorphic sculpture "El Creador", Sector B of Xochicalco. Epiclassic collection, Museo Nacional de Antropología (drawing by Nicolas Latsanopoulos, after Garza Tarazona 2010: 20).

In addition to peculiar motifs of clothing and plastic compositional models, it is also possible that other conventions, in particular anthropomorphic postures that combine social and hierarchical information, travelled thanks to artefacts that in turn replicated monumental images (monumental and architectural sculptures, as well as murals).

Two anthropomorphic postures can be illustrated. The first is a half-kneeling posture, known from two artefacts from Xochicalco that are very different in function, size and material used. The first is the above-discussed richly ornamented figure of the moulded-carved vessel (Figure 10.7). The other is the life-size sculpture called "El Creador" (Figure 10.8), of which there were at least twelve examples (Del Villar 1993: 77), probably exhibited in some room of the Acropolis.

According to Taube (2003), this posture is common in Olmec Gulf Coast iconography, it then appears in the eclectic contexts of Teotihuacan, as for the reticulated jaguar in the murals of Tetitla (Taube 2003: 301–303), as well as in a lustre-type ceramic fragment (associated with the Gulf Coast) documented by Séjourné in the same zone. It appears later in Río Blanco moulded pottery. In Late Preclassic and Classic Maya art, this pose is common in courtly scenes, where it is adopted by figures interacting with enthroned rulers, but it can also be adopted by prestige figures. Indeed, Maya vase K5745 shows one of the primordial heroes of the creation myth crouching before a masked being (Testard 2023: 254–255).

The second posture is that of the arm crossed over the opposite shoulder, adopted by the Figure 14W in the Battle Mural of Cacaxtla. This posture has been observed in Maya iconography (Ancona Ha *et al.* 2000) and also on Río Blanco ceramics (Koontz 2008: 333; Testard 2014a: 540, 2023: 248–249).

All these elements point to the possibility that both postures, highly codified, travelled thanks to their representation on imported/emulated vessels from the eastern zone, moulded-carved or polychrome cylinders and that they were replicated locally in other types of medias and sizes: The mural of Cacaxtla and the life-size sculpture of Xochicalco, precisely because their nonverbal communicative value made them necessary

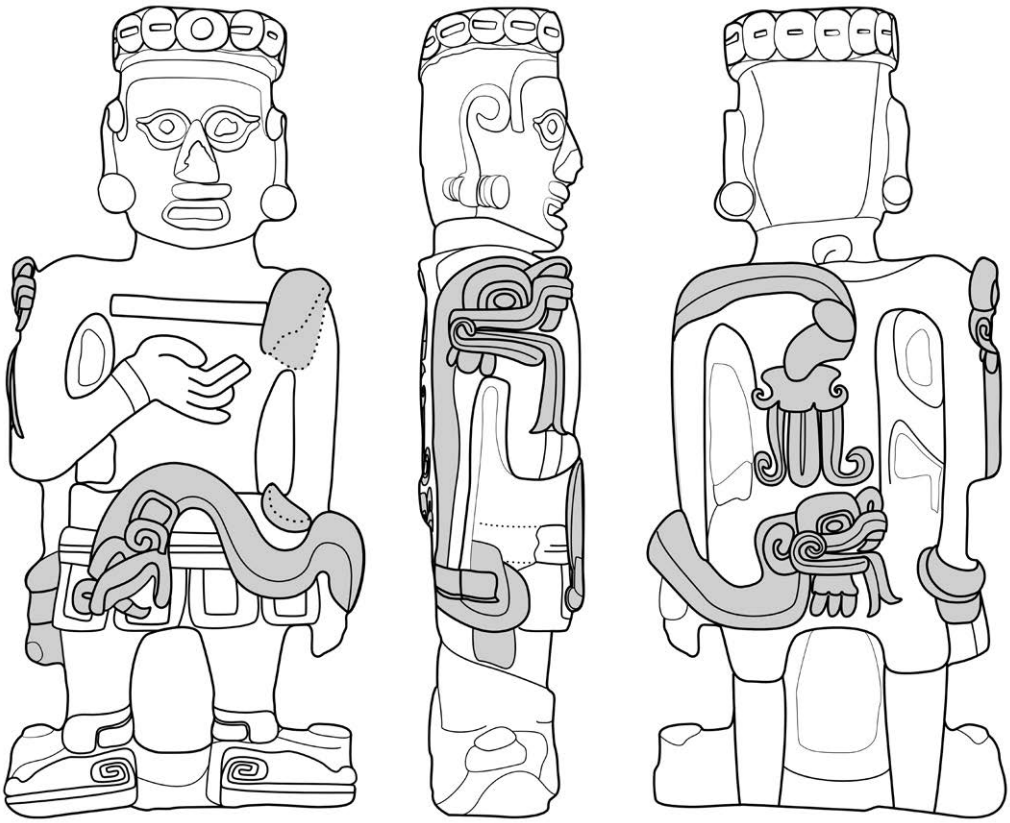

**Figure 10.9:** Sculpture of the "warrior" of Xochicalco. Xochicalco Site Museum (drawing by Sylvie Eliès).

in the new plastic discourses about political-ritual system (see Testard 2018). Another hypothesis would be that the posture of "El Creador" was locally inspired by the figure of the moulded-carved pottery, which would then have constituted an intermediate hybridised model, directly available at the site without the need to resort to a more distant "original" model.

A stone sculpture from Xochicalco (Figure 10.9) is a standing figure, 93 cm high, found in Patio 2 at Structure 8 of the Acropolis (Alvarado León 2019: 186; Testard 2013: 128–130). Three feathered snakes are depicted coiled on the body of the figure: the first at the waist; the second on his right arm and coiled on his atlatl; and the third has its head on the lower back of the individual, while between the shoulder blades is the last part of the animal's tail, with the traditional shape of a cut shell, as it appears in the reliefs of the Pyramid of Feathered Serpents. Although this sculpture is an original creation, its configuration and especially the presence of snakes at waist level, evokes the yokes of Veracruz, whereas the posture of the hand seems inspired by other exogenous models and recalls those of the seated figures on the *taludes* of the Pyramid of the Feathered Serpents. On the other hand, a ceramic figurine from Comalcalco (Tabasco) is close to the Xochicalco sculpture, especially given his hand gesture and the depiction of the serpent at the waist, although the Xochicalco sculpture lacks most of the rich clothing of that figurine, this proximity suggests that these kinds of models may have constituted an inspiration (Figure 10.9).

Indeed, certain hand gestures represented on several artefacts from Cacaxtla-Xochitecatl and Xochicalco (see Testard 2014b, 2023: 239–243), convey information and are characteristic of the figurative system of the Maya area (Bernal Romero and Velásquez García 2005), these could also have been reproduced thanks to portable eastern artistic formats such as polychrome cylindrical vessels, moulded-carved ceramics and figurative greenstone plaques (Testard 2021).

**Figure 10.10:** Clay anthropomorphic figurine from Comalcalco. Museo de Sitio de Comalcalco, INAH (photograph courtesy of Miriam Judith Gallegos Gómora).

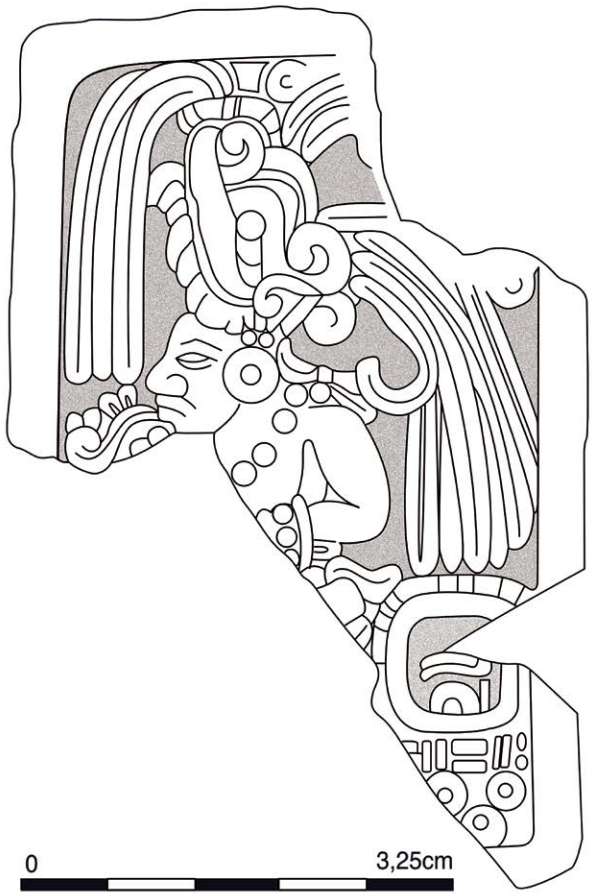


**Figure 10.11:** Ceramic figurative plaque found in the southern part of Xochicalco. Centro INAH Morelos (redrawn by Sylvie Eliès, after González Crespo *et al.* 1995: Fig. 23).

In fact, the famous seated figures on the *talud* of the Pyramid of the Feathered Serpents at Xochicalco have long been considered inspired by Nebaj-style (Guatemala) figurative greenstone plaques (Nagao1989; Sáenz 1962; Testard 2014a: 504–506, 2021; Urcid and López Luján 2019: 34). The latter may have been made in turn from models of enthroned figures known from the Maya reliefs of the Usumacinta (Proskouriakoff 1974; Umberger 1987: 93). At Xochicalco, the imitation of the seating gesture, the change of media, dimensions and function of the figuration necessarily implied a discontinuity of meanings between the postures depicted on Maya plaques and the carved reliefs. Interestingly, a ceramic plaque is known from Xochicalco: it was probably produced locally, depicting one of the characters and the date "9 Reptile Eye" from the reliefs of the *talud* of the monument. In a back-and-forth emulating movement that the imagery and composition of the Nebaj plaques was reactivated by the figurative ceramic plaque and the monumental reliefs from Xochicalco (Figure 10.11).

### *Non-transportable models: an index to think about the origin and the place of formation of the artisans*

In this section, I will briefly mention two cases of non-transportable artefacts that strongly indicate foreign origin or exogenous training of the artisans who made these. The first is the ceramic jaguar sculpture of Xochicalco exhibited in the museum of the site (No. 10-570645; 75 cm high and 50/55 cm wide), which is particularly close to the specimen found in the western platform of Monte Alban (see the specimen in the National Museum of Anthropology No. 10-0003257; 88.5 cm high) and which are earlier, with estimated dates between 200 BC and AD 200. The presence of this type of life-size ceramic sculpture in the city of Morelos could indicate the local presence of an artisan from Oaxaca (or trained in this area), especially for technical reasons of making large polychrome ceramic sculptures, which require specific knowledge, especially for their firing. The other ceramic sculptures (such as "El Creador") found in fragments in Sector B, suggest particular production features that are also related to the southern Gulf Coast, especially the sites of Cohuite and El Zapotal (Testard 2014a: 976, 2023: 329–330).

Second, there are the raw clay panels applied over earlier paintings in Building A at Cacaxtla. These are also possible indications of the presence of foreign artisans, this time Maya. Indeed, the number of references to Maya iconography and elements of writing is particularly high and specific to this cultural area (Helmke and Nielsen 2013; Helmke and Testard 2025). Therefore, it should be considered that its realisation may have been the result of the presence of a Maya artisan who was not necessarily part of the group of local painters who produced the pictorial programs (see Brittenham 2006, 2013). This artisan would have made a relief in keeping with the canons of stucco models from Usumacinta sites, such as those of Palenque, but using different material and technique (unfired clay), as noted by Nagao (2014: 116; see also Helmke and Testard 2025; Testard 2023: 329–330), also used in other sculptures produced at the site (Corona Andrade 2025).

## The identification of models in diachrony: revival, *translatio*, and "neo…-movements"

Having formulated hypotheses on the identification of models synchronously, we cannot ignore the identification of the same models diachronically, over the centuries. This is a subject that, unlike the one we dealt with in the previous section, has been studied extensively (albeit not specifically for Epiclassic art), especially among the Postclassic Mexica.

In their work on the history of European art, Panofsky and Krautheimer (cited in Kubler 1969: 351) documented a large number of ancient "revivals", which they defined as the formal and symbolic persistence of the Greco-Roman tradition during the early Christian centuries, forming an "almost a continuous ancient substance". In fact, the history of art as a whole is populated by countless examples of the persistence of figurative traditions, known as "revivals of taste" (Kubler 1969: 351). Alongside this principle of continuity and revival, the term "disjunction" was coined by Panofsky in 1944 (1969: 107–109) to translate the shift in meaning between classical (i.e. ancient) form and subject matter in medieval art. Panofsky's analysis is based on the work of Focillon (1937), who postulates that frequently used visual forms can acquire different meanings in diachrony and that the same concept can take on different visual forms (Kubler 1969: 352). In his essay on the concepts of "renascences", "revivals", and "disjunction", Kubler (1969) applied these concepts to Mesoamerican art. While the principle of "renascences" reproduces traditions to ensure their perpetuation, revivals are more selective and obey rules of taste that hierarchise the historical and archaeological heritage. Disjunctions, on the other hand, infuse new meanings into old forms and model old meanings in new visual forms (Kubler 1969: 352–353, 359, 1985: 271–272; Testard 2014a, 2023: 55).

Umberger (1987), López Luján (2002), López Luján and de Anda (2017), as well as Urcid and López Luján (2019), have explored this issue of the reappropriation of ancient models (relics and imitations) (Classic, Epiclassic, and Early Postclassic) by the Mexica through various patterns of imitation that also point to disjunctions. These observations shed light on the relationship that

the Mexica established with the societies that preceded them. Prior to the Postclassic period, this phenomenon was also observed among the Maya through their relationship with the Olmec. The ancient forms of the divine (models/archetypes) could also be contained in new imitated creations, occupying a place in liturgies and ritual scenarios. This reproduction of the imagery of the past (neo-Teotihuacan, neo-Toltec, neo-Xochicalca) is grounded in ritual processes aimed at protecting the "*núcleo duro*" ("solid core") of Mesoamerican religious tradition (see López Austin 1994), but also in a political legitimation that re-valorises local ancestors (see Anawalt 1990; Matos Moctezuma 2002; Pasztory 1992: 281–283; Testard 2023: 55–56; Umberger 1987).

Closer to the Epiclassic and Early Postclassic contexts of the Central Highlands, two operative analyses have approached this problem of revival and disjunction. For example, Brittenham (2020) has illustrated the complex back-and-forth movement of models and adaptations in the use of Maya and Teotihuacan tripod vessels during the Classic. Her research shows how the first model (the shape of the tripod pottery) is Teotihuacano (although probably of Gulf Coast origin) and is imported into the Maya area to then be adapted and incorporated into a network of local meanings (mythology related to birds and land surfaces), provided with a bird-shaped lid and then adapted again at Teotihuacan, eliminating the characteristic wings of the Maya specimens and changing the head of the bird type to conform to the local visual universe.

For the Early and Middle Postclassic, De Lucia (2018) reflects on the use of Aztec Black-on-orange pottery (I, II, III, IV) by the Xaltocan communities of the Basin of Mexico. The author shows how this ceramic, also used in Cholula (probably imitating the Cocoyotla type of the end of the Epiclassic) and Chalco, is part of a common complex associated with the "Toltec", a generic term referring to a prestigious past that at the same time reveals an active choice of practices and uses by the inhabitants of Xaltocan. The red-on-brown pottery of Tula is actually very different from this black-on-orange ceramic complex, so there is a clear disjunction in the reference to the presupposed "model" of the Xaltocan potters.

The phenomenon of revivals, the emulation of ancient models and the use of relics can be illustrated in Cacaxtla-Xochitecatl and Xochicalco thanks to numerous examples such as the Tlaloc jars, the Mezcala or Teotihuacan-Mezcala style stone figurines, among others. I will only illustrate here the sculptural type of the so-called Old God (see Billard 2020; Carballo 2007) found in both cities. One specimen was found in Nativitas and at least two versions close to the Teotihuacan specimens have been identified and discussed in Xochicalco by Nagao (2014: 130–133), who considers them as relics. Interestingly, the Old God of Nativitas seems to have been restored in Precolumbian times with a lime plaster intended to reconstruct its missing parts, especially the lower section of the face (Serra Puche *et al.* 2012: 49). It is therefore very likely that this sculpture of Nativitas, like the ancient Teotihuacan gods of Xochicalco, was a relic, perhaps from Tlaxcala. This would explain the care invested in its preservation and its consequent transmission from generation to generation (see Testard 2023: 204).

Finally, and returning to the seated figures of the Xochicalco Pyramid of the Feathered Serpents, it is interesting to note that more than eight centuries after its construction, a Mexica artisan imitated these reliefs on a stone plaque found in Tenochtitlan, at Calle de las Escalerillas (Umberger 1987: 67, 92–94; Urcid and López 2019). This artefact, probably made by replicating panels that were still visible during the Postclassic period (see Alvarado León 2018: 27–28), is preserved in the National Museum of Anthropology (No. 10-0001236). It is an impressive example of a neo-Xochicalca revival that responds to a selective process of hierarchisation of historical and archaeological heritage. Moreover, Umberger (1987: 94) points out that it would be a survival, that is, an imitation, without the first model (the enthroned dignitary of the Maya area) being necessarily recognised as such, but rather associated with a generic and prestigious concept of the mythical past thought as "Toltec". We can even add that, most likely, neither the first source of inspiration (Maya) nor the eventual second (Xochicalco) was recognised as such. Both memories were watered down in a mythical-historical re-creation of legitimation associated with venerated Toltecayotl ancestors, artisans and wisemen (see León Portilla 1985: 220–222).

## Concluding thoughts and perspectives

The identification of models, as I said in the introduction, is a complex task. My goal was to give some examples and try to show the potential of this type of analysis. Identifying the codes embedded in models is extremely important. On other occasions (Testard 2014a, 2018), I have insisted on the concept of the "selectivity criterion", which is of great operational importance for thinking about material culture in the situation of cultural interaction and which was coined (in another context) by the anthropologist Herskovits (1967). The "selectivity criterion" seems to be very closely related to the "codes" we are dealing with here, since these are the elements valued by the emulating society and which determine the use of this or that figurative model (be it formal, technical, thematic or symbolic). Both elements (codes selected by the criterion of selectivity) are essential for understanding the complex phenomena of

cultural and iconographic hybridisation translated into the material culture that we analyse as archaeologists.

Umberger's (1987: 98) reflection on stacked models is also of great importance for this discussion, especially because it questions the concepts of memory and the rhetoric of legitimation and also refers to what, in other contexts I have presented as a discrepancy between "proclaimed networks" and "real networks" of exchange (Testard 2014a: 20–23, 163). Umberger (1987) highlights how, in their long history of "revivalism", the Mexica most often imitated their own emulations of Toltec or Teotihuacan models rather than drawing directly from them.

Examples of stacked models have been glimpsed throughout this essay. This is the case of the effigy vessels, which are similar in form and proportions to examples known from the Guatemalan highlands, while at the same time being close to certain models from the Usumacinta lowlands. On the other hand, the moulded-carved bowls, although reproducing in form, format and technique those of central-southern Veracruz, also show features of the Maya region, probably the lowlands. The one from Nativitas, perhaps, emulates the Tajin vessel type, whereas the one from Xochicalco points to models from the Gulf (form, composition), the Maya area (iconography, style) and at the same time also refers to the tradition of stuccoed and painted vessels from Teotihuacan. Likewise, anthropomorphic postures allude to a multiplicity of different models, probably depicted on portable artifacts, the codes of which are certainly divorced from their primary meanings. This stacking of models, while translating an extremely broad network of relationships that stretches from the Guatemalan highlands to the central Gulf Coast, also shows an immense creative potential, full of variations, selected and organised to serve local purposes.

The greenstone plaques that served as models for the anthropomorphic seated figures of the Pyramid of the Feathered Serpents in Xochicalco also offer a glimpse of the complexity of interwoven networks. If it were possible to identify a point of origin for the enthroned characters in profile, it would be necessary to frame them in the tradition of the enthroned personages of the Usumacinta and Pasión Rivers. From there, they would have been reproduced on figurative green stone plaques (Nebaj's type) made in a place to be determined in the Maya zone, then they would have travelled hundreds of kilometres to the central Mexican highlands to be reproduced in monumental format on the facades of the Feathered Serpent Pyramid of Xochicalco. Finally, the composition would be miniaturised again and adapted to the format of a ceramic plaque, without being able to evaluate if the Xochicalca artisan had the idea of replicating a Maya artefact, or if he had already been inspired by the monumental reliefs and made reference to them, more directly. The composition would be reproduced again, eight centuries later, on the Mexica plaque found by Batres at Calle de las Escalerillas, this time certainly inspired (directly or inderectly) by the monumental reliefs of Xochicalco.

Ethnographic examples from Melanesia show that there were specific rights associated with clans and families in the reproduction of models of sculptures and funerary masks used in certain community ceremonies (Magnani and Russo 2010: 14–15). Helmke (2010) documents the concept of "ritual privilege" in several Amerindian societies, which consists of the specific prerogative, usually genealogically inherited, that allows the use of certain objects and the performance of certain ritual practices. Given the importance of this concept in the Americas, it is very likely that it also existed in Mesoamerica, as Helmke (2010) demonstrates thanks to the epigraphy of Yaxchilan, in reference to specific ritual dances. If we admit that ritual privileges existed in Mesoamerica, it is very likely that there were certain rules for the imitation, use, and transferral of objects involved in ritual practices, precisely because their use had to be controlled and their restriction to certain social groups had to be ensured. These ritual privileges, in turn, certainly governed the production of forms (see LeMoine *et al*. 2022: 15), which constituted the first model and allowed for identical reproduction intended for mass distribution. Considering the moulded-carved vessel, this ambivalence, first, between the will to limit the means of reproduction in resonance with the elevated status of the producers of the objects I have been discussing in this essay (see Inomata 2001); and secondly, the use of a mould technology aimed at mass distribution, perhaps refers to a political paradigm that Stone (1989) has named connection/disconnection. This figurative strategy makes it possible to simultaneously create proximity and distance with subordinate social groups. The phenomenon also points to a certain hierarchisation between objects of different status that did not necessarily circulate among the same groups. The Nativitas bowl could indeed illustrate this mechanism, since it was not found in the Gran Basamento of Cacaxtla, but in an elite residential sector, inhabited by a group of a lower status than the dignitaries of the main palatial group. The ceramic plaque of Xochicalco also constitutes another example, found in the lower part of the settlement, made in a more accessible material than the green stone, probably thanks to a mould, it would have garnered a more accessible means of diffusion of an iconography

of power anchored in processes of legitimisation with exogenous societies whose monumental model occurred in the most restricted part of the settlement.

This paper represents a first step in the identification of the latent processes in Epiclassic visual culture of two of the major cities of the Central Highlands. Much remains to be done, but we can begin to gain an understanding of the vast universe of creation and invention that Epiclassic societies employed to claim their role in space and time.

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In memory of my father, Roland Testard (1956-2025). May he rest in peace.

**References cited:**

Alvarado León, Claudia I.
2018 *Recuento de las contribuciones a la arqueología de Xochicalco*. Instituto Nacional de Antropología e Historia, Mexico City.
2019 Las relaciones sociales del espacio social en los entornos construidos del sitio arqueológico de Xochicalco, Morelos. Doctoral thesis. Universidad Nacional Autónoma de México, Mexico City.

Alvarado León, Claudia I. and Eduardo Corona-M.
2020 Consideraciones sobre los felinos de Xochicalco, Morelos, México. *Archaeobios*, Vol. 14 (1): 92–106.

Alvarado León, Claudia I., Juliette Testard, Emiliano Melgar Tísoc, Guillermo Acosta Ochoa and Silvia Garza Tarazona
in preparation The Xochicalco stone figurines, a tradition of its own: technological and compositional analysis.

Anawalt, Patricia
1990 The emperors' cloak: Aztec pomp, Toltec circumstances. *American Antiquity*, Vol. 55 (2): 291–307.

Ancona-Ha, Patricia, Jorge Pérez de Lara and Mark Van Stone
2000 Some Observations on Hand Gestures in Maya Art. *The Maya Vase Book: A Corpus of Rollout Photographs of Maya Vases, Volume IV,* edited by Justin Kerr, pp. 1072–1089. Kerr Associates, New York.

Berdan, Frances
1987 The Economics of Aztec Luxury Trade and Tribute. *The Aztec Templo Mayor*, edited by Elizabeth Hill Boone, pp. 161–183. Dumbarton Oaks Research Library and Collection, Washington, D.C.
2006 Circulation of Feathers in Mesoamerica. *Nuevo Mundo, Mundos Nuevos, Coloquios*. http://nuevomundo.revues.org/1387

Berlo, Janet C.
1989 *Early Writing in Central Mexico*: In Tlilli, In *Tlapalli before A.D.* 1000. *Mesoamerica after the Decline of Teotihuacan A.D. 700–900*, edited by Richard A. Diehl and Janet C. Berlo, pp. 19–47. Dumbarton Oaks Research Library and Collection, Washington, D.C.

Bernal Romero, Guillermo and Erik Velásquez García
2005 Manos y pies en la iconografía y la escritura de los antiguos mayas. *Arqueología Mexicana*, Vol. 11 (71): 28–33.

Billard, Claire
2020 The Nature of the Old God of Teotihuacan: Why Would the Old God be Represented by an Elderly Human Body? *Anthropomorphic Imagery in the Mesoamerican Highlands: Gods, Ancestors, and Human Beings*, edited by Brigitte Faugère and Christopher Beekman, pp. 238–265. University Press of Colorado, Boulder. DOI: 10.5876/9781607329954.c007

Bishop, Ronald L., Erin L. Sears and M. James Blackman
2005 A través del río del cambio. *Estudios de Cultura Maya,* Vol. 26: 17–40

Borlée, Denise and Laurence Terrier Aliferis
2018 Des modèles artistiques et de leurs usages à la fin du Moyen-âge. *Les modèles dans l'art du Moyen-âge: XII^e-XV^e Siècles*, edited by Denise Borlée and Laurence Terrier, pp. 11–12. Répertoire iconographique de la littérature du Moyen-âge 10. Brepols, Turnhout.

Brittenham, Claudia
2006 Los pintores del mural de la batalla de Cacaxtla, Tlax. *Memorias del Primer Coloquio Internacional Cacaxtla a sus Treinta años de Investigación*, pp. 503–521. Gobierno de Tlaxcala & Instituto Nacional de Antropología e Historia & Consejo Nacional para la Cultura y las Artes, Mexico City.
2013 Los Pintores de Cacaxtla. *La Pintura Mural Prehispánica en México V, Cacaxtla, Tomo II,* edited by María Teresa Uriarte Castañeda and Fernanda Salazar Gil, pp. 267–361. Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México, Mexico City.
2015 *The Murals of Cacaxtla. The Power of Painting in Ancient Central Mexico*. Latin American Studies. University of Texas Press, Austin.

2020 Teotihuacán y el área maya: relaciones recíprocas. *XXXIII Simposio de Investigaciones Arqueológicas en Guatemala, 2019*, edited by Bárbara Arroyo, Luis Méndez Salinas and Gloria Aju Álvarez, pp. 61–75. Museo Nacional de Arqueología y Etnología, Guatemala.

Brittenham, Claudia and Debra Nagao

2014 Cacaxtla Figural Ceramics. *Anales del Instituto de Investigaciones Estéticas*, Vol. 36: (104): 55–96.

Carballo, David M.

2007 Effigy Vessels, Religious Integration, and the Origins of the Central Mexican Pantheon. *Ancient Mesoamerica*, Vol. 18: 53–67.

Corona Andrade, Marisol

2025 Análisis cipológico y Comparativo de la escultura de Cacaxtla, Tlaxcala. Una aproximación a partir de los materiales resguardados en las bodegas arqueológicas del sitio. Licenciate Thesis. Escuela Nacional de Antropología e Historia, Mexico City.

Cruz, J. Alberto, Eduardo Corona and Emiliano Gallaga-Murrieta

2023 The Preclassic military macaw (*Ara militaris*) from the Cueva de Avendaños (Chihuahua, Mexico) was not locally procured. *International Journal of Osteoarchaeology*, Vol. 33 (4): 642–651. DOI: 10.1002/oa.3225

De Lucia, Kristin

2018 Style, Memory, and the Production of History: Aztec Pottery and the Materialization of a Toltec Legacy. *Current Anthropology*, Vol. 59 (6): 741–764.

Del Villar, Mónica

1993 Xochicalco, el lugar de la Casa de las Flores. *Arqueología Mexicana*, Vol. 1 (2): 76–79.

Delgadillo Torres, Rosalba

2006 Las urnas polícromas de Cacaxtla, Tlax. Estudio preliminar. *Memorias del Primer Coloquio Internacional Cacaxtla a sus Treinta años de Investigación*, pp. 466–491. Gobierno de Tlaxcala & Instituto Nacional de Antropología e Historia & Consejo Nacional para la Cultura y las Artes, Mexico City.

Duclos-Grenier, Pauline and Daniel Russo

2012 Histoire de l'art et Anthropologie, 6: le modèle, la copie. *Bulletin du centre d'études médiévales d'Auxerre | BUCEMA* [online], Num. 16. https://doi.org/10.4000/cem.12306.

Fash, Barbara

2011 *The Copán Sculpture Museum, Ancient Maya Artistry in Stucco and Stone.* Peabody Museum Press, David Rockefeller Center for Latin American Studies, Harvard University, Cambridge.

Focillon, Henri

1937 *Projet d'enseignement. Titres et Travaux.* Imprimerie des Presses Universitaires de France, Paris.

Foncerrada de Molina, Marta

1990 Mural Painting in Cacaxtla and Teotihuacan Cosmopolitism. *Mesoamerican Dualism, Symposium 46th International Congress of Americanists 1988*, pp. 183–198. Amsterdam.

1993 *Cacaxtla: la iconografía de los Olmecas-Xicalanca*. Universidad Nacional Autónoma de México, Mexico City.

Garza Tarazona, Silvia

2010 Esculturas de Cerámica de Xochicalco, Morelos. *Arqueología Mexicana*, Vol. 27 (103): 18–23.

Garza Tarazona, Silvia and Norberto González

2006 Cerámica de Xochicalco. *La producción alfarera en el México antiguo, Vol. III*, edited by Leonor B. Merino and Ángel García Cook, pp. 125–159. Instituto Nacional de Antropología e Historia, Mexico City.

González Crespo, Norberto, Silvia Garza, Hortensia de Vega, Pablo Mayer and Giselle Canto

1995 Archaeological Investigations at Xochicalco, Morelos 1984 and 1986. *Ancient Mesoamerica*, Vol. 6 (2): 223–236.

González Crespo, Norberto, Silvia Garza, Claudia Alvarado, Emiliano Melgar, Beatriz Palavicini, Mauro de Ángeles, Fernando Sánchez and Juan Bernando Albaitero

2008 *Informe: Trabajos de Campo del Proyecto Especial Xochicalco 1993-1994*. Unpublished Report. Archivo de la Coordinación Nacional de Arqueología del Instituto Nacional de Antropología e Historia, Mexico City.

Guerrero Martínez, Fernando

2013 La presencia del felino en la pintura mural de Cacaxtla. *La Pintura Mural Prehispánica en México V, Cacaxtla, Tomo III,* edited by María Teresa Uriarte Castañeda and Fernanda Salazar Gil, pp. 479–515. Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México, Mexico City.

Halperin, Christina T.

2009 Figurines as Bearers of and Burdens in Late Classic Maya State Politics. *Mesoamerican Figurines, Small-Scale Indices of Large-Scale Phenomena*, edited by Christina Halperin, Katherine A. Faust, Karl Taube and Aurore Guiguet, pp. 378–403. University Press of Florida, Gainesville.

Helmke, Christophe

2001 The Last Supper: Competitive Feasting and the Terminal Classic Moulded-Carved Ceramic Tradition in the Central Maya Lowlands. MA dissertation. University College London, London.

2010 The Transferral and Inheritance of Ritual Privileges: A Classic Maya Case from Yaxchilan, Mexico. *Wayeb Notes*, No. 35: 1–14.

Helmke, Christophe and Jesper Nielsen

2013 La iconografía de Cacaxtla bajo la influencia maya: Identidad, procedencia y datación. *La Pintura Mural Prehispánica en México V, Cacaxtla, Tomo II,* edited by María Teresa Uriarte Castañeda and Fernanda Salazar Gil, pp. 363–381. Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México, Mexico City.

Helmke, Christophe and Dorie Reents-Budet
2008 A Terminal Classic Molded-Carved Ceramic Type of the Eastern Maya Lowlands. *Research Reports in Belizean Archaeology,* Vol. 5: 37–49.
Helmke, Christophe and Juliette Testard
2025 Los textos jeroglíficos mayas en el Altiplano central mexicano. Autoría y audiencia. *Journal de la Société des Américanistes,* Vol. 111 (1): 15-62, https://doi.org/10.4000/14y9z
Helmke, Christophe and Carmen Ting
2020 The Terminal Classic at Pacbitun: Evidence from Moulded-carved Ceramics. *An Archaeological Reconstruction of Ancient Maya Life at Pacbitun, Belize*, edited Terry G. Powis, Sheldon Skaggs and George J. Micheletti, pp. 185–200. BAR International Series 2970, BAR Publishing, Oxford.
Helmke, Christophe, Jesper Nielsen and Ángel Iván Rivera Guzmán
2017 Tras las huellas de la tradición cartográfica en el altiplano central de México. *Estudios de Cultura Náhuatl,* Vol. 54: 79–133.
Herskovits, Melville, J.
1967 *Les bases de l'anthropologie culturelle*. Petite collection Maspero 106. François Maspero, Paris.
Hill Boone, Elizabeth and Michael E. Smith
2003 Postclassic International Styles and Symbol Sets. *The Postclassic Mesoamerican world*, edited by Michael E. Smith and Frances F. Berdan, pp. 186–193. University of Utah Press, Salt Lake City.
Ichon, Alain
1992 *Los Cerritos-Chijoj. La Transición Epiclásica en las Tierras Altas de Guatemala*. CEMCA, CNRS - R.C.P 294, Paris.
Inomata, Takeshi
2001 The Power and Ideology of Artistic Creation: Elite Craft Specialists in Classic Maya Society. *Current Anthropology*, Vol. 42 (3): 321–349.
Joyce, Rosemary
2004 Mesoamerica: A Working Model for Archaeology. *Mesoamerican Archaeology: Theory and Practice*, edited by Julia A. Hendon, Lisa Overholtzer and Rosemary Joyce, pp. 1–42. Wiley Blackwell Studies in Global Archaeology, Blackwell Publishing, Malden.
Koontz, Rex
2008 Iconographic Interaction between El Tajín and South-Central Veracruz. *Classic Period Cultural Currents in Southern and Central Veracruz*, edited by Philip J. Arnold III and Christopher Pool, pp. 323–359. Dumbarton Oaks Research Library and Collection, Washington, D.C.
Kubler, George
1969 *Studies in Classic Maya Iconography*. Memoirs of the Connecticut Academy of Arts & Sciences 18. Hamden Archon Books, New Haven.
1980 Eclecticism at Cacaxtla. *Third Palenque Round Table 1978*, edited by Merle Greene Robertson, pp. 163–172. University of Texas Press, Austin.
1985 *Studies in Ancient American and European Art: The Collected Essays of George Kubler*, edited by Thomas F. Reese. Yale Publications in the History of Art 30. Yale University Press, New Haven.
Lacadena, Alfonso
2010 Highland Mexican and Maya Intellectual Exchange in the Late Postclassic. Some Thoughts on the Origin of Shared Elements and Methods of Interaction. *Astronomers, Scribes, and Priests Intellectual Interchange between the Northern Maya Lowlands and Highland Mexico in the Late Postclassic Period*, edited by Gabrielle Vail and Christine Hernández, pp. 383–406. Dumbarton Oaks Research Library and Collection, Washington, D.C.
Ladrón de Guevara, Sara
2020 *Sonrisas de piedra y barro: iconografías prehispánicas de la Costa del Golfo de México*. Universidad Veracruzana, Xalapa.
Lazcano Arce, Jesús Carlos
2006 Explotación de recursos en el sitio de Nativitas, durante los periodos formativos y epiclásico. *Memorias del Primer Coloquio Internacional Cacaxtla a sus Treinta años de Investigación*, pp. 173–185. Gobierno de Tlaxcala & Instituto Nacional de Antropología e Historia & Consejo Nacional para la Cultura y las Artes, Mexico City.
LeMoine, Jean-Baptiste, Christina T. Halperin and Miriam Salas
2022 Maya Molded-Carved Ceramics as Boundary Objects: Terminal Classic Ceramic Production and the Forging of Political Relations in the Mopan Valley of Guatemala. *Journal of Anthropological Archaeology*, Vol. 68: 101463. DOI: 10.1016/j.jaa.2022.101463
León Portilla, Miguel
1985 *La Pensée Aztèque*. Recherches Anthropologiques. Le Seuil, Paris.
Lombardo, Sonia, Diana López de Molina, Daniel Molina Feal, Carolyn Baus de Czitrom and Oscar Polaco
1991 *Cacaxtla, el lugar donde muere la lluvia en la tierra*. Gobierno del Estado de Tlaxcala & Instituto Nacional de Antropología e Historia & Consejo Tlaxcalteca de Cultura, Mexico City.
López Austin, Alfredo
1994 *Tamaonchan y Tlalocan*. Sección de Obras de Antropología. Fondo de Cultura Económica, Mexico City.
López Luján, Leonardo
2002 Los aztecas y su visión del pasado. *Aztecas, exposición en la Royal Academy of Arts, London, 16 de noviembre del 2002 – 11 de abril 2003,* pp. 22–29. Turner publicaciones, Madrid.
López Luján, Leonardo and Michelle de Anda Rogel
2017 Teotihuacan en México-Tenochtitlan: descubrimientos recientes, nuevas perspectivas. *Estudios de cultura náhuatl*, Vol. 54: 17–60.

López Luján, Leonardo and Eduardo Matos Moctezuma (eds)
2022 *Los animales y el recinto sagrado de Tenochtitlan*. El Colegio Nacional, Mexico City.
Magnani, Eliana and Daniel Russo
2010 Histoire de l'art et anthropologie, 4. Modèle et copie. Autour de la notion de « modèle » en anthropologie, histoire et histoire de l'art. *Bulletin du centre d'études médiévales d'Auxerre | BUCEMA*, Num. 14: 209–233.
Matos Moctezuma, Eduardo
2002 Teotihuacan y Tula: su presencia en Tenochtitlan. *Ideología y política a través de materiales, imágenes y símbolos, Memoria de la Primera Mesa Redonda de Teotihuacan*, edited by María Elena Ruiz Gallut, pp. 117–134. Consejo Nacional para la Cultura y las Artes & Instituto Nacional de Antropología e Historia & Instituto de Investigaciones Estéticas & Instituto de Investigaciones Antropológicas, Universidad Nacional Autónoma de México, Mexico City.
Michener, David C.
2013 Las plantas de Cacaxtla: una perspectiva botánica. *La Pintura Mural Prehispánica en México V, Cacaxtla, Tomo III,* edited by María Teresa Uriarte Castañeda and Fernanda Salazar Gil, pp. 518–527. Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México, Mexico City.
Miller, Arthur G.
1986 *Maya Rulers of Time, A Study of Architectural Sculpture at Tikal, Guatemala*. The University Museum, University of Pennsylvania, Philadelphia.
Montgomery, John
1995 Sculptors of the Realm: Classic Maya Artists' Signatures and Sculptural Style During the Reign of the Piedras Negras Ruler 7. MA thesis. University of New Mexico, Albuquerque.
Moreno Gúzman, María Olvido
2013 Escudos rituales en el Mural del Sacrificio del Maíz. *La Pintura Mural Prehispánica en México V, Cacaxtla, Tomo III,* edited by María Teresa Uriarte Castañeda and Fernanda Salazar Gil, pp. 741–775. Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México, Mexico City.
Nagao, Debra
1989 Public Proclamation in the Art of Cacaxtla and Xochicalco. *Mesoamerica after the Decline of Teotihuacan A.D. 700–900*, edited by Richard A. Diehl and Janet C. Berlo, pp. 83–104. Dumbarton Oaks Research Library and Collection, Washington, D.C.
2014 An Interconnected World? Evidence of Interaction in the Arts of Epiclassic Cacaxtla and Xochicalco, Mexico. PhD dissertation. University of Columbia, New York.
Navarijo Ornelas, Lourdes
2013 Los elementos ornitológicos en el discurso pictórico. *La Pintura Mural Prehispánica en México V, Cacaxtla, Tomo III,* edited by María Teresa Uriarte Castañeda and Fernanda Salazar Gil, pp. 441–477. Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México, Mexico City.
Palka, Joel W., Josuhé Lozada and Alejandro Sheseña
2023 Hallazgos sobre un nuevo estilo de cilindros efigies mayas de Laguna Pethá, Chiapas. *Arqueología Mexicana*, Vol. 29 (179): 78–83.
Panofsky, Erwan
1969 *L'œuvre d'art et ses significations. Essais sur les « Arts visuels »*. NRF, Gallimard, Paris.
Pasztory, Esther
1992 Abstraction and the Rise of a Utopian State at Teotihuacan. *Art, Ideology and the City of Teotihuacan*, edited by Janet C. Berlo, pp. 281–320. Dumbarton Oaks Research Library and Collection, Washington, D.C.
Polaco, Oscar
1991 Los murales desde una perspectiva biológica. Apéndice 4. *Cacaxtla, el lugar donde muere la lluvia en la tierra*, edited by Sonia Lombardo de Ruiz, pp. 531–536. Gobierno del Estado de Tlaxcala & Instituto Nacional de Antropología e Historia & Consejo Tlaxcalteca de Cultura, Mexico City.
1994 La fauna en la pintura mural. *Arqueología Mexicana*, Vol. 1 (6): 79–81.
Proskouriakoff, Tatiana
1974 *Jades from the Cenote of Sacrifice, Chichen Itza, Yucatan.* Vol. 1. Memoirs of the Peabody Museum of Archaeology and Ethnology 10. Cambridge University Press, Cambridge.
Quirarte, Jacinto
1983 Outside Influence at Cacaxtla. *Highland-Lowland Interaction in Mesoamerica: Interdisciplinary Approaches*, edited by Arthur G. Miller, pp. 201–221. Dumbarton Oaks Research Library and Collection, Washington, D.C.
Rice, Prudence M.
1999 Rethinking Classic Lowland Maya Pottery Censers. *Ancient Mesoamerica*, Vol. 10 (1): 25–50.
Robertson, Donald
1985 The Cacaxtla Murals. *Fourth Palenque Round Table 1980*, Vol. 4, edited by Merle Greene Robertson and Elizabeth P. Benson, pp. 291–302. Pre-Columbian Art Research Institute, San Francisco.
Robertson, Merle Greene
1991 *The Sculpture of Palenque, Vol. IV, The Cross Group, The North Group, The Olvidado and other pieces*. Princeton University Press, Princeton, New Jersey.
Sáenz, César
1962 Exploraciones arqueologicas en Xochicalco. *Boletín INAH*, Núm. 7: 1–3.
Samayoa Chinchilla, Carlos and Thomas Barthel
1967 *L'art des Mayas du Guatemala: 1967-1968. Catalogue d'exposition*. Editions des Musées Nationaux, Paris.
Schmidt, Peter J., Mercedes de la Garza and Enrique Nalda (eds)
1998 *Maya*. Rizzoli Publications, New York.

Serra Puche, Mari Carmen and Jesús Carlos Lazcano Arce
2004 *Los materiales cerámicos del Epiclásico en el sitio de Xochitécatl-Cacaxtla-Nativitas. México*. Unpublished manuscript in possession of the author.
2011 *Vida cotidiana. Xochitécatl-Cacaxtla. Días. Años. Milenios*. Instituto de Investigaciones Antropológica, Universidad Nacional Autónoma de México, Mexico City.
Serra Puche, Mari Carmen, Jesús Carlos Lazcano, Mónica Blanco, Víctor Hugo Romero Aranda, Javier Jover Maestre, Marianne Sallum and Luis Fernando Gómez Padilla
2012 *Proyecto Arqueológico 'El hombre y sus recursos en el Valle de Puebla-Tlaxcala durante el Formativo y el Epiclásico' Sitio Nativitas*. Unpublished Report. Archivo de la Coordinación Nacional de Arqueología del Instituto Nacional de Antropología e Historia, Mexico City.
Smith, Michael E.
2003 Information Networks in Postclassic Mesoamerica. *The Postclassic Mesoamerican World*, edited by Michael E. Smith and Frances F. Berdan, pp. 181–85. University of Utah Press, Salt Lake City.
Smith, Robert E. and James C. Gifford
1966 *Maya Ceramic Varieties, Types, and Wares at Uaxactun: Supplement to Ceramic Sequence at Uaxactun*. Middle American Research Institute, Publication 28, Tulane University, New Orleans.
Somerville, Andrew D., Ben A. Nelson and Kelly J. Knudson
2010 Isotopic Investigation of Pre-Hispanic Macaw Breeding in Northwest Mexico. *Journal of Anthropological Archaeology*, Vol. 29 (1): 125–135.
Stone, Andrea
1989 Disconnection, Foreign Insignia and Political Expansion: Teotihuacan and the Warrior Stelae of Piedras Negras. *Mesoamerica after the Decline of Teotihuacan A.D. 700–900*, edited by Richard A. Diehl and Janet Catherine Berlo, pp. 153–172. Dumbarton Oaks Research Library and Collection, Washington, D.C.
Sugiyama, Saburo and Leonardo López Luján
2006 Sacrificios de consagración en la Pirámide de la Luna, Teotihuacan. *Sacrificios de consagración en la Pirámide de la Luna*, edited by Saburo Sugiyama and Leonardo López Lujan, pp. 25–52. Instituto Nacional de Antropología e Historia & Arizona State University, Mexico City.
Taube, Karl
2003 Tetitla and the Maya Presence at Teotihuacan. *The Maya and Teotihuacan, Reinterpreting Early Classic Interaction*, edited by Geoffrey E. Braswell, pp. 273–314. University of Texas Press, Austin.
Testard, Juliette
2013 Expressionnisme et naturalisme à Cacaxtla-Xochitécatl et Xochicalco (Mexique): une approche des interactions culturelles pendant l'Épiclassique. *Adoption et Adaptation*, edited by Charlène Bouchaud, Quentin Borderie and Thibault Valette, pp. 111–139. Archéo Doct, vol. 5. Publications de la Sorbonne, Paris.
2014a Pouvoir et altérité. Interactions suprarégionales à l'Epiclassique (600 à 900 apr. J.-C.) dans le Mexique central (Puebla-Tlaxcala et Morelos). Doctoral thesis. Université Paris 1 Panthéon-Sorbonne, Paris.
2014b Transformations des représentations corporelles durant l'Épiclassique mésoaméricain (600 à 900 apr. J.-C.). *Ateliers d'anthropologie. Revue éditée par le Laboratoire d'ethnologie et de sociologie comparative,* Num. 40, https://journals.openedition.org/ateliers/9628
2018 Intercambiar en Mesoamérica durante el Epiclásico (600 a 900 d.C.): poder, prestigio y alteridad. Un análisis de la cultura material de Puebla-Tlaxcala y Morelos (México). *Journal de la société des américanistes*, Vol. 104 (2): 153–201.
2021 Strategies of Legitimization in Mesoamerica. Uses of Greenstone Figurative Plaques during the Epiclassic (AD 600–900). *RES: Anthropology and Aesthetics*, Vol. 75–76: 118–136.
2022 Le Postclassique ancien (900-1200 apr. J.-C.): mésoaméricanisation et émulations. *Atlas de l'Amérique précolombienne*, edited by Brigitte Faugère and Nicolas Goepfert, pp. 42–43. Atlas Autrement, Paris.
2023 *La fábrica del prestigio en Mesoamérica. Interacciones y alteridad en el Altiplano central durante el período epiclásico (600–900 d.C.)*. Paris Monographs in American Archaeology 60. Archaeopress Access Archaeology, Oxford. DOI: 10.32028/9781803275574
Ting, Carmen, Marcos Martinón-Torres, Elizabeth Graham and Christophe Helmke
2015 The Production and Exchange of Moulded-Carved Ceramics and the 'Maya Collapse'. *Journal of Archaeological Science*, Vol. 62: 15–26.
Turner, Andrew
2016 Cultures at the Crossroads: Art, Religion, and Interregional Interaction in Central Mexico, AD 600-900. PhD dissertation. University of California, Riverside.
Umberger, Emily
1987 Antiques, Revivals, and References to the Past in Aztec Art. *RES: Anthropology and Aesthetics*, Vol. 13: 62–105.
Urcid, Javier and Leonardo López Luján
2019 Xochicalco en México-Tenochtitlan: apropiaciones gráficas en la tradición escrituraria tardía de la Cuenca de México. *Estudios de cultura náhuatl*, Núm. 58: 15–58.
Vega Villalobos, María Elena
2016 El legado de los escultores: un estudio de las firmas de artistas registradas en los monumentos

mayas del periodo Clásico Tardío. *Anales del Instituto de Investigaciones Estéticas*, Vol. 1 (108): 149–175.

Von Winning, Hasso and Nelly Gutiérrez Solana
1996 *La Iconografía de la Cerámica de Río Blanco, Veracruz*. Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México, Mexico City.

Wyllie, Cherra
2008 Continuity and Change in Late Classic Southern Veracruz Art, Hieroglyphs, and Religion. *Classic Period Cultural Currents in Southern and Central Veracruz*, edited by Philip J. Arnold III and Christopher Pool, pp. 225–257. Dumbarton Oaks Research Library and Collection, Washington D.C.

# Chapter 11
# From the East: Reflections on the Nature, Origin and Timing of Maya Traits at Central Mexican Epiclassic Sites

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## Introduction

With the collapse of the great metropolis of Teotihuacan (AD 550–650), the central Mexican highlands were plunged into a great period of social restructuration, known as the Epiclassic (AD 650–950) (e.g. Alvarado León *et al.*, this volume; Diehl and Berlo 1989; Jiménez Moreno 1959). This period saw the emergence of a series of independent city-states, such as Xochicalco, Teotenango and Cacaxtla that rose in the wake of the collapse of highly centralised hegemonic forms of governance. Social-political transformation is a defining feature of the Epiclassic, although there are few empirically informed theoretical models or heuristic approaches to explain the advent of Epiclassic social structures.

The material culture at Xochicalco provides valuable insights into the site's role as a cultural nexus in the Epiclassic, highlighting the dynamic nature of cultural exchange and innovation of the period. Based on precisely this growing mass of material evidence found at Xochicalco we are now forced to reconsider the fact that aside from local material culture, the bulk points to emulations of elite Maya artefacts and forms of symbolic expression. Therefore, far from the loose and superficial stylistic similarities that have long been debated among art historians and lumped under the awkward heading of "eclecticism" (Kubler 1980; see also Brittenham 2015; Nagao 2014), we now need to consider the presence of types of architecture, and associated architectural sculptures and decorations, material culture, along with representations of mythological entities and deities, and most important of all, depictions of idealised rulers—all of which derive from contemporaneous, Late-to-Terminal Classic (AD 700–950) canons of Maya art and material culture. This strong resonance of the ideological realm of the Maya speaks of the well-informed translation of foreign ideologies and forms of governance to a central Mexican setting; accompanied by attendant material culture and architectural forms. Given the evidence at hand, we propose that Epiclassic rulers intentionally modelled their form of rule on the contemporaneous forms of governance that existed at the time, namely the monarchical city-states of the east. We may go one step further and suggest that these may have been deliberately emulated for their perceived stability and temporal longevity. As such, Epiclassic rulers essentially saw themselves in the same mould as the eastern monarchs of city-states, the imported forms of governance bringing with them consequential material culture, ideational backdrops, symbols of power, as ideals of the eastern realms were rapidly naturalised to their new cultural setting.

The discourse surrounding Maya traits at Xochicalco has focused in particular on its most renowned monument, namely the Pyramid of the Feathered Serpents (Figure 11.1), resulting in a polarization of contrasting perspectives first articulated by Carl Nebel (1836) and Eduard Seler (1904), each emblematic of divergent historiographic interpretations. Nebel, writing in 1834, focused on the distinctiveness in the iconography, emphasizing the exaggerated nasal features and crossed legs, which he perceived as reminiscent of monuments of the Maya area. In contrast, Seler writing 68 years later, in 1904, ardently dismissed any and all Maya attributions, but drew attention to the figure's cross-legged posture and animal headdress. This bipolar debate persists to this day, reflecting ongoing scholarly views regarding the origins and nature of interactions that have shaped the iconography of Xochicalco, although most scholars now tacitly acknowledge some Maya influence (e.g. Nagao 2014: 143–151, 2019; Smith 2000; Taube 2017). However, the nature of such "influence" and what precisely this implies are rarely addressed in full (although see Brittenham 2015; Nagao 1989, 2019).


**Figure 11.1:** The Pyramid of the Feathered Serpents of Xochicalco. **a)** general view, **b)** detail of one of the cross-legged seated figures (photographs by C. Helmke).

Still, beyond the iconography of the Pyramid of the Feathered Serpents, few scholars have attempted to comprehend the totality of the evidence from Xochicalco, nor have they purposely inquired as to whether artistic styles reflect indigenous innovation, eclecticism, or direct Maya impart. In this paper, we seek to address this very question by examining the weight of the evidence afforded by architectural features, iconographic elements, material culture, representations of foreign deities, and polychromatic murals, found at Xochicalco that codify the cultural exchanges and historical dynamics that connected ancient Mesoamerican societies together during the Epiclassic period.

## An old and ongoing debate

It was the German architect and illustrator Carl Nebel who, upon having visited both Palenque and Xochicalco, first made a direct comparison of the seated individuals on the lower sloping *taludes* of the Pyramid of the Feathered Serpents with Maya reliefs, remarking that those at Xochicalco bore a resemblance to those encountered in Chiapas (more specifically Palenque) and Yucatan (Nebel 1836). Subsequent travellers in the second half of the nineteenth century, such as Jean-Frédéric Waldeck, appear to have made similar observations. However, in his detailed treatment of the site and its architecture, sculpture and iconography

published in 1904, Eduard Seler authoritatively thought otherwise: "The notion of a Palenque type, which some authors wish to see in this figure, is certainly not in question" (Seler 1960 II: 76 [1904: 137], translation ours).[1] Seler did not give any names, but it was undoubtedly Nebel, among others, who he targeted with his rather incisive rejection.

Nevertheless, in the two centuries since the idea was first postulated, the perception that the seated persons do indeed reflect a direct Maya inspiration or "influence" has since become widespread and generally accepted (see Andrews 2010: 376; Nagao 1989, 2019; Smith 2000: 60; Taube 2017: 276). Indeed, examples of Maya plaques from Chichen Itza and palatial scenes of Maya rulers show a striking similarity in body posture and gesture to those at the Pyramid of the Feathered Serpents (see Nagao 1989: 94). In 1962, George Kubler, the highly influential art historian even went so far as to suggest that Xochicalco was a "hilltop ritual centre related to Veracruz and Piedras Negras" and even stated, that "From the pottery it seems that Xochicalco was the north-western frontier outpost for a Maya cultural tradition" (Kubler 1962: 70). While not explicitly commenting on the seated persons of the lower *taludes* of the Pyramid of the Feathered Serpents, he drew comparisons to the seated figures on the upper *taludes*, who wear "turbans", with those shown on the famous Altar Q of Copan (Kubler 1962: 72). Kubler's sweeping conclusion about Xochicalco as a Maya outpost seems strangely unfounded, and it is not an idea that has been taken up since. In 1971, Henry B. Nicholson acutely stated: "The sculptural style of Xochicalco presents certain problems" and pointed to the different Mesoamerican traditions that appear to have been integrated into Xochicalco's visual language, leading to the label "eclecticism" that has been since applied to much of the iconography of the Epiclassic period (ever since Kubler 1980). With regards to the seated individuals, Nicholson concluded that: "an undeniable lowland Maya influence is also discernible" (1971: 104). In the seminal publication on the Epiclassic—based on a seminar at Dumbarton Oaks in 1984, *Mesoamerica after the Decline of Teotihuacan A.D. 700-900* (Diehl and Berlo 1989), the question of Mayaness or Mayoid features at Xochicalco and Cacaxtla is discussed at length by Debra Nagao (1989). She raised several important issues and questioned the use of central terms like "influence", "eclecticism" and "presence" in an Epiclassic context, and it is worth quoting her at length:

> Implicit in most discussions of Cacaxtla and Xochicalco is the notion that changes in public monuments were caused by the intrusion of foreign peoples. For example, invasion or conquest has been proposed for Cacaxtla on the basis of ethnohistorical sources [...] Migration has also been posited for both sites, again largely on ethnohistorical sources [...] Interelite relations have been suggested as the link between Cacaxtla and the Maya region.
>
> In these previous approaches, the possibility of a high degree of manipulation of public monuments to communicate a political image rather than a true reality is seldom considered. If the premise that the shaping of ideology can be an important stabilising factor in the establishment of sociopolitical order, then the pivotal role of artworks in this cannot be ignored. One must ask, "How did ruler-patrons of monumental public works manipulate style and symbolism to serve their needs? (Nagao 1989: 83–84)

Her initial considerations lead to a series of highly relevant questions, and are several of the same that we are interested in providing new answers and perspectives to:

> I am proposing that monumental Epiclassic artworks be viewed as political programs intended to shape public opinion and that, as such, they represent a desired reality but not necessarily a historically accurate one. In order to understand this process and the role of public monuments during this transitional phase, it is important to consider a number of questions: What were the needs and concerns of Epiclassic patrons, and how did they differ from those of the Classic period? What messages were encoded in public artworks? How did artworks effectively convey these messages? (Nagao 1989: 84–85).

More recent contributions and syntheses have generally followed the same overall interpretative framework for understanding the Maya-like features at Xochicalco, occasionally adding new observations and including new archaeological material (e.g. Brittenham 2015; González Crespo *et al.* 1995; Nagao 2019; Nielsen and Helmke 2023; Turner 2021)[2]. In her volume on

[1] The original states: "Von einem Palenque-Typus, den einige Autoren in dieser Figur erblicken wollen, ist natürlich keine Rede" (Seler 1904: 137).

[2] In the recently much revised edition of Michael Coe's *Mexico: from the Olmecs to the Aztecs* an unexpected return to Seler's "puritan" approach is found. Thus, the authors avoid any mentioning of Maya cultural impulses at Xochicalco, and instead presents an unfounded interpretation of the iconographic and epigraphic program of the Pyramid of the Feathered Serpents, claiming that the seated individuals on the lower taluds are all portraying the same person, "undoubtedly ... references to an apical ancestor, 9 Alligator" (Coe *et al.* 2019: 149). In earlier editions, as in the sixth edition (Coe and Koontz 2008) and the original from 1962, it is unwaveringly stated that "the seated nobles reflect the influence of the Classic Maya far to the south" (Coe 1962: 132).

murals of Cacaxtla, Claudia Brittenham provides a brief Epiclassic context, also touching upon the—in her words "cosmopolitan"—processes taking place at Xochicalco. As for the seated figures, she suggested rather plainly that they "seem to have been copied from images of rulers on Maya jade plaques" (Brittenham 2015: 37), echoing observations made by Debra Nagao (1989: 94) two decades earlier. Interestingly, in keeping with the observations first made by Nagao, she also emphasizes the role foreign motifs or features may have played among the Epiclassic city-states:

> Part of the goal may have been to establish visual distance from the failed legacy of Teotihuacan. It also meant adopting the style of success: distant Maya city-states like Tikal, Copan, and Palenque were among the largest political entities left standing in Mesoamerica after the Teotihuacan cataclysm. Their peer-polity interactions provided a viable alternative model to the empire of Teotihuacan (Brittenham 2015: 37).

Apart from the much-discussed seated individuals from the Pyramid of the Feathered Serpents only a few other examples of possible Mayaness or Mayoid features have been mentioned for Xochicalco (making Kubler's remark all the more curious). Karl Taube, always a keen observer of Maya traits in the central Mexican highlands, has pointed to other elements that appear to have originated in a Maya tradition or school of visual expressions (e.g. Taube 2003). Yet, the overall image that archaeologists and art historians have so far been able to paint in terms of Maya "presence" or "influence" at Xochicalco has been less clearly defined and less apparent than what is generally seen as the more obvious and direct influence at Cacaxtla (Foncerrada de Molina 1993; also Brittenham 2015).

## Possible Maya-style architecture and site-planning at Xochicalco

We begin our own review of Maya traits in Epiclassic central Mexico by examining architectural features, specifically the ballcourts, of which Xochicalco exhibits two distinct types. The northern ballcourt resembles a precursor to later Postclassic ballcourts with steep sides, contrasting sharply with the eastern and southern ballcourts, which align more closely with Maya architectural norms, in terms of size and form (see Taladoire 2019) (Figure 11.2). Notably, the presence of ball court rings, typically associated with Central Mexican or Yucatec styles (Barrois 2006: 104–114; Taladoire 2019: 43–55, Table 3), instead suggest early examples of Maya-style ballcourts outside the Maya region. This seems probable, given that Classic-period examples are known for a selection of sites in the central Maya lowlands (Tonina, Naranjo, Xunantunich and Xultun) we may likewise argue that the presence

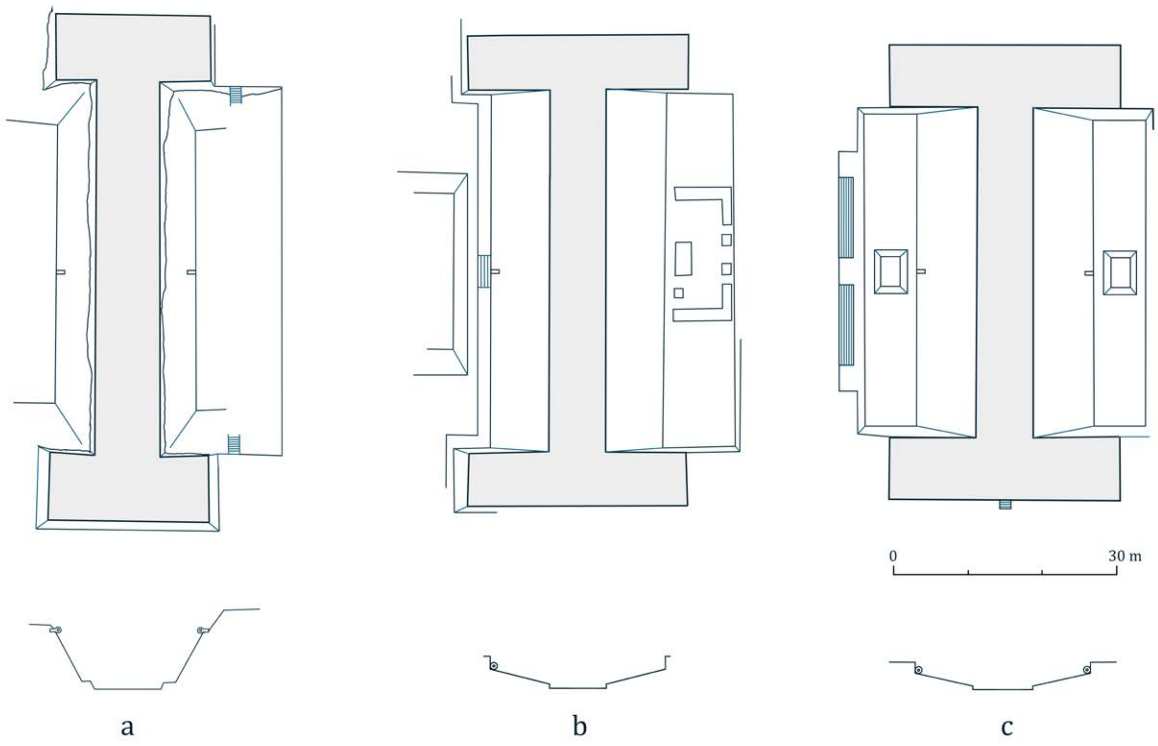


**Figure 11.2:** The ballcourts of Xochicalco. **a)** Northern ballcourt, **b)** Eastern ballcourt and **c)** Southern ballcourt (plans and sections by Christophe Helmke, based on LiDAR data and surveys by G. Lucet).

**Figure 11.3:** Ballcourt sculpture representing the head of a giant macaw (photograph by C. Helmke).

of these features at Xochicalco are not a Yucatec trait, but actually an overlooked lowland Maya feature found outside of this point of incipience (Awe *et al.* 2023: 221–222; Graham 1980:187; Graham *et al.* 2006: 110; Helmke *et al.* 2015: 18, Fig. 15; Taladoire 2019: 63).

A remarkable artefact found within Xochicalco, resembling an oversized *hacha*, depicts a large macaw head (Figure 11.3), representing one of the major actors of ballgame mythology, and which closely resembles similar macaw ballcourt markers found at Copan (Fash 2011: 93–94; López Luján 1995: 55; Smith and Hirth 2000: 38, 41; Turner 2021: 163–164; Whittington 2001: 168–169). This ballcourt sculpture was found by chance, west of the Pyramid of the Feathered Serpents, in the early years of the twentieth century (López Luján and Santos 2011). The sculpture bears a striking similarity to the ballcourts of Copan, that were richly adorned with supernatural macaws during the various phases of refurbishment from the fifth to the eighth centuries (Fash 1992: 90–91; Fash 1998: 230–232; Kowalski and Fash 1986). This is part of shared mythological narratives across Mesoamerica wherein giant macaws figure prominently as monstrous beings that are defeated by cultural heroes in primordial times, as part of greater monster-ridding cycles, serving as preludes to the creation of humanity (see Helmke and Nielsen 2015, in press; Nielsen and Helmke 2015). Additionally, the surviving ballcourt ring of the Eastern ballcourt was found collapsed *in situ*, in the middle of the west wall, atop the upper sloping bench. This ballcourt ring

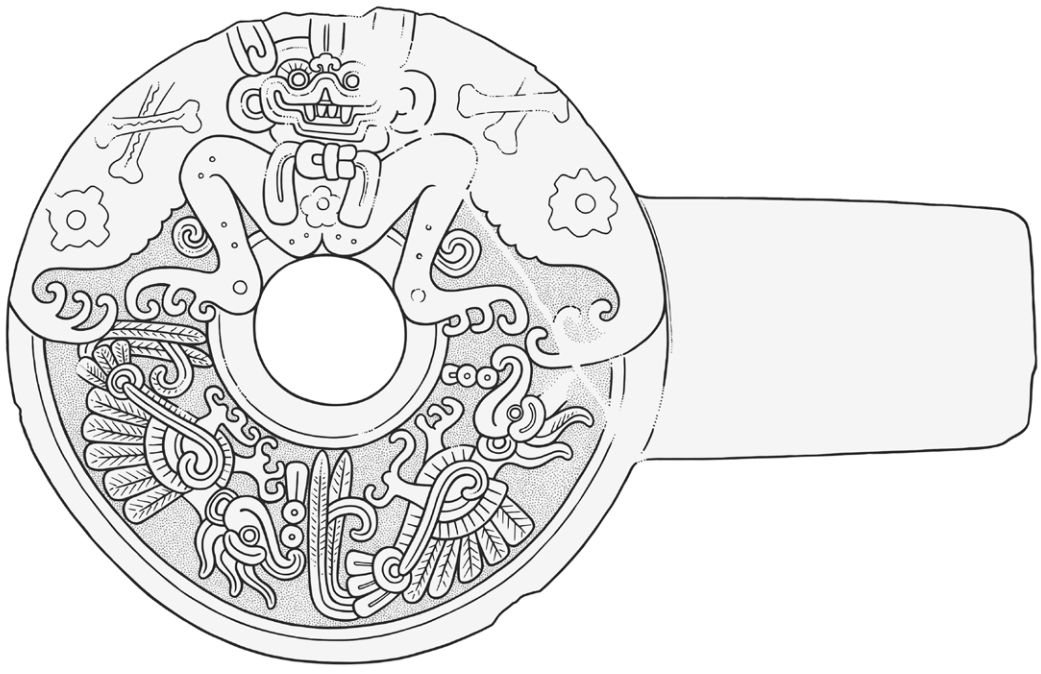

**Figure 11.4:** The surviving western ballcourt ring of the Eastern ballcourt (drawing by N. Latsanopoulos).

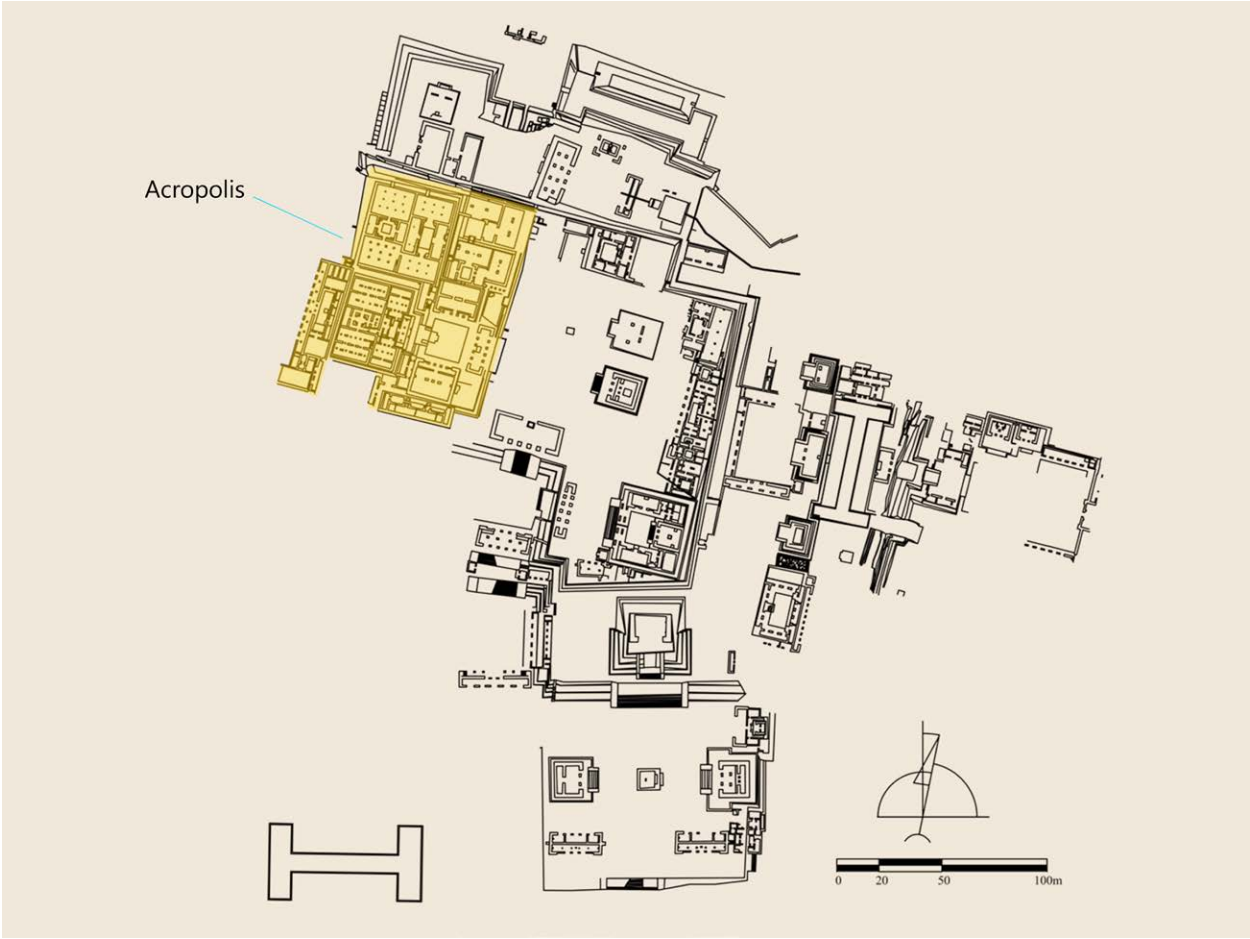


**Figure 11.5:** The monumental epicentre of Xochicalco showing the extent of the palatial Acropolis (map by the Proyecto Arqueológico Xochicalco, adapted by C. Helmke).

(Figure 11.4) exhibits imagery that draws heavily on Maya mythology and cosmology, including a bat with outstretched wings that are adorned with crossed bones, along with two quarrelling quetzal birds, emblematic of eastern origins and Maya culture (e.g. Taube 2004, 2017: 276). The presence of such symbolism reflects not only artistic exchange but familiarity of Maya mythology and natural historical knowledge gained from observed biological behaviours of male quetzals.

Beyond ballcourts, the emergence of palaces during the Epiclassic period also represents a significant shift in social structure (see Pereira, this volume), when compared to the preceding Classic period. Unlike Teotihuacan, where the identification of a singular palace remains elusive due to architectural regularity of centralised and orthogonal city planning (see discussion in Carballo 2020; Nielsen 2014), Xochicalco's palace is a distinct departure, that we assume reflect evolving social re-structurations. This architectural evolution is symptomatic of the complex interplay of cultural influences and societal transformations that took place during the Epiclassic era at Xochicalco (see Alvarado León 2015). The prevalence of large, singular palaces within Epiclassic sites, that are broadly in keeping with Maya architectural canons, highlights the similarities in social structures of city-states (see Alvarado León 2020; Inomata and Houston 2001; Lucet 2013). At Xochicalco, the palace occupies a substantial portion of the monumental epicentre, comprising approximately 12.3% of the total surface area (Figure 11.5). This significant architectural complex embodies the centrality of royalty within the city-state social structures. Notably, the palace is strategically positioned at the highest and most inaccessible point of the site (see Alvarado León 2022), mirroring Maya architectural conventions where palaces are elevated above surrounding plazas.

Furthermore, the concept of restricted access architecture sheds light on social behaviour via the control of movement and access within urban spaces. Through an analysis of major access points, it becomes evident that structures were purposefully raised along pathways that serve to regulate and obstruct passage (Alvarado León 2022) (Figure 11.6). These structures,


**Figure 11.6:** The distribution of *audiencia* structures across major points of access in the monumental epicentre and paths leading to the Acropolis (map by the Proyecto Arqueológico Xochicalco, adapted by C. Helmke).

dating to the later part of the site's history, parallel Maya *audiencia* structures, which act as checkpoints for gaining access to the secluded royal palace, thus reinforcing social inequality within urban settings (Alvarado 2019: 326). This architectural phenomenon, prevalent in the Maya area from AD 750 onwards (e.g. Awe 2008; Parmington 2011), speaks to a growing desire among rulers to increasingly distance and segregate themselves from the populace. The strategic placement of such *audiencia* structures at Xochicalco serves to regulate and control access to the palace, reflecting a trend towards increased segregation of royalty from the general population (Alvarado León 2022: 43; Alvarado León and Garza Tarazona 2010: 146). The structures (dated to between AD 830 and 850), feature broad doorways on the front—and fewer doorways at the back—funnelling traffic and allowing for controlled passage. In some specific cases (for example Str. G3) benches were later added at the centre-back, further limiting access (see also Nielsen *et al.* 2001). Notably, one such structure, Str. I4, contained grisly displays of human skeletons, probably serving as an additional psychological deterrent (Garza Tarazona *et al.* 2003: 196-197). The anatomically mismatched human remains that were found in distinct groupings on the floor of this structure during excavations, consisted of mandibules, long bones, and skull fragments, whereas others involved articulated mandibles and skulls, as well as a pelvic girdle and lower extremities. Analyses revealed that the bones exhibit various cultural modifications such as cuts, scrapes and conical perforations. Slight wear was observed around the edges of the holes, suggesting that the skeletal elements were tied together to form trophies that were hung from the roof beams of the structure (Ángeles 1993-1994; Pijoan *et al.* 2003). This architectural strategy reflects deliberate

**Figure 11.7:** Mosaic sculptures representing butterflies that once adorned the terraces of the upper ceremonial plaza (after Garza Tarazona and Mayer Guala 2005: Fig. 53).

**Figure 11.8:** Fragmentary stucco mat motifs that once adorned the facade of Structure B2-1 (photograph by C. Helmke).

efforts to control movement and access, shaping social interactions and reinforcing hierarchical power structures within the societies of the Epiclassic and closely follow Maya architectural templates.

## Architectural motifs: Butterflies, mats and quetzals

Architectural facades were also adorned with a variety of motifs, several of which betray connections to

**Figure 11.9:** The iconography of the lower *taludes* of the Pyramid of the Feathered Serpents (composite photograph and graphics by C. Helmke).

Maya iconography. Among these are mosaic sculpture fragments discovered at Xochicalco, the majority of which remain unpublished, that offer intriguing insights into cultural continuity and exchange (Garza Tarazona and Mayer Guala 2005: Fig. 53; Turner 2016: 128–129). These sculptures, depict butterfly motifs (Figure 11.7), drawing on Teotihuacan iconography and religious conceptions, reiterating the belief in the transformation of deceased warriors into butterflies in the afterlife (Berlo 1983; Headrick 2003; Nielsen and Helmke 2018: 87–95; Taube 2000).[3] The rendering of these sculptures, with neatly carved blocks, in high relief, bears a very close resemblance to mosaic sculptures that are a hallmark of Copan in the Maya region, further revealing cultural exchanges and mutual influences between Xochicalco and Maya sites. This is especially comparable to Structure 26 at Copan, famous for its focus on the local dynasty's Teotihuacan "heritage", which also displayed mosaic sculptures of serpent entities with clear Teotihuacan-inspired butterfly elements (Fash 2011: 109–111; Stuart 2005). At Xochicalco, the sculptures adorned the corners of the terraces of the uppermost ceremonial plaza and greeted visitors upon their approach, possibly serving to qualify the entire plaza area as a space associated with complementary symbolic references to fertility, abundance, creation, and origins as well as warfare, death, and the afterlife (see also Turner 2021).

The mosaic sculptures at Xochicalco, while similar in style to those at Copan, exhibit local iconography, highlighting a reciprocal exchange of artistic motifs and construction techniques between the two regions. This convergence of artistic styles brings into sharper focus the interconnectedness and cultural dialogue between Mesoamerican city-states during the Epiclassic period.

The distinct mat motifs found at Xochicalco, identical to those found in Maya imagery, serve as symbolic representations of rulership and power inherent in architectural ornamentation (see Robinson 2013; Robiscek 1975). The mat motifs at Xochicalco appear mainly in the Pyramid of the Feathered Serpents in the bands that separate the main iconographic panels from one another (Nielsen and Helmke 2023). Another structure that bore these motifs, as small stucco applique is Str. B2-1, along the edge between the sloping *talud* and the vertical *tablero* (Figure 11.8). These motifs were typically incorporated into regal attire and regalia, adorn buildings at Xochicalco, serving as visual markers of authority and sovereignty. While further discussion on these motifs can be found in Juliette Testard's excellent studies (Testard 2018: 164–165, 2023: 271) the presence of these motifs suggests a shared cultural significance, particularly in the portrayal of rulership and authority.

Briefly returning to the Pyramid of the Feathered Serpents, we can comment on its iconography, which prominently features large, feathered serpents as well as the depiction of an apparent "Maya monarch" alongside an Epiclassic calendrical notation written as "9 Reptile Eye" (Figure 11.9). As we have already argued elsewhere, this date likely corresponds to a New Fire ceremony, that was celebrated in conjunction with the consecration of the building itself (Helmke and Nielsen 2011: 17, Fig. 10; Helmke and Nielsen 2023: 54). The depiction of the feathered serpent itself, rendered sinuously and adorned with stylised shells, evokes the idea of easterly rain-bearing winds, and visualises the mythological narrative of a serpent slithering across the surface of a primordial sea, mirroring motifs found in earlier central Mexican iconography, notably at Teotihuacan. The motif of the feathered serpent transporting a ruler from the east thus bears striking similarities to earlier depictions at the Feathered Serpent Pyramid at Teotihuacan and in the murals of Zacuala, indicative of continuity in a local mythological

[3] Butterflies are also represented on ceramic effigy urns and censers at both Cacaxtla and Xochicalco, further demonstrating the continued importance of these beings after the demise of Teotihuacan (Brittenham and Nagao 2014; Nagao 2014: 274–283, Fig. 499; Turner 2016: 127–131, 2021).

**Figure 11.10:** A clay *almena* that represents a descending quetzal bird (photograph by C. Helmke).

narrative from the Classic to the Epiclassic (Helmke and Nielsen 2017: 132–133, Fig. 17.3; Nielsen and Helmke 2023). Whereas the earlier headdresses that were carried by the feathered serpents of Teotihuacan are replaced at Xochicalco with depictions of an idealised Maya ruler, the underlying mythological narrative and symbolism remain, conveying an etiological myth about the advent of political institutions associated with rulership and authority, embodied by the headdresses that were conveyed by the serpents (Helmke and Nielsen 2017: 132–133; Nielsen and Helmke 2020: 323). This continuity, coupled with innovations, reflects a nuanced blend of tradition and hybridity at Xochicalco. Additionally, the significance of the posture depicted in the iconography, which we initially regarded as coincidental, can now be reassessed in light of its clear association with Maya royal accessions.

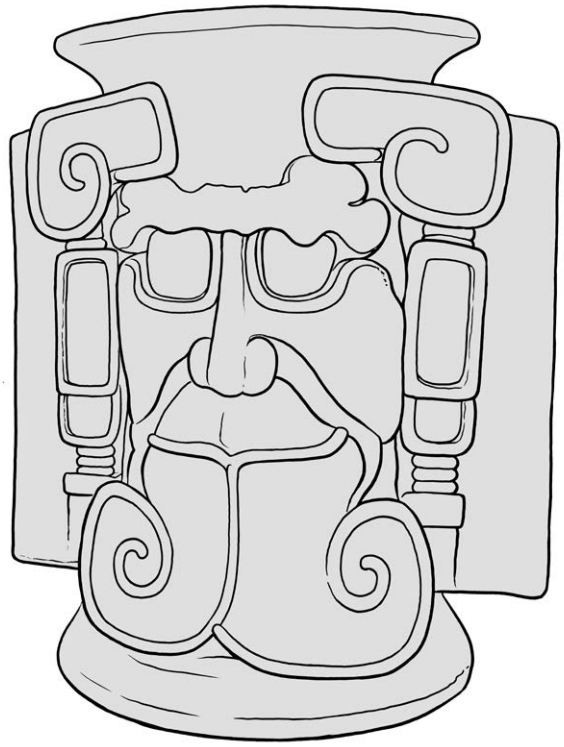

**Figure 11.11:** Large figurative censer depicting the Jaguar God of the Underworld (drawing by N. Latsanopoulos).

Architectural ornamentations at Xochicalco extend to intricate *almenas* (decorative merlons), notably those that once adorned one of the structures of the Acropolis, quite probably from Str. Ac9 or Ac10 given the scatter of *almena* fragments found associated with these buildings (see Helmke and Nielsen 2023: 65–66, Fig. 3.19) (Figure 11.10). Hundreds of fragments were found scattered within the debris around the exterior of those buildings, and in the mass of debris that came to rest on the terrace just beneath the Acropolis on the north side of the complex, whether through deliberate deposition or as a result of structural collapse. These *almenas* represent a quetzal bird descending with distinctive features such as four long, fluttering tail-feathers. This iconographic motif directly evokes the 'descending quetzal' motif found in Maya place names, such as *yehmal k'uk'* and again refers to observed behaviours of the exotic quetzal bird, thereby blending cultural symbolism with acquired knowledge of the bird's natural history (Helmke and Nielsen 2023: 66). Despite variations in artistic interpretation (and lack of first-hand knowledge of the bird itself), such as the depiction of a quetzal with four feathers, these *almenas* proudly name the structure it once adorned as


**Figure 11.12:** A mould-made bowl depicting the Maya deity *K'awiil*. **a)** section and **b)** planar projection of the decorated exterior (photogrammetry and drawings by C. Helmke, based on planar projection models by Rigsters).

the 'place of the descending' quetzal, echoing names known from the Maya area.

## On the representation of foreign deities

With regard to the representation of foreign deities, we first want to draw attention to the quite outstanding examples of flanged censers at Xochicalco. While these are at times adorned with figures of central Mexican deities, other censers portray Maya deities, specifically the Jaguar God of the Underworld (possibly known as *Chuwaaj* in the Classic period), the personification of the nocturnal sun (Schele and Miller 1986: 50; see also Nagao 2014: 281–282, 318, 323, Figs. 286c–d; Testard, this volume) (Figure 11.11). This is one of the main deities of the Maya pantheon, which in addition to its role in pyrolytic ritual also served as a patron of warriors. What is also worth pointing out is the large size of the censers at Xochicalco (these are up to 88 cm tall), that sets them apart from most other censers, and perhaps indicating a direct inspiration from the impressive, flanged censers known from Palenque (Cuevas García 2007; see also Testard, this volume).

Furthermore, the discovery of multiple, identical bowls at Xochicalco, featuring mould-made designs that are wholly Maya in iconography (see also Testard, this volume), are noteworthy of their depictions of the deity

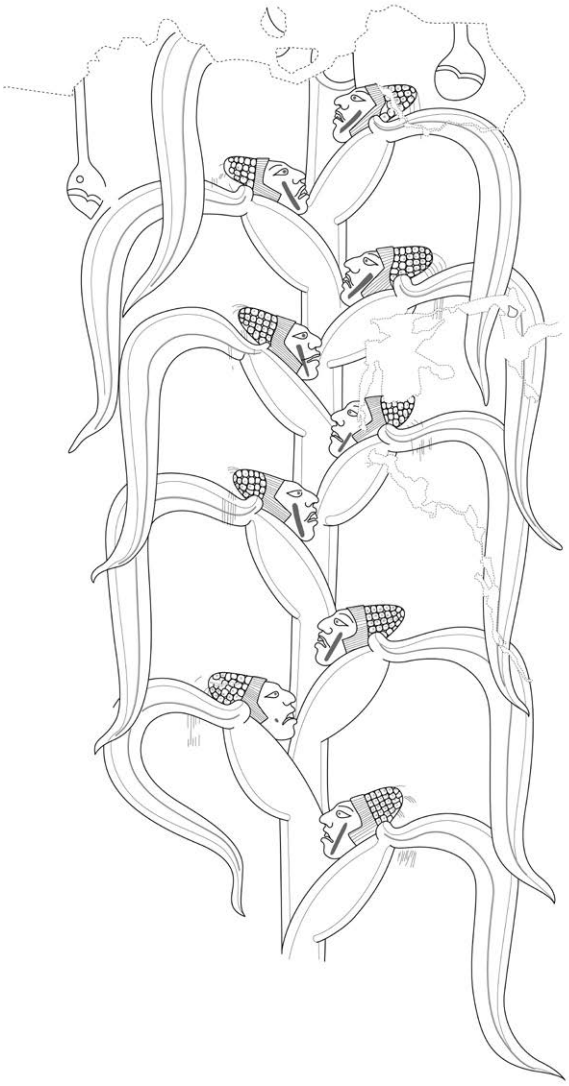

**Figure 11.13:** The Maize god represented as personified maize cobs at Cacaxtla (drawing by C. Coronel y A. O. Yañez, courtesy of the *La pintura mural prehispánica en México* project, IIE-UNAM).

*K'awiil* (Figure 11.12). This deity was a prominently associated with lightning, agricultural fertility, and royal power and is a deliberate incorporation of Maya religious symbolism into local material culture (e.g. Cuevas García 2007; Taube 1992: 69–79; Valencia Rivera 2022). Whether these mould-made bowls were locally manufactured, or were imported in finished form, remains to be ascertained by petrographic analyses and instrumental analyses of the clay's chemical profile, but these do bear some resemblance to contemporaneous slateware ceramics from the Yucatan peninsula.

The representation of other Maya deities at Cacaxtla reveals a fascinating blend of cultural influences and religious syncretism. As has long been recognised, the murals of the Templo Rojo represent supernatural maize plants—amidst languid raindrops—wherein the ripe cobs are rendered as small heads, with distinctive elongated crania (Stuart 1992: 134). Rather than merely personifications of maize cobs, these are actually representations of the Maize god, with the distinctive cranial modification, the fine silk doubling as the deity's sparse hair (see Taube 1985, 2018: 21) (Figure 11.13). Comparable depictions of the Maize god are known from earlier Classic Maya iconography, especially from the Temple of the Foliated Cross at Palenque and even a small graffiti incised on a blackware vessel from Calakmul (see Helmke and Kupprat 2016: 46–47, Fig. 2). As such, the mythological maize stalks at Cacaxtla are not just rendered according to Maya artistic canons but deliberately serve to embed a depiction of a foreign deity, drawn from the Maya pantheon.

The other deity is the patron of tradespeople and merchants, commonly referred to as God L, which is also represented in the murals of the Templo Rojo (see Taube 1992: 79–88). His identity is made clear by his wide-brimmed sombrero and the large backrack or *cacaxtli*, laden with merchandise and feathers, which is leaning against the deity's walking stick (Brittenham 2015: 149–157; Martin 2013) (Figure 11.14a). In a Maya context, this deity is typically identified as *<Ek Chuah>* or 'black *Chuwaaj*' in the Postclassic (Taube 1992: 88–92), and at Cacaxtla he is depicted standing on the back of a feathered serpent as if being transported by this entity, which is, as we have seen, a motif associated with the rain-bearing clouds from the east. The presence of a quetzal bird landing on a hybrid plant combining both maize and cacao further points to the distant lands in the East.

What is particularly intriguing is that the deity is named as '4 Dog,' using both central Mexican Epiclassic writing and—it must be assumed—the local language encoded in the script (see Helmke and Nielsen 2011: 4). This juxtaposition of foreign deities and the use of Epiclassic script to name the deity suggest a deliberate effort to syncretise different religious traditions and cultural elements, here to specifically blend together the Maya deity usually known as God L, with the forerunner of the central Mexican tutelary deity of the *pochteca* or tradesmen, known as *Yacateuctli* ('lord of the nose'—perhaps referring to emic perceptions of Maya phenotypes) or *Tlacotzintli* (the tutelary deity of roads) (see Miller and Taube 1993: 112). Page 31 of the sixteenth-century Aztec *Codex Fejérváry-Mayer* depicts an intriguing example of one of the trader deities, bearing striking red body paint, suggesting that this is an aspect tied to the eastern cardinal direction (Figure 11.14b). This figure, carries a backrack, topped by a perched quetzal from the eastern realms, as he leans on

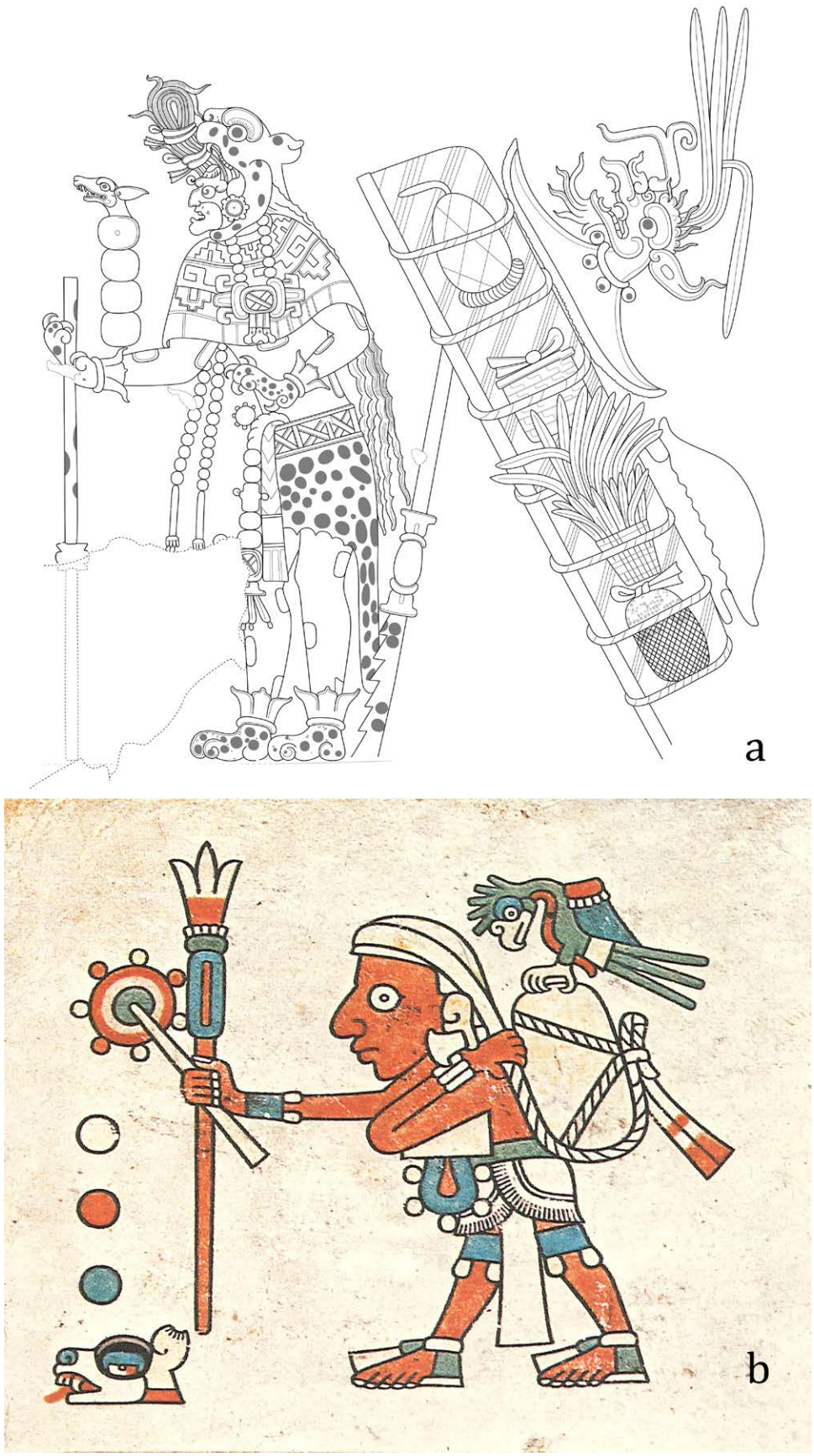


**Figure 11.14:** The tutelary deity of merchants and tradespersons, as represented in **a)** the murals of Cacaxtla (drawing by C. Coronel y A. O. Yañez, courtesy of the *La pintura mural prehispánica en México* project, IIE-UNAM) and **b)** the *Codex Féjeváry-Mayer* (detail of p. 31).

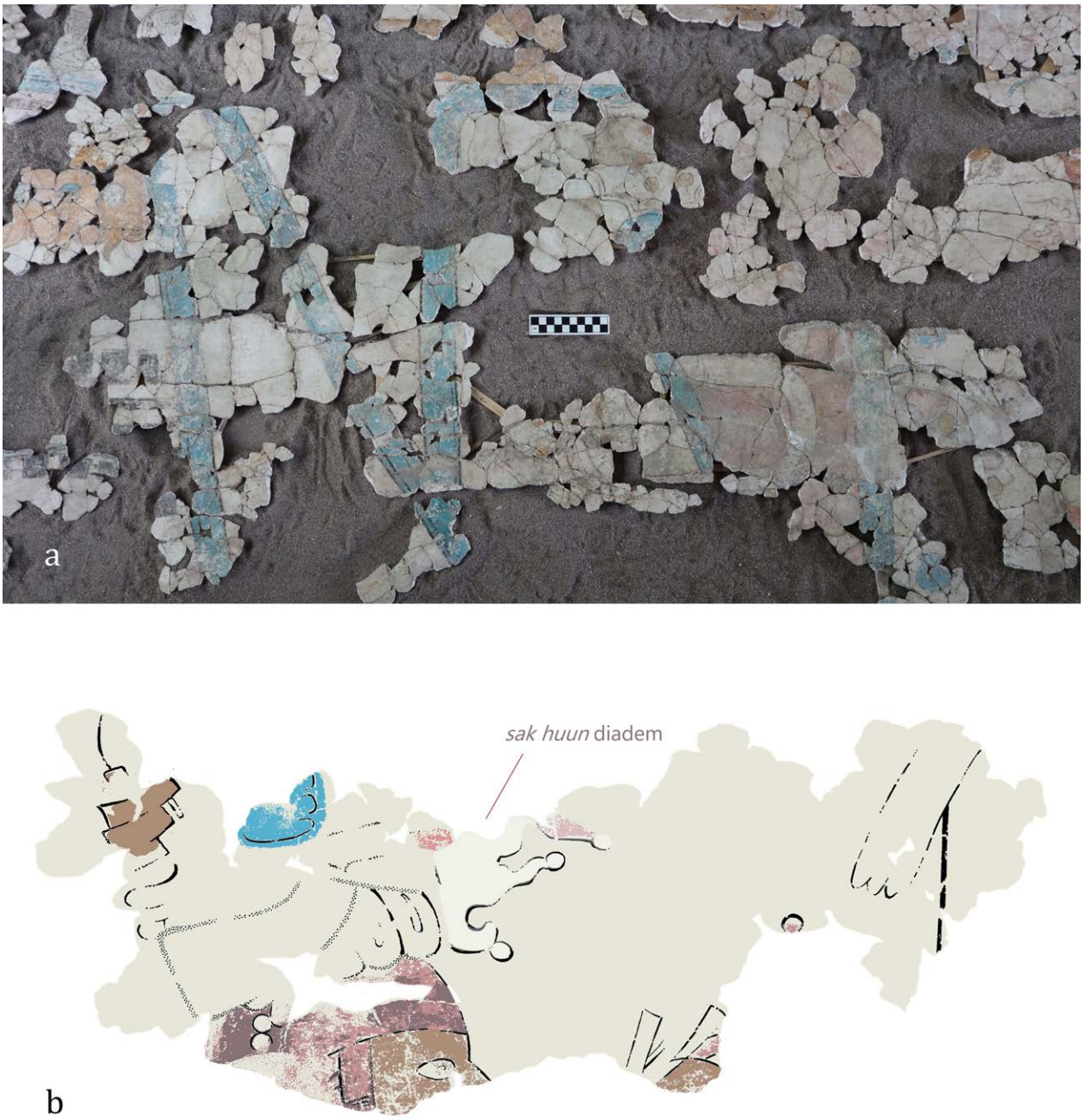


**Figure 11.15:** The polychromatic mural fragments of Structure G7. **a)** Overview of mural fragments undergoing restoration and curation (note parts of the blue scaffolding). **b)** Mural fragment showing a figure in profile wearing a headband adorned with the *sak huunal* diadem (photograph and drawing by C. Helmke).

his walking stick and holds a distinctive fan. Notably, the accompanying glyphic caption identifies his calendrical name as '3 Dog' (*yey itzkʷintli*). This is a remarkable rejoinder to the murals of Cacaxtla, where the patron of traders is named '4 Dog'. While we cannot readily account for the differing numerical coefficients apart from remarking on the intervening eight centuries, the close onomastic connections and shared attributes, provide evidence for tutelary deities of merchants tied to the cardinal directions by the Epiclassic period. The inhabitants of Cacaxtla thereby deliberately sought to represent a hybrid form of one aspect of their deity, tied specifically with the Maya area, with the imagery drawn from canons of Maya iconography and the name from the local central Mexican pantheon.

## Eccentrics

Before turning our attention to arguably the most extraordinary visual documentation of Maya influence

on Xochicalco's ruling elite and their concepts of power and rulership, there is one further category of objects that we need to consider, and which points to an intensive interaction with lowland Maya culture. These are eccentrics, significant eye-catching artefacts shaped in flint or obsidian with a wide array of shapes and symbolic connotations (e.g. Joyce 1932; Meadows 2003; Stemp *et al.* 2024). While Maya eccentrics come in a bewildering range of forms, including lanceolate points with side-notching, tridents, circlets, and crescents, their range and significance in the Epiclassic period remains underexplored. The presence of eccentrics at Xochicalco and Cacaxtla (Palavicini and Garza Tarazona 2004; Testard and Alvarado León forthcoming) prompts questions regarding potential Maya influence or continuity from earlier Mesoamerican traditions, such as those found at Teotihuacan, given that the latter also had a long-standing tradition of obsidian eccentrics (e.g. Carballo 2007, 2011). The eccentrics discovered at Xochicalco and Cacaxtla, are notable for their resemblance to Maya forms such as circlets, tridents, and crescents, and their co-occurrence reveals that these forms stylised representations of storm deity masks (see Helmke and Nielsen 2014: 28–30, Fig. 2.7). The juxtaposition of these artefacts with their counterparts in Maya iconography, particularly at Cacaxtla, speaks of the complex interplay between continuity and foreign stylistic elements.

## Polychromatic murals

We conclude our discussion of Maya cultural traits in the Epiclassic world with a preliminary analysis of a remarkable, and previously unpublished polychromatic mural from Xochicalco, highlighting the importance of visual culture in conveying religious beliefs and cultural identity during this period. While Cacaxtla is renowned for its Maya-inspired polychromatic murals (Brittenham 2015; Helmke and Nielsen 2014; Uriarte Castañeda and Salazar Gil 2013), the presence of similar murals at Xochicalco now suggests that the adoption and adaptation of Maya artistic styles and iconography were not unique to Cacaxtla but were in fact much more widespread among Epiclassic sites than heretofore acknowledged.

The discovery of thousands of mural fragments from Structure G7 at Xochicalco, which likely once featured imposing polychromatic murals across the entirety of its walls (Garza Tarazona 1993-1994: 299–300; González *et al.* 2008: 227-228), is an incredible source of information that we are only beginning to unravel and is the subject of ongoing analyses (Figure 11.15a). Despite the considerable challenges of reconstructing the fragmented murals, significant details have emerged, providing valuable insights into the visual themes represented, and in extension thereof, possibly also the type of rites and services conducted within the structure. One striking aspect of the murals is the presence of painted linear elements that neatly form what we assume depict a scaffold, in vivid blue lines. This scaffold likely served as the backdrop for intricate ceremonial scenes depicted on the murals. Another equally remarkable fragment features the profile of a human figure adorned with what appears to be a turquoise headdress (Figure 11.15b). Further examination reveals that the headband worn by figure bears a diadem known in Maya studies as a *sak huunal*, symbolising royal authority and is one the central sacral objects of the coronation ceremony. This diadem, representing a personification of paper, has its roots in ancient Maya religious and figurative traditions and serves as a powerful symbol of kingship (see Schele *et al.* 1990; Stuart 2012). The depiction of a scaffold accession ceremony at Xochicalco is particularly noteworthy, as similar scenes are found in the famed Preclassic Maya murals at the site of San Bartolo (Saturno 2009; Taube *et al.* 2010: 60–69). The presence of individuals ascending ladders and holding aloft the *sak huunal* diadem asserts the importance of ritual in legitimising and solidifying power within the person of the sole ruler. Further parallels are found with Late Classic sculptures from Maya sites like Piedras Negras (Proskouriakoff 1950: 4, 119, Fig. 52; Schele and Miller 1986: 111–112; see also Taube 1988). Despite temporal and regional differences, the themes of royal accession and the symbolism of ceremonial regalia remain one and the same and speak of unbroken cultural continuity and the adoption of a specifically Maya accession ceremony and associated symbols of regal power.

## Concluding remarks

The similarities in iconography, material culture and associated ritual practices between Xochicalco and other Epiclassic sites of central Mexico and Maya polities suggest a complex interplay of cultural influences and ideological exchanges. The portrayal of a scaffold accession ceremony at Xochicalco marks both the adoption of Maya-inspired symbolism and rituals by rulers at Xochicalco and, we would argue, speak of their efforts to legitimise their authority via rituals of power from the east. The transmission of titles and symbolic practices between different linguistic and ethnic groups underscores the dynamic nature of the cultural landscape of Mesoamerica and the ongoing processes of adaptation and innovation. The representations of foreign deities and the presence of polychromatic murals at Xochicalco indicate multifaceted and complex cultural exchanges beyond mere economic interactions. Cacaxtla has hitherto monopolised discussions of Maya-inspired polychromatic murals in the Epiclassic period, but as we demonstrated here, we now know that Xochicalco also contributes significantly to this

artistic tradition—and was perhaps a prime mover in this regard.

Overall, our brief review exposes a complex network of cultural exchange and interaction, from various parts of the Maya area (but seemingly with strong impulses from sites in the central lowlands), each contributing to different aspects of the development of Xochicalco's material culture and visual register. In this, the upper Usumacinta emerges as the focal point where diverse ideas and influences converge before reaching Xochicalco (see also discussion in Helmke and Nielsen 2014). Furthermore, our findings prompt an inquiry into the mechanisms by which Maya cultural attributes were transmitted to Xochicalco, focusing on the ideological scale, agents of transmission, and the accompanying ideas imbued within material objects. Rather than mere emulation, viewed as a whole, the accumulation of these different strands of evidence, we are left with the intriguing notion of Xochicalco's rulers adopting a semblance of Maya rulership and perpetuating a long-standing regal tradition and cultural practices that were in turmoil among the Maya themselves in the Terminal Classic. Our observations invite further reflection on whether these cultural traits were introduced by specific historic individuals, conveyed through trade routes, or embedded within the materiality of objects themselves.

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**References cited:**

Alvarado León, Claudia I.
2015 El espacio construido y los procesos de cambio en la Acrópolis de Xochicalco. *Cuicuilco*, Vol. 22 (63): 171–205.
2019 Las relaciones sociales del espacio social en los entornos construidos del sitio arqueológico de Xochicalco, Morelos. Doctoral thesis. Universidad Nacional Autónoma de México, Mexico City.
2020 El poder institucionalizado. El caso del palacio de Xochicalco, Morelos. *Las sedes del poder en Mesoamérica*, edited by Linda R. Manzanilla, pp. 128–148. Instituto de Investigaciones Antropológicas, Universidad Nacional Autónoma de México & El Colegio Nacional, Mexico City.
2022 Los sistemas de comunicación y circulación en Xochicalco, Morelos, México. *Anales de Antropología*, Vol. 56 (1): 33-46.

Alvarado León, Claudia I., and Silvia Garza Tarazona
2010 El carácter defensivo de Xochicalco (650-1100 d.C.). *Arqueología*, Núm. 43: 136-154.

Andrews, Anthony P.
2010 Travelers in the Night: A Discussion of the Archaeological Visibility of Trade Enclaves, Ethnicity, and Ideology. *Astronomers, Scribes, and Priests: Intellectual Interchange between the Northern Maya Lowlands and Highland Mexico in the Late Postclassic Period,* edited by Gabrielle Vail and Christine Hernández, pp. 369–381. Dumbarton Oaks Research Library and Collection, Washington, D.C.

Ángeles, Mauro de
1993–1994 Informe de los materiales óseos humanos. *Informe de materiales arqueológicos del Proyecto Especial Xochicalco 1993–1994*, coordinated by N. González C., pp. 329–358. Unpublished Report. Archivo de la Coordinación Nacional de Arqueología del Instituto Nacional de Antropología e Historia, Mexico City.

Awe, Jaime J.
2008 Architectural Manifestation of Power and Prestige: Examples from Classic Period Monumental Architecture at Cahal Pech, Xunantunich, and Caracol, Belize. *Research Reports in Belizean Archaeology*, Vol. 5: 159–173.

Awe, Jaime J., Christophe Helmke, Julie A. Hoggarth and Claire E. Ebert
2023 Changing Spheres of Interaction in Terminal Classic Western Belize. *Research Reports in Belizean Archaeology*, Vol. 18: 219–242.

Barrois, Ramzy R.
2006 Les Sculptures Associées aux Jeux de Balle dans l'Aire Méso-Américaine. Doctoral thesis. Université Paris I, Panthéon Sorbonne, Paris.

Berlo, Janet C.
1983 The Warrior and the Butterfly: Central Mexican Ideologies of Sacred Warfare and Teotihuacan Iconography. *Text and Image in Pre-Columbian Art: Essays on the Interrelationship of the Verbal and Visual Arts,* edited by Janet C. Berlo, pp. 79–117. BAR International Series 180, Oxford.
Brittenham, Claudia
2015 *The Murals of Cacaxtla. The Power of Painting in Ancient Central Mexico*. University of Texas Press, Austin.
Brittenham, Claudia and Debra Nagao
2014 Cacaxtla Figural Figurines. *Anales del Instituto de Investigaciones Estéticas,* Vol. 36 (104): 55–96.
Carballo, David M.
2007 Implements of State Power: Weaponry and martially themed obsidian production near the Moon Pyramid, Teotihuacan. *Ancient Mesoamerica,* Vol. 18: 173–190.
2011 *Obsidian and the Teotihuacan State: Weaponry and Ritual Production at the Moon Pyramid / La obsidiana y el Estado teotihuacano: La producción military y military en la Pirámide de la Luna.* University of Pittsburgh Memoirs in Latin American Archaeology No. 21. University of Pittsburgh & Universidad Nacional Autónoma de México, Pittsburgh & Mexico City.
2020 Power, Politics, and Governance at Teotihuacan. *Teotihuacan, The World Beyond the City,* edited by Kenneth G. Hirth, David M. Carballo and Bárbara Arroyo, pp. 57–96. Dumbarton Oaks Research Library and Collection, Washington, D.C.
Coe, Michael D.
1962 *Mexico: Ancient Peoples and Places*. Frederick A. Praeger, London.
Coe, Michael D. and Rex Koontz
2008 *Mexico*: *From the Olmecs to the Aztecs*. 6th edition. Thames & Hudson, London.
Coe, Michael D., Rex Koontz and Javier Urcid
2019 *Mexico: From the Olmecs to the Aztecs.* 8th edition. Thames & Hudson, London.
Cuevas García, Martha
2007 *Los incensarios efigie de Palenque: deidades y rituales maya*. Universidad Nacional Autónoma de México & Instituto Nacional de Antropología e Historia, Mexico City.
Diehl, Richard and Janet C. Berlo (eds)
1989 *Mesoamerica after the Decline of Teotihuacan A.D. 700-900*. Dumbarton Oaks Research Library and Collection, Washington, D.C.
Fash, Barbara W.
1992 Late Classic Architectural Sculpture Themes in Copan. *Ancient Mesoamerica*, Vol. 3 (1): 89–104.
2011 *The Copan Sculpture Museum: Ancient Maya Artistry in Stucco and Stone*. Peabody Museum Press, Cambridge.
Fash, William L.
1998 Dynastic Architectural Programs: Intention and Design in Classic Maya Buildings at Copan and Other Sites. *Function and Meaning in Classic Maya Architecture*, edited by Stephen D. Houston, pp. 223–270. Dumbarton Oaks Research Library and Collection, Washington, D.C.
Foncerrada de Molina, Marta
1993 *Cacaxtla: La iconografía de los olmeca-xicalanca*. Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México, Mexico City.
Garza Tarazona, Silvia
1993-1994 Análisis de la pintura mural. *Informe de materiales arqueológicos del Proyecto Especial Xochicalco 1993–1994*, coordinated by N. González C., pp. 329–358. Unpublished Report. Archivo de la Coordinación Nacional de Arqueología del Instituto Nacional de Antropología e Historia, Mexico City.
Garza Tarazona, Silvia and Pablo Mayer Guala
2005 Arquitectura: Materiales y sistemas constructivos en Xochicalco. *IV Coloquio Pedro Bosch Gimpera: El occidente y centro de México*, edited by E. Vargas Pacheco, pp. 349–383. Instituto de Investigaciones Antropológicas, Universidad Nacional Autónoma de México, Mexico City.
Garza Tarazona, Silvia, Carmen Pijoan, Josefina Mansilla and Norberto González
2003 Pórtico I4 de Xochicalco, Morelos, México. Localización arqueológica de materiales esqueléticos. *Memorias del XII Congreso de la Sociedad Española de Antropología Biológica*, edited by Ma. Pilar Aluja, Asunción Malgosa and Ramón Ma. Nogués, pp. 191-198. Bellaterra, Barcelona.
González Crespo, Norberto, Silvia Garza, Claudia Alvarado, Emiliano Melgar, Beatriz Palavicini, Mauro de Ángeles, Fernando Sánchez and Juan Bernando Albaitero
2008 *Informe: Trabajos de Campo del Proyecto Especial Xochicalco 1993-1994*. Unpublished Report. Archivo de la Coordinación Nacional de Arqueología del Instituto Nacional de Antropología e Historia, Mexico City.
González Crespo, Norberto, Silvia Garza Tarazona, Hortensia de Vega Nova, Pablo Mayer Guala and Giselle Canto Aguilar
1995 Archaeological investigations at Xochicalco, Morelos: 1984 and 1986. *Ancient Mesoamerica,* Vol. 6 (2): 223–236.
Graham, Ian
1980 *Corpus of Maya Hieroglyphic Inscriptions, Volume 2, Part 3: Ixkun, Ucanal, Ixtutz, Naranjo*. Peabody Museum of Archaeology and Ethnology, Harvard University, Cambridge.
Graham, Ian, Lucia R. Henderson, Peter Mathews and David Stuart
2006 *Corpus of Maya Hieroglyphic Inscriptions, Volume 9, Part 2: Tonina*. Peabody Museum of Archaeology and Ethnology, Harvard University, Cambridge.
Headrick, Annabeth

2003 Butterfly War at Teotihuacan. *Ancient Mesoamerican Warfare,* edited by Kathryn Brown and Travis W. Stanton, pp. 149–170. AltaMira Press, Walnut Creek.

Helmke, Christophe and Felix A. Kupprat

2016 Where Snakes Abound: Supernatural Places of Origin and Founding Myths in the Titles of Classic Maya Kings. *Places of Power and Memory in Mesoamerica's Past and Present: How Sites, Toponyms and Landscapes Shape History and Remembrance*, edited by Daniel Graña-Behrens, pp. 33–83. Estudios Indiana, Vol. 9. Gebrüder Mann Verlag, Berlin.

Helmke, Christophe and Jesper Nielsen

2011 *The Writing System of Cacaxtla, Tlaxcala, Mexico*. Ancient America, Special Publication No. 2. Boundary End Archaeology Research Center, Barnardsville.

2014 Identifying the Provenance and Dating of Maya Influences at the Cacaxtla Court. *Palaces and Courtly Culture in Ancient Mesoamerica*, edited by Julie Nehammer Knub, Christophe Helmke and Jesper Nielsen, pp. 17–35. Pre-Columbian Archaeology Vol. 4. Archaeopress, Oxford.

2015 The Defeat of the Great Bird in Myth and Royal Pageantry: A Mesoamerican Myth in a Comparative Perspective. *Comparative Mythology*, Vol. 1 (1): 23–60.

2017 Of Gods and Rituals: The Religion of Teotihuacan. *Teotihuacan: City of Water, City of Fire*, edited by Matthew H. Robb, Danica Hodge and Ann Kalstrom, pp. 130–137. Fine Arts Museums of San Francisco, de Young Museum & Instituto Nacional de Antropología e Historia, San Francisco.

2023 The Writing System of Epiclassic Central Mexico. *Western Mesoamerican Calendars and Writing Systems [Proceedings of the Copenhagen Roundtable]*, edited by Mikkel Bøg Clemmensen and Christophe Helmke, pp. 49–74. Pre-Columbian Archaeology Vol. 18. Archaeopress, Oxford.

in press Kill and Create: Monstrous Creatures in Mesoamerican Origin Myths. *A Cultural History of Monsters in Antiquity*, edited by Debbie Felton. Bloomsbury Publishing, New York.

Helmke, Christophe, Christopher R. Andres, Shawn G. Morton and Gabriel D. Wrobel

2015 For Love of the Game: The Ballplayer Panels of Tipan Chen Uitz in Light of Late Classic Athletic Hegemony. *The PARI Journal*, Vol. 16 (2): 1–30.

Inomata, Takeshi, Stephen D. Houston (eds)

2001 *Royal Courts of the Ancient Maya: 1. Theory, Comparison, and Synthesis*. Westview Press, Boulder.

Jiménez Moreno, Wigberto

1959 Síntesis de la Historia Pretolteca de Mesoamérica. *Esplendor del México Antiguo vol. 2,* edited by Carmen Cook and Raúl Noriega, pp. 1019–1108. Centro de Investigaciones Antropológicas de México, Editorial del Valle de México, Mexico City.

Joyce, T. A.

1932 The 'Eccentric Flints' of Central America. *The Journal of the Royal Anthropological Institute of Great Britain and Ireland*, Vol. 62: xvii–xxvi.

Kowalski, Jeff and William L. Fash

1986 Symbolism of the Maya Ballgame at Copan: Synthesis and New Aspects. Paper presented at the *Sixth Palenque Round Table*, Palenque.

Kubler, George

1962 *The Art and Architecture of Ancient America.* Penguin Books Ltd. Middlesex.

1980 Eclecticism at Cacaxtla. *Third Palenque Round Table, 1978, Part 2*, edited by Merle Greene Robertson, pp. 163–226. University of Texas at Austin, Austin.

López Luján, Leonardo

1995 Xochicalco el lugar de la casa de las flores. *Xochicalco y Tula*, pp. 15–141. Jaca Book & Consejo Nacional para la Cultura y las Artes, Milan & Mexico City.

López Luján, Leonardo and Marco Antonio Santos

2011 Cabeza de guacamaya. *Catálogo esencial: Museo Nacional de Antropología. 100 obras*, edited by Mónica del Villar, pp. 142–143. Artes de México & Instituto Nacional de Antropología e Historia, Mexico City.

Lucet, Geneviève

2013 Arquitectura de Cacaxtla: lectura y espacio. *La Pintura Mural Prehispánica en México, Volumen V, Cacaxtla, Tomo III*, edited by María Teresa Uriarte and Fernanda Salazar Gil, pp. 19–109. Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México, Mexico City.

Martin, Simon

2013 El templo Rojo y los mayas: art, mitología y contactos culturales en las pinturas de Cacaxtla. In *La pintura mural prehispánica en México V, Cacaxtla, Tomo III,* edited by María Teresa Uriarte Castañeda and Fernanda Salazar Gil, pp. 529–545. Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México, Mexico City.

Meadows, Richard

2003 From eccentric lithics to material symbols: aspects of ancient Maya cultural production in northern Belize. *Mono y Conejo: Journal of the Mesoamerican Archaeological Research*, Vol. 1: 15–25.

Miller, Mary and Karl Taube

1993 *An Illustrated Dictionary of the Gods and Symbols of Ancient Mexico and the Maya.* Thames and Hudson, London.

Nagao, Debra

1989 Public Proclamation in the Art of Cacaxtla and Xochicalco. In *Mesoamerica after the Decline of Teotihuacan A.D. 700-900*, edited by Richard A. Diehl and Janet C. Berlo, pp. 83–104. Dumbarton Oaks Research Library and Collection, Washington, D. C.

2014 An Interconnected World? Evidence in the Interaction in the Arts of Epiclassic Cacaxtla and Xochicalco, Mexico. PhD dissertation, Columbia University, New York.

2019 Invoking the Past to Mute the Present: Implications for the Epiclassic Feathered Serpent Pyramid at Xochicalco, Mexico. *Culturas Visuales Indígenas y las Prácticas Estéticas en las Américas desde la Antigüedad hasta el Presente*, edited by Sanja Savkić, pp. 83–110. Ibero-Amerikanisches Institut, Gebr. Mann Verlag, Berlin.

Nebel, Carl

1836 *Voyage pittoresque et archéologique dans la partie la plus intèressante du Mexique*. M. Moench & M. Gau, Paris.

Nicholson, Henry B.

1971 Major Sculpture in Pre-Hispanic Central Mexico. *Handbook of Middle American Indians, Vol. 10. Archaeology of Northern Mesoamerica, Part 1,* edited by Gordon F. Ekholm and Ignacio Bernal, pp. 92–134. University of Texas Press, Austin.

Nielsen, Jesper

2014 Where Kings Once Ruled? Considerations on Palaces and Rulership at Teotihuacan. *Palaces and Courtly Culture in Ancient Mesoamerica,* edited by Julie Nehammer Knub, Christophe Helmke and Jesper Nielsen, pp. 1–16. Pre-Columbian Archaeology 4, Archaeopress, Oxford.

Nielsen, Jesper and Christophe Helmke

2015 The Fall of the Great Celestial Bird: A Master Myth in Early Classic Central Mexico. *Ancient America*, No. 13: 1–46.

2018 'Where the sun came into being': Rites of Pyrolatry, Transition, and Transformation in Early Classic Teotihuacan. *Smoke, Flames, and the Human Body in Mesoamerican Ritual Practice,* edited by Vera Tiesler and Andrew K. Scherer, pp. 77–107. Dumbarton Oaks Research Library and Collection, Washington, D.C.

2020 Crowning Rulers and Years: Interpreting the Year Sign Headdress at Teotihuacan. *Ancient Mesoamerica*, Vol. 31 (2): 319–334.

2023 Pirámide de las Serpientes Emplumadas: Nuevos acercamientos. *Arqueología Mexicana*, Vol. 29 (179): 34–39.

Nielsen, Jesper, Claudia Alvarado León and Christophe Helmke

2021 The Stuccoed and Painted Benches of Xochicalco, Morelos, Mexico. *Ancient Mesoamerica*, Vol. 32 (2): 249–268

Palavicini, Beatriz and Silvia Garza

2004 El complejo Tláloc durante el Epiclásico. *Homenaje a Jaime Litvak*, editado por A. Benavides, L. Manzanilla y L. Mirambell, pp. 205-216. Colección Científica 458. Instituto Nacional de Antropología e Historia, Mexico City.

Parmington, Alexander

2011 *Space and Sculpture in the Classic Maya City*. Cambridge University Press, Cambridge.

Pijoan, Carmen, Josefina Mansilla and Silvia Garza T.

2003 Pórtico I4 de Xochicalco, Morelos, México. Análisis tafonómico cultural de los restos óseos. *Antropología y Biodiversidad*, edited by María Pilar Aluja, Asunción Malgosa and Ramón María Nogués, pp. 414-420. Bellaterra, Barcelona.

Proskouriakoff, Tatiana

1950 *A Study of Classic Maya Sculpture*. Publication 593. Carnegie Institution of Washington, Washington, D.C.

Robinson, Tessa P.E.

2013 Cords of Time: An iconographic analysis of the flat two-dimensional knot in the context of Classic period Maya representation. PhD thesis. Institute of Archaeology, University College London, London.

Robicsek, Francis

1975 *A Study in Maya Art and History: The mat symbol*. Museum of the American Indian, Heye Foundation, New York.

Saturno, William A.

2009 Centering the Kingdom, Centering the King: Maya Creation and Legitimization at San Bartolo. *The Art of Urbanism: How Mesoamerican Kingdoms Represented Themselves in Architecture and Imagery*, edited by William L. Fash and Leonardo López Luján, pp. 111–134. Dumbarton Oaks, Washington, D.C.

Schele, Linda and Mary E. Miller

1986 *Blood of Kings: Dynasty and Ritual in Maya Art*. Kimbell Art Museum, Fort Worth.

Schele, Linda, Peter Mathews and Floyd Lounsbury

1990 Untying the Headband. *Texas Notes on Precolumbian Art, Writing, and Culture*, No. 4: 1–6.

Seler, Eduard

1904 Die Ruinen von Xochicalco. *Gesammelte Abhandlungen zur Amerikanischen Sprach- und Alterthumskunde. Zweiter Band*, pp. 128–167. A. Asher & Co., Berlin.

Smith, Virginia

2000 The Iconography of Power at Xochicalco: The Pyramid of the Plumed Serpents. *Archaeological Research at Xochicalco, Vol. 2: The Xochicalco Mapping Project,* edited by Kenneth Hirth, pp. 57–82. University of Utah Press, Salt Lake City.

Smith, Virginia and Kenneth G. Hirth

2000 A Catalog of Carved Monuments and a Guide to the Visual Characteristics of Xochicalco's Art Style. *Archaeological Research at Xochicalco, Vol. 2: The Xochicalco Mapping Project,* edited by Kenneth Hirth, pp. 17–56. University of Utah Press, Salt Lake City.

Stemp, W. James, Jaime J. Awe, Christophe Helmke and Jordan Lee

2024 The Ideology and Symbolism of Ancient Maya Chipped Chert and Obsidian Eccentrics from Central Belize: Materials, Contexts, Chronology, and Meaning. *Journal of Lithic Studies*, Vol. 12 (2): 1–30.

Stuart, David

2005 A Foreign Past: The Writing and Representation of History on a Royal Ancestral Shrine at Copan. *Copán: The History of an Ancient Maya Kingdom,* edited by E. Wyllys Andrews and William L. Fash, pp. 373–394. School of American Research Press, Santa Fe.

2012 The Name of Paper: The Mythology of Crowning and Royal Nomenclature on Palenque's Palace Tablet. *Maya Archaeology,* Vol. 2: 117–148.

Stuart, George

1992 Mural masterpieces of ancient Cacaxtla. *National Geographic*, Vol. 182 (3): 120–136.

Taladoire, Eric

2019 Las canchas de juego de pelota en la Cuenca de México. Una tentativa de mapa. *Estudios de Cultura Náhuatl*, Vol. 57: 31–79.

Taube, Karl

1985 The Classic Maya Maize God:A Reappraisal. *Fifth Palenque Round Table, 1983*, edited by Merle Greene Robertson, pp. 171–181. Pre-Columbian Art Research Institute, San Francisco.

1988 A Study of Classic Maya Scaffold Sacrifice. *Maya Iconography*, edited by Elizabeth P. Benson and Gillett G. Griffin, pp. 331–351. Princeton University Press, Princeton.

1992 *The Major Gods of Ancient Yucatan*. Dumbarton Oaks Research Library and Collection, Washington, D.C.

2000 The Turquoise Hearth: Fire, Self Sacrifice, and the Central Mexican Cult of War. *Mesoamerica's Classic heritage: From Teotihuacan to the Aztecs,* edited by David Carrasco, Lindsay Jones and Scott Sessions, pp. 269–340. University of Colorado Press, Boulder.

2003 Tetitla and the Maya Presence at Teotihuacan. *The Maya and Teotihuacan: Reinterpreting Early Classic Interaction,* edited by Geoffrey E. Braswell, pp. 273–314. University of Texas Press, Austin.

2004 Flower Mountain: Concepts of Life, Beauty, and Paradise among the Classic Maya. *RES: Anthropology and Aesthetics*, No. 45: 69–98.

2017 The Ballgame, Boxing and Ritual Blood Sport in Ancient Mesoamerica. *Ritual, Play and Belief, in Evolution and Early Human Societies*, edited by C. Renfrew, I. Morley and M. Boyd, pp 264–301. Cambridge University Press, Cambridge.

2018 Author's Introduction. *Studies in Ancient Mesoamerican Art and Architecture: Selected Works by Karl Andreas Taube, Volume 1*, pp. 76–93. Precolumbia Mesoweb Press, San Francisco.

Taube, Karl, William A. Saturno, David Stuart and Heather Hurst

2010 The Murals of San Bartolo, El Petén, Guatemala, Part 2: The West Wall. *Ancient America*, No. 10: 3–107.

Testard, Juliette

2018 Intercambiar en Mesoamérica durante el Epiclásico (600 a 900 d.C.): poder, prestigio y alteridad. Un análisis de la cultura material de Puebla-Tlaxcala y Morelos (México). *Journal de la Société des américanistes*, Vol. 104 (2): 153–201.

2023 *La fabrique du prestige en Mesoamérique*. L'Harmattan, Paris.

Testard, Juliette and Claudia I. Alvarado León

forthcoming Dinámicas y modalidades de interacción entre Cacaxtla-Xochitécatl, Xochicalco y Teotenango (600-1100 d.C.). Algunas reflexiones a partir de su cultura material compartida. *Producción, circulación e intercambio de bienes en Mesoamérica, México Virreinal y áreas vecinas. Otros enfoques y diferentes propuestas*, edited by Geiser G. Martín Medina, Emiliano R. Melgar Tísoc y Reyna B. Solís Ciriaco. BAR Publishing, Oxford.

Turner, Andrew

2016 Cultures at the Crossroads: Art, Religion, and Interregional Interaction in Central Mexico, A.D. 600-900. PhD dissertation, University of California, Riverside.

2021 Beauty in Troubled Times: The Flower World in Epiclassic Central Mexico, A.D. 600–900. *Flower Worlds: Religion, Aesthetics, and Ideology in Mesoamerica and the American Southwest*, edited by Michael D. Mathiowetz and Andrew Turner, pp. 149–173. Amerind Studies in Archaeology, University of Arizona Press, Tucson.

Uriarte Castañeda, María Teresa and Fernanda Salazar Gil (eds)

2013 *La Pintura Mural Prehispánica en México V, Cacaxtla*. Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México, Mexico City.

Valencia Rivera, Rogelio

2022 *K'awiil: El dios maya del rayo, la abundancia y los gobernantes*. Paris Monographs in American Archaeology 55. Archaeopress, Oxford.

Whittington, E. Michael (ed)

2001 *The Sport of Life and Death: The Mesoamerican Ballgame*. Thames & Hudson, London.

# Chapter 12
# Redefining the Epiclassic: Synthesis, Summary and Future Prospects

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Through the presentations, lively discussions, and in-depth dialogues, the Roundtable on the Epiclassic allowed us to redefine our understanding of this pivotal period in Mesoamerican history. While the prevailing narrative has long cantered on Teotihuacan's collapse as a trigger for widespread turmoil—marked by population shifts, migrations from the north and west, conflict over former Teotihuacan-controlled territories, the rise of fortified hilltop settlements, militarism, and an artistic expression reflecting the multiculturalism of these societies in flux—the **Copenhagen Epiclassic Roundtable** has revealed the need for a more nuanced perspective.

We have recognised a tendency to oversimplify and homogenise the Epiclassic experience across diverse regions with distinct historical trajectories and responses to change. A multitude of Epiclassic sites throughout the central highlands offer insights into the social processes unfolding from Teotihuacan's decline to approximately AD 900/1000, which paint a picture that challenges the conventional narrative that has persisted for over the past six decades.

In the following sections, we present a thematic breakdown of our discussions, mirroring the topics explored at the Roundtable. This synthesis aims to address some of the key questions raised in the introduction to this volume, fostering a deeper and more comprehensive understanding of the Epiclassic era.

## Reconsidering the rupture: Teotihuacan's legacy and the Epiclassic period

Understanding the Epiclassic period requires a thorough examination of Teotihuacan during its so-called "collapse." It is evident that, until very recently, research on Teotihuacan's Epiclassic occupation has been limited, with the exception of publications by Rattray (1980, 2006) and Moragas Segura (2013). While recent and ongoing research (Clayton 2016, 2020, 2021; Forest and Somerville 2023; Manzanilla 2023) offers promising avenues for future investigation, our understanding of this period remains in its early stages. Furthermore, mentioning Teotihuacan in discussions of the Epiclassic solely as a justification for the period's beginning is a misconception and has hindered our comprehension of this era. It is vital to recall that Teotihuacan was not just the largest city in Central Mexico during the Classic period, but also a culture and state that held sway over a vast territory through satellite settlements such as Chingu at the Mezquital valley or Matacapan at Los Tuxtlas, Veracruz. While the decline had undeniable repercussions, Teotihuacan culture extended beyond the city itself (e.g. Clayton 2013; Faugère *et al.* 2019; Feinman and Nicholas 2020; Fenoglio Limón 2024; García Capistrán 2006; García-Des Lauriers and Murakami 2022; Hirth *et al.* 2020; Houston *et al.* 2021; Nielsen *et al.* 2019). The dispersal of its people and the continued influence of its culture suggest a transformation more intricate than a simple downfall.

Teotihuacan's significant population in the Early Epiclassic raises questions about its role and relationship with rising cities like Xochicalco and Cacaxtla. Following the fall of centralised governance, the city underwent partial depopulation, but substantial portions of the populations remained, forming the basis for the neighbourhoods and villages that grew out of the partially abandoned urban landscape, such as Hacienda Metepec or Chicoloapan (Clayton 2016, 2020, 2021; Forest and Somerville 2023). The question of demographic continuity at Teotihuacan remains a subject of debate (see Cowgill 2015a, 2015b; Nichols 2016). Some researchers observe evidence of continuity (Parsons 2006; Parsons and Sugiura 2012; Sanders 2006), while others interpret the post-collapse settlements as the result of population replacement (Beekman and Christensen 2003; Rattray 1996, 2006). However, it is likely that the situation is more complex than this simple dichotomy suggests, and further research is needed to fully understand the demographic processes at play. The initial phase of the Epiclassic period, at the transition from the Classic, is particularly crucial for addressing this question. Whereas materials of the Oxtotipac assemblage at Teotihuacan (Sanders 2006) have yet to be defined stratigraphically, it is nonetheless significant, with similar materials identified in the Tula region (Crider 2011) and the Toluca Valley (Sugiura and Nieto Hernández, this volume).

Teotihuacan's enduring presence and influence necessitate its inclusion in any comprehensive account of the Epiclassic period. Researchers have long acknowledged that Teotihuacan was still occupied when new Epiclassic cities were emerging (Charlton and Nichols 1997:192; Cohodas 1989: 224; Manzanilla *et al.* 1996; Mastache *et al.* 2002: 51; Rattray 2001: 414). Population estimates for Early Epiclassic Teotihuacan range from 10,000 to 35,500 inhabitants (Cowgill 2013: 133; Diehl 1989: 12; Parsons and Sugiura 2012: 311; Rattray 1996: 216, 2006; Serra Puche and Lazcano Arce 2011: 118–119; Sugiura 2001: 352), demonstrating its continued significance even after its political decline. More recent data suggests that between AD 550 and 650, Teotihuacan may have still had a population of around 30,000 (Cowgill 2015b). Comparing these figures to those of emblematic Epiclassic cities like Xochicalco and Cacaxtla, whose populations reached 12,000 and 15,000 respectively (Hirth 2000; Serra Puche and Lazcano Arce 2008, 2011), highlights the enduring role that Teotihuacan played. Teotihuacan's hegemony during the Classic period was waning, but the city was still populated and connected to other city-states via trade networks, emulation and political alliances. It should not be overlooked that this once-powerful Classic city lost approximately 80% of its population in less than a century, undoubtedly leading to increased population movements. Recent work in the Basin of Mexico, particularly at Chicoloapan (Clayton 2016, 2020, 2021), suggests that this site experienced a population increase during the Epiclassic, reaching approximately 6,000 inhabitants. This growth appears to be the result of migrations rather than internal demographic processes (Clayton 2021: 197). On the contrary, city-states such as Cacaxtla, Cantona and Xochicalco do not have enough data to infer that those were founded by people coming from other areas, whether the Basin of Mexico or West Mexico. However, Sugiura (1990, 2002) posited that an increase in population within the Toluca Valley was the result of people moving from the north-central area of the basin with no interest on the establishment of new settlements on hilltops or the seeking out of defensive locations.

Teotihuacan, with its pan-Mesoamerican influence, is key to understanding the social processes that unfolded as its networks weakened. It is imperative to understand the place occupied by different areas of Central Mexico within the macrosystem once dominated by the metropolis. This will allow us to identify the intensity of contact, the nature of the relationship, or the influence they maintained with Teotihuacan. This information will pave the way to recognising variation in the responses to decentralisation, the degree of its impacts, and the regional and sub-regional transformations that Teotihuacan's decline brough about. The events that unfolded in the Basin of Mexico, particularly in terms of population reactions, the reorganisation of trade networks, and the diversification in the production and design of material culture, were markedly different compared to what is observed in Morelos, Tlaxcala, Michoacan, or Queretaro (Alvarado León, this volume; Fenoglio Limón, this volume; Pereira, this volume; Punzo Díaz, this volume).

This also relates to the tendency to focus on Teotihuacan's central core, while neglecting its periphery. To fully understand the Epiclassic period, we propose to analyse its peripheral neighbourhoods, which may hold crucial information about the dynamics of the period, particularly regarding extra-regional relations. For example, when we discuss Teotihuacan and its abandonment, we often think of the Avenue of the Dead, overlooking the fact that Teotihuacanos in surrounding areas coexisted with people using Coyotlatelco material culture (Moragas Segura, this volume). This highlights the diverse experiences and interactions that characterised the Epiclassic period, even within the immediate vicinity of the metropolis.

Furthermore, advances in understanding social and cultural processes at the pan-Mesoamerican level have shown that population movements have occurred in all periods. Therefore, we cannot characterise the Epiclassic period by something that has always

been present. We concur that, in addition to being a period of change and restructuring, the Epiclassic also exhibits continuity from the Classic (Nielsen *et al.* 2023). We see this not only in terms of human mobility, but also in terms of militarism, multiculturalism, and artistic expression, where often the theme remains the same, and what changes is the mode of expression. From the first descriptions of the iconography of the Pyramid of the Feathered Serpent at Xochicalco, and later with the discovery of the murals at Cacaxtla, the Mayan influence was highlighted in the features, techniques, and materials used. However, this foreign element in artistic expressions of material culture did not appear suddenly and innovatively during the Epiclassic. Instead, it demonstrates the persistence of something that had been occurring since earlier times, especially considering Maya-inspired murals at multiple loci within Teotihuacan in the Classic period (Helmke and Testard 2025; Staines Cicero and Helmke 2017; Sugiyama *et al.* 2020, 2022). This assertion does not negate the recognition of innovation, which simultaneously occurred in all the processes of change that differentiated one period from another. The traditional chronology of the Epiclassic period (AD 600–900), closely tied to the collapse of Teotihuacan, has been challenged by archaeological data indicating a more gradual and regionally varied shift. While in central southern Michoacan and Toluca valley significant continuities are observed between the Classic and Epiclassic periods (Punzo Díaz, this volume; Sugiura and Nieto Hernández, this volume; see Pérez Negrete 2003 for Cerro de la Estrella), an abrupt rupture is perceived in Queretaro (Fenoglio Limón, this volume) and central western Michoacan (Pereira, this volume).

## Chronology and periodisation

*The discussion begins with an exploration of the chronology of the Epiclassic period, emphasizing the continuity rather than abrupt changes in archaeological sites, particularly as scholars compare regions like the Balsas River and Tepalcatepec to central Mexico. The participants reflect on the implications of defining the Epiclassic in relation to the preceding Classic period, suggesting a need for a more nuanced understanding of cultural dynamics and transitions rather than strict chronological boundaries.*

Over the past 50 years, scholars have moved away from rigid periodisation towards a more nuanced understanding of historical transformations, recognising their gradual and multifactorial nature (Le Goff 2014; Nandrin 2016). In this context, we acknowledge that the Epiclassic period's timeframe, like all periodisation of Mesoamerican development, is inherently subjective and potentially too rigid. While the most widely accepted interval of the Epiclassic period is from AD 600 to 900,[1] the pace of change varied across Mesoamerica. This variation was influenced by factors such as a site's distance from Teotihuacan, the nature of interaction with the metropolis, and regional dynamics. For instance, some sites, like Santa Cruz Atizapan (Sugiura *et al.* 2010), Cantona (García Cook and Merino 1998) and Cerro Barajas (Pereira *et al.* 2005), emerged before Teotihuacan's decline and experienced continuous occupation from the Classic period onwards. Relatively few, including Chalco (Crider *et al.* 2007), Xochicalco (Alvarado León, this volume) and Teotenango (Alvarado León and Testard forthcoming) were established outright, although this pattern may have varied regionally, during or after Teotihuacan's decentralisation. Many may have re-emerged with newfound autonomy as appears to be the case at sites such as Chapultepec, Cerro Portezuelo, Tlalpizahuac, Azcapotzalco and Zumpango (Charlton and Nichols 1997: 193; Crider *et al.* 2007; Parsons 1987: 53–63; Pfannkuch *et al.* 1993). Furthermore, the abandonment of Epiclassic city-states was not uniform, with some sites, like Xochicalco (Alvarado León 2019), El Cerrito (Nielsen *et al.* 2023), and El Coporo (García Pimentel *et al.* 2020), abandoned around the beginning of the twelfth century, while others continued and strengthened into the Middle Postclassic period. This variability highlights the need for a more flexible understanding of the Epiclassic period, recognising that it may span from as early as AD 550 to as late as AD 1100.

Given the complexity of socio-cultural processes and material culture attested during this period, in this contiguous part of Mesoamerica (see Alvarado Léon and Helmke, this volume), we propose that we cannot continue to view the Epiclassic as merely transitional moment in the historical development of Mesoamerican societies. As Christopher Morehart notes, while understanding what precedes state emergence is valuable, the term "transitional" can be highly limiting. To gain clearer answers about the different moments and processes within the Epiclassic, we must shift our perspective. This involves recognising the enduring influence of Teotihuacan, evidenced in various regions such as the Bajío, western Mesoamerica, and the Toluca Valley, where architectural styles, ceramic forms, and iconographic motifs reflect its lasting impact.

Simultaneously, we must raise specific questions to guide our investigations into this complex period. For one, to understand Teotihuacan's decline and its legacy, we must ask: What are the main differences between the end of the Classic and the beginning

[1] As initially formulated and perceived by Jiménez Moreno (1959), the Epiclassic was thought to begin as late as AD 850 or 900, thereby imparting this phase with this notion of transition, owing to its perceived short duration.

of the Epiclassic aside from Red-on-buff ceramics? What are the continuities and the innovations in the political organisation, resource exploitations and trading networks? Can we speak of a change in settlement patterns? Can we identify a shift in religious beliefs or practices? At the political level, what did the transformation of Teotihuacan's supreme power structure represent?

To achieve a better understanding, a more refined chronology is necessary. Dividing the period is essential to organising the various processes that occurred over several centuries, and to do this, we need to recognise and understand its own complex dynamics. While acknowledging the challenges, we can draw on other markers, such as iconography, ceramics, lapidary, spatial planning and architecture, to help discern what was happening at specific times. In that sense, we consider that the Epiclassic, in general, can be divided into two moments: AD 550 to 800 and from AD 800 to 1000/1100.

This first moment (AD 550 to 800) is a period of adaptation and reorganisation. It is marked by both continuities and changes as communities respond to the decline of Teotihuacan and the restructuring of regional power dynamics. Continuities with the Classic period are evident in various aspects of material culture, such as the persistence of ceramic forms seen in the Coyotlatelco complex (Clayton 2021; Dumond and Müller 1972), the presence of certain deities like Huehueteotl, and the continued use of architectural elements like the *talud-tablero*. Following Teotihuacan's decline, some groups, including people from the metropolis itself, returned to their ancestral lands. These movements, which likely took over a century to unfold (Burmeister 2000: 553; Solar Valverde 2023: 795), led to a merging of customs and ideas, as seen in the Epiclassic material culture of Santa Cruz Atizapan, Tula, and the Basin of Mexico. This fusion of traditions is also visible in the presence of Teotihuacan-inspired iconographic/epigraphic elements on monuments, such as the feathered serpent and the Year Sign headdress.

However, alongside these continuities, significant changes are also apparent. Urban layouts shifted away from Teotihuacan's orthogonal urban planning, reflecting new approaches to spatial organisation. The presence of ballcourts in Epiclassic settlements and changes in the sourcing of resources previously controlled by Teotihuacan signal further transformations. Perhaps the most significant change was in political organisation. The Teotihuacan model of a central city controlling resources, trade networks, and power relations across regions gave way to a fragmented geopolitical landscape of independent city-states. While some of these new powers established themselves on hilltops, others occupied valley settings. Despite this shift in political organisation, the Epiclassic city-states, like Teotihuacan, lack clear evidence for a single ruler or king. While palaces, reminiscent of those at Teotihuacan, are present, there are no representations of individual rulers. Although we can infer the existence of a hegemonic class and its control, the specific structure of political power, especially in this early stage of change and reorganisation, remains unclear.

The second moment (AD 800 to 1000/1100) is when these emerging societies solidify and regional powers consolidate. Competition for resources and control of routes intensifies, leading to significant investment in architectural features that project power, prestige, and defence as seen at sites such as Xochicalco, Cacaxtla, Teotenango, Cantona, Los Mogotes, and La Trinidad. The Epiclassic period is often associated with conflict and warfare, and evidence supporting this interpretation becomes more pronounced in this second phase. Murals at Cacaxtla depict violent scenes and graphic depictions of battle outcomes. Monumental sculptures from Xochicalco represent warriors or military units carrying weapons, shields, and standards, suggesting the presence of a formalised military institution. Disarticulated human remains begin to appear, intentionally displayed in prominent locations within settlements; and offerings of skulls with evidence of skinning and decapitation are also found. These elements contribute to the perception of the Epiclassic as a period of heightened conflict.

In addition to these defensive(?) features, the second phase of the Epiclassic sees the emergence of new architectural trends. Halls with columns or pillars are found in a variety of sites, reflecting the growing influence of ideas from other areas (Turner and Kristan-Graham 2023). This phase also sees the incorporation of elements from more distant regions, such as the Maya area, including not only forms, techniques and stylistic models, but also systems of governance (Helmke *et al.*, this volume). This period culminates in either the abandonment of some sites, like Cacaxtla, Cantona, and Xochicalco, or the consolidation of Early Postclassic sites such as El Cerrito and Tula. The continuity from the Epiclassic into the Early Postclassic, that is often overlook, is evident in the commercial networks, architectural forms, and many symbolic, iconographic and epigraphic elements that were established during the Epiclassic and persisted into the Postclassic (Morehart, this volume; Turner and Kristan-Graham 2023: 472).

Therefore, it is crucial to re-evaluate the concept of the Epiclassic as solely a "transitional" period. While there were significant changes, there were also important continuities in areas such as militarism, multiculturalism and artistic expression. That being said, the manner in which these traits are manifested during the Epiclassic certainly take on a character of their own, but the continuity of practice is clear. The estimated three-century duration of the Epiclassic may have contributed to this perception, but it is vital to recognise its significance as a period with its own dynamics, not just a bridge between the Classic and Postclassic periods.

**Warfare and defensive architecture?**

*Participants debated whether the architectural features of hilltop installations should be interpreted predominantly as defensive mechanisms or as symbols of power, given their function as commercial hubs. While there is a shared acknowledgment of the presence of militarism, some scholars argue that the apparent defensive structures could represent conflict avoidance strategies rather than direct military responses. The discussions also touched upon settlement patterns, suggesting that organisations during the Epiclassic may not align neatly with previous models of centralised power, reflecting a diverse array of local responses and adaptations.*

The Epiclassic settlement pattern, characterised by establishing sites in elevated and fortified areas, has often been interpreted as a response to conflict and violence. However, this view requires nuance. While competition for resources and trade routes may have intensified during the Epiclassic, the assumption that new city-states consistently sought defensible locations and developed military institutions needs further examination.

While there is a preference for elevated areas as seen at Cerro Magoni, Los Mogotes, Cerro Zapotecas, Santa Rita, Santa Lucía, Las Majadas, etc., empirical evidence does not indicate that defensive features were universally employed across Central Mexico. The nature and motivations behind the apparent rise in inter-polity tensions require careful consideration. We often conceive of "defence" as an immediate, reactive measure to an imminent threat, leading to the assumption that the "fire" at Teotihuacan around AD 550–650 immediately led people to flee to the hills for protection.

Evidence from sites like Xochicalco, Los Mogotes and La Trinidad demonstrates deliberate, well-planned efforts to establish settlements in elevated locations, away from the fertile valleys below. The investments of time, resources and organised labour to build entire cities symbolised power, prestige, and authority, suggesting that their location choices were motivated by more than just defence. Their visibility and prominent location may have served additional functions, such as displaying power, attracting populations, gaining prominence, and controlling trade routes (DeMarrais *et al*. 1996). These characteristics suggest those cities were exceptions rather than the norm for Epiclassic settlements. The construction of fortifications, such as walls, sentry buildings, and moats, varied in timing and extent, suggesting that conflict, while potentially a factor, may not have been the primary catalyst for their location choices. This variability aligns with our earlier observations about the non-uniform nature of change during the Epiclassic period, where responses to the decline of Teotihuacan and the reconfiguration of regional power dynamics differed across Mesoamerica.

The persistence of settlements in valleys and lowlands such as Teotihuacan itself, Chicoloapan, Santa Cruz Atizapan, Azcapotzalco, and Tingambato, highlights the importance of considering sites located in valleys, which fall outside the typical Epiclassic hilltop prototype but are crucial for understanding the diverse social processes and settlement patterns of this era. This complicates the narrative of a period dominated solely by conflict, therefore, it is more appropriate to speak of a change in settlement patterns at a regional level rather than generalising to the entire period, and to consider the temporal factor, wherein some sites exhibit rapid construction and influx of populations, whereas others, instead, reveal very gradual changes.

The diversity of settlement patterns, from fortified city-states to communities and cities in more vulnerable locations, indicates that various factors influenced settlement choices during the Epiclassic, including political strategies, economic considerations, and social dynamics.

In at least two of these exceptional city-states, Cacaxtla and Xochicalco, the activities developed within the cities were associated with the hegemonic class or elite. As a result, walls may not solely represent conflict or defence but also signify prestige, social division, cultural landmarks, or community boundaries, we must remember that Epiclassic sites were settlements inhabited by communities, not merely fortresses. Linking elevated areas with hegemonic groups also involves considering the heavy investment required to obtain resources, especially water. For sites like Xochicalco or La Trinidad, located in regions with long dry seasons and few nearby perennial water sources, access to water reflects the power and wealth of the groups established there. Furthermore, settling in areas exhibiting complex resource procurement

strategies, all the while maintaining and sustaining large populations, appears to be a recurring theme.

Available empirical data does not confirm widespread violence and unabated wars. While defensive constructions and elevated locations might suggest otherwise, it is important to critically evaluate this evidence. For example, the Battle Mural at Cacaxtla, the polychromatic murals at Xochicalco, figurines, and sculptural assemblages, including the representation of warrior-priests in the reliefs of the Pyramid of the Feathered Serpent, are not in and of themselves sufficient to infer increased violence or warfare. In fact, the evidence is comparable to that of the preceding Classic period, which featured numerous militaristic costumes and titles, the violent nature of Teotihuacan murals, and evidence of sacrifices in the Feathered Serpent Pyramid and the Pyramid of the Moon (Cabrera and Serrano 1999; Sugiyama 2005; Sugiyama and López Luján 2006). However, we must also address the possibility of ritual warfare in the Epiclassic period. Moreover, we are still unsure whether the images of war represent actual events or are symbolic representations of events that never took place. The motives for these representations remain unclear. While the link and direct associations with the Maya, the representations, despite being graphically explicit, do not narrate the reasons, dates, or parties involved, as is traditionally found in Eastern monuments. The same can be said for the skulls found in various offerings from different sites in the Mezquital Valley. Are they perhaps the result of these ritual battles rather than struggles for control of routes and resources?

Epiclassic iconography, particularly the Cacaxtla murals and Xochicalco reliefs, has contributed to the perception of a period marked by militarism and conflict. However, it is vital to contextualise these representations and recognise the continuities with the Classic period themes, concepts, ideologies, and imagery. The presence of warrior orders, titles, and ritual themes suggests the persistence of symbolic elements and power structures.

## Imagery and iconography

*The discourse on iconography highlighted the challenges of assessing artistic continuity amidst notable shifts in styles and symbols. Scholars expressed the need for a more critical approach to interpreting available visual materials, arguing that the apparent militarism in the artistic record may reflect deeper socio-political realities. The complexities of artistic expression during the Epiclassic were noted, with specific references to polychromatic mural paintings in contexts such as Cacaxtla and Xochicalco. Attendees advocated for an understanding of these artistic forms as indicators of evolving cultural identities rather than simple reflections of earlier practices.*

The study of imagery and writing is crucial to understanding Epiclassic art, not only for its artistic and figurative characteristics but also for revealing potential relationships between city-states and broader cultural trends. Whereas some Mesoamerican regions have yielded limited evidence of iconography or writing, the challenge lies in balancing insights from settlements rich in these elements with those currently offering less comparative material.

A consensus has emerged that Epiclassic mural paintings do not show a radical thematic departure from Teotihuacan murals. Themes such as human sacrifice and warfare persist, observable in both Teotihuacan and Cacaxtla, and influencing other Mesoamerican areas. However, a notable shift is evident in the figurative style, in particular the advent of naturalism and expressionism. These two forms of visual communication likely impacted audiences differently, with naturalism potentially creating a stronger sense of realism and immediacy (*mimesis* effect) (Testard 2018, 2023). The shift towards a more naturalistic and performative visual style may in fact have influenced the interpretation of the Epiclassic as inherently militaristic (e.g. Stuart 1992).

However, it is essential to broaden the iconographic analysis and consider the diversity of artistic expressions —including objects, supports, techniques, and execution— and their connection to regional political and social dynamics. The continuity of themes (e.g., human sacrifice and warfare), present at both Teotihuacan and in Epiclassic imagery, hints at the persistence of certain concerns and ritual practices despite political and social transformations. Relatedly, the stone figurines that appear in many Epiclassic sites and frequently have been, and still are, misconceived as either Teotihuacan or Mezcala. Broader and more careful analyses of these objects will have to be undertaken to properly identify their origin, place of production, the source of the raw materials, and the different kind of networks along which these figurines were distributed.

The Epiclassic situation may mirror a pattern seen in Late Classic Maya area, where a lack of communication between city-states resulted in the diverse innovations in writing (see Helmke and Nielsen, in press). This "balkanisation" likely led to independent cultural developments, with individual city-state identities rather than a shared one. Further research is needed to determine the extent to which this dynamic played out during the Epiclassic period.

## Trade networks

*The fall of Teotihuacan did not mark the end of trade networks or interaction between different regions of Mesoamerica. Archaeological evidence points to the continued movement of goods and people, albeit with significant transformations in the Epiclassic period. One of the most robust pieces of empirical evidence we have for studying the Epiclassic period is the shift in obsidian sources (Braswell 2003; Feinman and Riebe 2022).*

Most sites discussed in this volume show evidence of using obsidian primarily from deposits located in Michoacan, particularly from Ucareo and Zinapecuaro. In contrast, the eastern entities of Mexico Basin (Cacaxtla-Xochitecatl and Cholula) were primarily using Oyameles-Zaragoza (Puebla) obsidian (Blanco 2020: 214–215; Knight 2020; Testard 2018: 173–174). This change in material sourcing, reveals much about the transformation of trade routes. It highlights the role of the Toluca valley in connecting Michoacan to Morelos (Nieto Hernández *et al*., forthcoming) and Hidalgo (Healan 1993), and the part played by Cantona in the distribution of Oyameles obsidian to Gulf societies and beyond, reaching Maya sites such as Comalcalco (Gallegos 2018).

However, significant gaps in information still need to be addressed to fully explain the processes and systems under which obsidian was exploited and distributed during this era. Although there are several advances on the organisation of these trade networks, the mechanisms of exchange, and the social and economic implications of these changes (e.g. Feinman *et al*. 2013; Hirth 2008; Kabata 2011; Pastrana and Domínguez 2009), further research is needed.

While obsidian provides a key example, the Epiclassic period also saw the movement of other goods, including ceramics and luxury items. For instance, Red-on-buff ceramics (including Coyotlatelco) exhibit significant regional variations, highlighting the importance of local identities and the adaptation of cultural elements to specific regions and cultural contexts. This suggests a dynamic interplay between regionalisation and interregional interaction. The same can be said about the stone figurines and other material culture that circulated over vast regions.

The concept of "cosmopolitanism," once associated with the cultural diversity and interconnection of Teotihuacan, requires re-evaluation in the context of the Epiclassic. While centres like Xochicalco maintained extensive networks, there was also a trend towards regionalisation and the strengthening of local identities. This period was marked by a complex interplay between local and interregional connections, with trade playing a crucial role in shaping social, political and economic landscapes. Economic aspects such as resource access, production systems and exchange routes are effectively examined through World Systems theory, which offers a multiscalar framework centred on connectivity rather than hierarchy. It also emphasizes that cultural integration involved not only economic exchange but also ritual, ideological and political-military interactions (see Fournier G. and Sánchez-Aldana, this volume; Jimenez Betts 2007, 2020). In the context of the Epiclassic, this model helps to clarify how decentralised, yet interconnected polities negotiated shifting dynamics of power, identity and exchange across Mesoamerica.

## Red-on-buff ceramics

*Coyotlatelco pottery is a recurring theme in discussions of the Epiclassic period. This ceramic type has been, and in some cases continues to be, used as a diagnostic horizon marker, significantly influencing our understanding of this period (López Pérez and Nicolás Careta 2023; Rattray 1966; Solar Valverde 2006). However, relying solely on Coyotlatelco ceramics, as defined from the vantage point of Teotihuacan, limits our understanding of the wide-ranging phenomenon of Red-on-buff pottery in the Epiclassic.*

Although the topic has been largely addressed (e.g. Sánchez 2013; Solar Valverde 2006), it is worth reiterating that Coyotlatelco, is not synonymous with the Epiclassic. Therefore, we must consider the regionalism of Coyotlatelco, first as a manifestation of the occupational (dis)continuity of Teotihuacan and then as a marker of regional identity. From this perspective, we can discuss the significance of Coyotlatelco in defining and explaining the identity and continuity of the Epiclassic. Many regions and settlements of this period do not exhibit pottery with the decoration typically associated with Coyotlatelco. Although we refer generally to ceramics of this sphere as Red-on-buff pottery, decorations, modal attributes and forms vary across regions. Therefore, while Coyotlatelco ceramics could represents a significant regional variant with a localised distribution, it is crucial to recognise the diversity within Red-on-buff traditions across Central Mexico. For example, in Queretaro, three distinct ceramic traditions have been identified, likely corresponding to regional demarcations among different groups who share the use of Red-on-buff ceramics yet differentiate themselves through distinct forms and decorative motifs. Therefore, Coyotlatelco ceramics, are better understood as a local manifestation of a greater phenomenon, and we should thereby not grant this particular complex any greater typological pre-eminence than any other local variant.

The various (re)definitions of Coyotlatelco have had a profound impact on our understanding of relative sequencing, periods as well as conceptions of ceramic types, styles, traditions and spheres. For researchers that would like to equate Coyotlatelco ceramics with a distinct social or cultural group, the definition is even more problematic. Contrary to the standpoint expressed by Fournier G. and colleagues (2006) that regards Coyotlatelco as an "integral ceramic style", in which form, paste, colour and technique are considered, the prevailing view is that it is merely a ceramic type with a distinctive Red-on-buff surface treatment. As a result, complications have arisen in the interpretation of the regional scope of the presence of ceramics subsumed under this type, due to a lack of precise typological definition. Consequently, it is the opinion of the authors that research on Epiclassic ceramics should aim to provide answers to fundamental questions such as: Which are the specific typological attributes the are actually diagnostic of Coyotlatelco ceramics? In the event of the presence of ceramics exhibiting similar pastes, production techniques and form, yet devoid of the distinctive Coyotlatelco surface treatment, could such specimens be regarded as varieties of this particular style? Were Red-on-buff ceramics used throughout the Epiclassic at all sites, or are these ceramics more specifically to certain regions and tied to the initial phase, before gradually falling out of use and being replaced by later types? Is it possible to consider that Coyotlatelco pottery is just a variant of a much broader Red-on-buff ceramic style?

The over-reliance on Teotihuacan-centric information presents a challenge to understanding regional developments. Although Teotihuacan's power extended to regions hundreds of kilometres away, each region had its own historical development, ethnic and cultural identities, and degrees of interaction with the metropolis. We therefore consider it crucial to identify regional markers to understand the diverse trajectories within the broader context of the Epiclassic period. Despite continuities, there were also regional innovations and adaptations stemming from a common basis of material culture.

## Population dynamics

*Deliberations on migration pinpointed the complexities of population movement during the Epiclassic. While certain scholars noted a lack of substantial evidence for large-scale migrations, others argued for the presence of smaller group movements (or rural/peasant migrations) characterised by organic interactions among diverse communities. The discussion engaged with how genetic and isotopic analyses can enhance our understanding of these migrations beyond mere ceramic typologies. Recognising the significance of multivalent interactions and dynamic identity formations, participants emphasised that the Epiclassic is marked by pronounced multiculturalism, a reflection of ongoing dialogues between ethnic groups*

Deliberations on migration during the Epiclassic period have pinpointed the complexities of population movement. While certain scholars have noted a lack of substantial evidence for large-scale migrations or widespread population replacements (Diehl 1989: 16; Fournier G. and Sánchez-Aldana, this volume; Solar Valverde 2023), others have argued for the presence of smaller group movements (or rural/peasant migrations) characterised by organic interactions among diverse communities (Charlton and Nichols 1997; Clayton 2021; Cowgill 2013).

Regarding large-scale migration, there is currently no conclusive evidence to support the idea of widespread population replacements (Blanton *et al.* 1993: 135–138; Charlton and Nichols 1997: 190–194; Diehl 1989: 16; Sanders *et al.* 1979: 129–137). Population movements were likely present, but comparative data, in particular from Classic-period contexts at Teotihuacan, suggest they were not specific to the Epiclassic period. While some population movement was undoubtedly occasioned by the collapse of centralised governance at Teotihuacan, such movements were diverse in nature, scale and direction across the larger region.

In contrast to the Toluca Valley and the area of Chalco-Xochimilco, which show evidence of population increases brought about an influx of people coming from the Basin of Mexico, particularly from Teotihuacan (Parsons *et al.* 1982: 335–339; Sugiura 2002), settlement data from the Tula region shows no significant change (Fournier G. and Sánchez-Aldana, this volume). In this regard, it is important to distinguish between mobility—understood as the routine, often cyclical movement of individuals or groups for purposes such as trade, pilgrimage, or seasonal labour—and migration, understood as more permanent or large-scale displacement or relocations typically prompted by exceptional circumstances such as political unrest, environmental stress, or warfare (Arnauld *et al.* 2021: 3; Gonlin and Landau 2021: 132; Inomata 2004). While mobility is often embedded in the socio-cultural practices of daily life and tends to preserve ties to original settlements and regions, migration entails the disruption of those ties and the establishment of new socio-political and economic affiliations. This distinction is crucial in the context of the Epiclassic, where both phenomena coexisted and played divergent roles in shaping demographic and geopolitical shifts, especially in light of regional identity formation processes. Recognising regional variation in the forms

and drivers of population movement allows for a more nuanced understanding of settlement dynamics and social transformation during this period.

Linguistic analysis offers a valuable lens for understanding social processes and population dynamics. For a long time, the traditional view has been that speakers of proto-Nahuatl arrived in Mesoamerica at the beginning of the Epiclassic (Kaufman 2020), and that the Nahuan languages subsequently dispersed throughout Mesoamerica as part of the Postclassic migrations and the ascendancy of the Aztec empire. However, recent linguistic analyses show that the immediate ancestor of Nahuan languages was already a fully Mesoamericanised language, which would suggest a period of intense contact between pre-Nahua and the Mesoamerican languages already during the Classic period. Based on this observation, pre-Nahua speakers must have already been established in Mesoamerica during the Classic period. The decline of Teotihuacan at the close of the Classic may thereby have been a decisive factor in precipitating the diversification and subsequent dispersal of Nahuatl through Mesoamerica.

Multi-ethnicity is a defining feature of Mesoamerica from the earliest times but seems to become even more evident in the Epiclassic. Archaeological and linguistic evidence suggests a period of increased interaction and cultural mixing, though not necessarily in terms of large-scale migrations or population replacements. The presence of migrant populations at sites like Chicoloapan reinforces this notion (Clayton 2016), highlighting how mobility and ethnic mixing shaped the social landscape of the Epiclassic.

Current perspectives on the Epiclassic are often dominated by a focus on hegemonic groups and city-states as actors. Explanations tend to centre on the Teotihuacan state's control and the subsequent reactions of people following its decline. However, evidence suggests that some of Teotihuacan's population, settled mainly in the neighbourhoods, migrated to different areas such as the Toluca Valley and the Bajío, places of their possible origin. In these areas, the settlement pattern and complexity of Early Epiclassic city-states contrast with other elsewhere in the Mexican highlands. It is conceivable that people sought new locations when their current settlements no longer served their needs, leading to the establishment of new cities. Likewise, it is important to consider that different regions experienced demographic rearrangements of local populations that led to the reoccupation of sites.

**The Epiclassic as a period and a culture**

The participants concluded that continued research into the Epiclassic period must navigate between broad generalisations and specific, localised histories. Emphasizing the need for more comprehensive archaeological and spatial data and specialised analysis, including systematic absolute dates, traceology, chemical analysis of material provenances, DNA and isotopic analyses, participants advocated for a model that embraces both continuity and change. As they reflected on the future of this field, scholars anticipate new findings and theoretical frameworks that can illuminate the multifaceted realities of the Epiclassic.

In addressing the central theme of diversity within the Epiclassic, this volume has embraced the multiplicity of cultural expressions across regions. Contributors have recognised the limitations of previous generalisations, emphasizing the need for region-specific studies that honour local variations in settlement patterns and socio-political organisation. The roundtable has highlighted the importance of interdisciplinary approaches, including paleolinguistic and archaeological methods, to reframe our understanding of cultural dynamics and historical narratives during the Epiclassic.

The Epiclassic emerges as a period of intricate complexity and diversity, characterised by both continuities and transformations. While the decline of the Teotihuacan state was a significant event, it should not be viewed as the sole catalyst for social and political changes. Political autonomy, population mobility, inter-ethnic interactions, enduring trade networks and diversifying cultural expressions are key elements for understanding this period. The seventh century marked a turning point, disrupting the economic, political and social dynamics that had prevailed under Teotihuacan's centralised rule. Initial changes were likely abrupt, but the processes of adaptation, innovation, and hybridisation unfolded over time.

Re-evaluating the Epiclassic requires moving beyond generalisations and recognising regional variability. Archaeology, linguistics and other disciplines must collaborate to construct a more nuanced and complete vision of this pivotal period in Mesoamerican history. Questioning inherited definitions and building new interpretations based on available evidence are essential for acknowledging the complexity and diversity of the Epiclassic.

The Epiclassic was not merely a transitional period of chaos after Teotihuacan's collapse. Instead, it was a long period—spanning over three centuries—of adaptation, innovation and reconfiguration of the Mesoamerican political and cultural landscape. Given that the Epiclassic is of comparable length to the preceding Classic period, there is a compelling argument for understanding it on its own terms.

Evidence shows that each entity reacted differently to the changes that impacted societies across Central Mexico to varying degrees. Continuities are observed in architectural features such as palaces and vertically-segregated spaces, the evolution of the writing system, naturalistic and expressionist styles, themes related to sacrifice and warfare, as well as military titles, warrior orders and associated symbolism. At the same time, differences also emerged, including forms of government, burial, ritual and culinary customs, resource acquisition, decentralisation, changes in supply sources and trade routes.

The Epiclassic demonstrates great diversity and complexity in settlement patterns, ceramics, art and political organisation. Regional states, city-states in elevated areas, confederations of smaller political units and valley-level settlements coexisted. This variety challenges traditional evolutionary models with centralised or decentralised states. A "pluricentric model"—used in linguistics and referring to a language with several common codified forms used in different places—may offer a more suitable framework for understanding the Epiclassic period and societies. This model helps explain the observed archaeological patterns of change, fragmentation and local adaptation.

The continuity of symbols, customs and ideas from the Classic period is evident. Multi-regional interaction is reflected in the movement of people, goods and ideas throughout Mesoamerica, with Teotihuacan serving as a central hub where many symbols transcended time and space. The need to make temporal and spatial distinctions within the Epiclassic is underscored by the persistence of cultural material from regions outside the Basin of Mexico.

Comparing data from different regions is complicated by variations in material and chronological resolution, theoretical approaches and methods. Proposing models of response or behaviour in the face of evident change presents further challenges. Some more global processes, such as the analysis of paleo-environmental contexts, require further development for the region and period. While not extensively discussed, the potential impact of drought on Teotihuacan's decline and subsequent population movements warrants deeper investigation. Future research must systematically address regional diversity, social interaction and environmental factors to fully comprehend this crucial period of Mesoamerican history.

**Rethinking the Epiclassic**

*To reiterate the questions posed at the outset: Can we speak of a single culture, or can we detect local variations that signal regional differences? Should the Epiclassic rather be considered a mayor scale event of culture-historical significance, rather than a protracted period of change? How did the independent city-states that characterise the geo-political landscape maintain their autonomy and interact, both economically and politically? Where these city-states in unceasing competition and conflict, or were clashes more singular events that punctuated periods of tempered cohesion? Were there networks of allegiances and alliances between the city-states, and if so, were these driven by economic impetuses or other socio-political catalysts? How did the cultural impulses from eastern Mesoamerica, notably those of the Maya city-states of the Late-to-Terminal Classic, shape Epiclassic identities and forms of governance? How did the features that define the Epiclassic in turn integrate, or not, into the social, cultural and political fabric of the ensuing Postclassic?*

The Epiclassic period—conceived not as mere interlude but as a distinct and complex era—has traditionally been defined by the fall of Teotihuacan and the subsequent rise of city-states. However, recent research challenges the notion of a homogeneous and fleeting Epiclassic culture. Instead, it reveals a mosaic of distinct yet interconnected cultures, each incorporating elements inherited from Teotihuacan while expressing strong regional traditions and selectively adopting external influences. These dynamics resulted in variations in local architecture, ceramics, art and writing. The Epiclassic writing system, for instance, evolved into diverse regional scripts akin to dialects, reflecting the pluricentric nature of cultural development (Helmke and Nielsen 2023).

Although the beginning of the Epiclassic is generally placed around AD 550–650, its end varies across regions. Some city-states collapsed earlier than others, echoing the well-known Maya "collapse" (Arnauld 2024). This suggests a pan-Mesoamerican horizon of gradual, multifactorial environmental and societal change and depopulation at the end of the Terminal Classic and Late Epiclassic. In reassessing the evidence, it becomes clear that the Epiclassic was at least as long as the Classic period, necessitating its recognition as a substantive phase in its own right.

Population movements—both the exodus from Teotihuacan and the internal reorganisation of communities—led to the formation of new geopolitical territories. These newly city-states maintained autonomy through the control of trade routes, fostering regional exchange networks. Hence, relationships between them may have been defined more by alliances than by outright conflict.

Nevertheless, our understanding of regional interactions among Central Mexican cities remains incomplete. While there is evidence that Cacaxtla,

Xochicalco, and Teotenango interacted, the nature of these interactions is not fully understood. Their shared visual and material culture implies common cultural practices and ritual observances, but it is unclear whether they perceived themselves as part of a wider cultural network. Iconographic and epigraphic data suggest that Cacaxtla and Xochicalco may have experienced direct conflict, including the taking and display of captives (Helmke and Nielsen 2011: 30–31; Nielsen and Helmke 2015).

To better understand the nature of inter-polity relationships during the Epiclassic, it is essential to improve chronological precision and undertake systematic characterisation of material provenances. These tools enable scholars to trace the rhythms of interaction, the development of exchange networks and the evolving roles of individual partners. Although still in its early stages, the study of obsidian circulation is a particularly valuable avenue for revealing the dynamics of regional connectivity.

Some scholars, based on heuristic analyses of visual and material culture, have proposed that societies in the Central Highlands—especially those of Cacaxtla-Xochitecatl and Xochicalco—deliberately adopted the exclusionary political model outlined by Blanton and colleagues (1996). This approach reflects both a continuation of the political restructuring seen at Teotihuacan and an alignment with governance models common in eastern Mesoamerican societies, particularly those of the Gulf Coast and the Maya region (Testard 2018: 157–158; 2023: 336–337).

Importantly, surviving city-states such as Tula and Colhuacan directly contributed to the formation of Postclassic cultures, including the Toltec. Colhuacan, with archaeological roots in the Epiclassic, flourished into the Postclassic and positioned itself as a cultural inheritor of the Toltec, exemplifying the processes of continuity and transformation that characterised this period (Prem 1999).

From AD 900–950, the Postclassic International Style emerged, though many of its elements likely originated in the Epiclassic (Solar Valverde 2023; Turner and Kristan-Graham 2023; Volta and Braswell 2014). These include sculptures (perhaps feminine) with medallions or mirrors carried on the abdomen; the motif of diamonds and dots on figurine skirts; skull and crossbones symbols; the "smoke" glyph on the snout of the Feathered Serpent; the recumbent figures (possible prototypes of the Chacmool); and the prominence of female deities such as "proto" Tlazolteotl and Cihuateteo (Testard 2023: 342–343). In this regard, the transition from Epiclassic to the Early Postclassic period should be viewed as a gradual process that varies according to cultural contexts. If some city-states remained occupied beyond AD 900, then the hegemonic role traditionally attributed to Tula in the Central Highlands must also be reassessed.

This redefined understanding of the Epiclassic emphasizes the richness and complexity of Mesoamerican cultures during this period. By recognising the unique characteristics of individual Epiclassic cultures, we gain a deeper appreciation for the processes of change and adaptation that shaped the Postclassic world.

**References cited:**

Alvarado León, Claudia I.
2019 Las relaciones sociales del espacio social en los entornos construidos del sitio arqueológico de Xochicalco, Morelos. Doctoral thesis. Universidad Nacional Autónoma de México, Mexico City.

Alvarado León, Claudia I. and Juliette Testard
forthcoming Teotenango y Xochicalco: entornos, asentamientos y patrones constructivos. *Xochicalco y Teotenango (650-1150 d.C.): dos ciudades sobre cerros. Estudio comparativo*, coordinated by Geneviève Lucet and Claudia Alvarado. Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México, Mexico City.

Arnauld, M. Charlotte
2024 Le pourquoi et le comment. Les recherches en causalités dans l'archéologie maya du changement climatique (800-1100 de notre ère). *IdeAs. Idées d'Amériques*, Num. 24 (September) DOI:10.4000/12hsb.

Arnauld, M. Charlotte, Christopher Beekman and Grégory Pereira (eds)
2021 Mobility and Migration in Ancient Mesoamerican Cities. An Introduction. *Mobility and Migration in Ancient Mesoamerican Cities*. University Press of Colorado, Louisville.

Beekman, Christopher S. and Alexander F. Christensen
2003 Controlling for Doubt and Uncertainty through Multiple Lines of Evidence: A New Look at the Mesoamerican Nahua Migrations. *Journal of Archaeological Method and Theory*, Vol. 10 (2): 111–164.

Blanco, Mónica
2020 la industría lítica en Xochitécatl-Cacaxtla: ritual y poder. Doctoral thesis. Universidad Nacional Autónoma de México, Mexico City.

Blanton, Richard, Gary Feinman, Stephen Kowalewski and Peter Peregrine
1996 A dual-processual theory for the evolution of Mesoamerican civilization. *Current Anthropology*, Vol. 17 (1): 1–14

Blanton, Richard E., Stephen A. Kowalewski, Gary M. Feinman and Laura Finsten

1993 *Ancient Mesoamerica: a comparison of change in three regions.* 2d ed. Cambridge University Press, Cambridge.

Braswell, Geoffrey E.

2003 Obsidian Exchange Spheres. *The Postclassic Mesoamerican World*, edited by Michael E. Smith and Frances F. Berdan, pp. 131–58. University of Utah Press, Salt Lake City.

Burmeister, Stefan

2000 Archaeology and Migration: Approaches to an Archaeological Proof of Migration. *Current Anthropology*, Vol. 41 (4): 539–567.

Cabrera, Rubén and Carlos Serrano

1999 Los entierros de la Pirámide del Sol y del Templo de Quetzalcoatl. *Prácticas funerarias en la ciudad de los dioses. Los enterramientos humanos de la antigua Teotihuacan*, edited by Linda Manzanilla and Carlos Serrano, pp. 345–398. Instituto de Investigaciones Antropológicas & Dirección General de Asuntos del Personal Académico, Universidad Nacional Autónoma de México, Mexico City.

Charlton, Thomas and Deborah Nichols

1997 Diachronic Studies of City-States: Permutations on a Theme. *The Archaeology of City-States: Cross-Cultural Approaches,* edited by Deborah Nichols and Thomas Charlton, pp. 169–207. Smithsonian Institution Press, Washington, D.C.

Clayton, Sarah

2013 Measuring the long arm of the state: Teotihuacan's relations in the Basin of Mexico. *Ancient Mesoamerica*, Vol. 24 (1): 87–105.

2016 After Teotihuacan: A View of Collapse and Reorganization from the Southern Basin of Mexico. *American Anthropologist*, Vol. 118 (1): 104–120.

2020 The collapse of Teotihuacan and the regeneration of Epiclassic societies: a Bayesian approach. *Journal of Anthropological Archaeology*, Vol. 59: 101223.

2021 Coalescence at Chicoloapan, Mexico. Migration and the Making of a Post-Collapse Community. *Mobility and Migration in Ancient Mesoamerican* Cities, edited by Marie-Charlotte Arnauld, Christopher Beekman and Grégory Pereira, pp. 189–207. University Press of Colorado, Boulder.

Cohodas, Marvin

1989 The Epiclassic Problem: A Review and Alternative Model. *Mesoamerica after the Decline of Teotihuacan A.D. 700–900*, edited by Richard A. Diehl and Janet C. Berlo, pp. 219–240. Dumbarton Oaks Research Library and Collection, Washington, D.C.

Cowgill, George

2013 Possible migrations and shifting identities in the central Mexican Epiclassic. *Ancient Mesoamerica*, Vol. 24 (1): 131–149.

2015a The Debated Role of Migration in the Fall of Ancient Teotihuacan in Central Mexico. *Migration and Disruptions: Toward a Unifying Theory of Ancient and Contemporary Migrations*, edited by Brenda Baker and Takeyuki Tsuda, pp. 97–122. University Press of Florida, Gainesville.

2015b *Ancient Teotihuacan: Early Urbanism in Central Mexico*. Case Studies in Early Societies. Cambridge University Press, New York.

Crider, Destiny

2011 Epiclassic and Early Postclassic Interaction in Central Mexico as Evidenced by Decorated Pottery. PhD dissertation. Arizona State University, Tucson.

Crider, Destiny, Debora L. Nichols, Hector Neff and Michael Glascock

2007 In the Aftermath of Teotihuacan: Epiclassic Pottery Production and Distribution in the Teotihuacan Valley, Mexico. *Latin American Antiquity*, Vol. 18 (2): 123–143.

DeMarrais, Elizabeth, Luis J. Castillo and Timothy Earle

1996 Ideology, Materialization, and Power Strategies. *Current Anthropology*, Vol. 37 (1): 15–31.

Diehl, Richard

1989 A Shadow of Its Former Self: Teotihuacan during the Coyotlatelco Period. *Mesoamerica after the Decline of Teotihuacan A.D. 700–900*, edited by Richard A. Diehl and Janet C. Berlo, pp. 9–18. Dumbarton Oaks Research Library and Collection, Washington, D.C.

Dumond, Donald and Florencia Müller

1972 Classic to Postclassic in Highland Central Mexico. *Science*, Vol. 175 (4027): 1208–1215.

Faugère, Brigitte, Daniel Pierce and Héctor Cabadas-Báez

2019 Teotihuacan neighborhoods' expansion in Northwestern Mexico. Cultural implications and social processes from ceramic analysis of El Mezquital-Los Azules, Guanajuato. *Journal of Anthropological Archaeology*, Vol. 56:101116.

Feinman, Gary and Linda Nicholas

2020 Teotihuacan and Oaxaca Assessing Prehispanic Relations. *Teotihuacan, the World Beyond the City*, edited by Kenneth Hirth, David Carballo and Bárbara Arroyo, pp. 331–369. Dumbarton Oaks Research Library and Collection, Washington, D.C.

Feinman, Gary, Linda Nicholas and Mark Golitko

2013 Exchange in the Valley of Oaxaca, Mexico: Late Classic Obsidian Procurement. *Mexicon*, Vol. 35 (3): 60–68.

Feinman, Gary M. and Danielle J. Riebe (eds)

2022 *Obsidian across the Americas: Compositional Studies Conducted in the Elemental Analysis Facility at the Field Museum of Natural History*. Archaeopress Pre-Columbian Archaeology No. 17. Archaeopress, Oxford.

Fenoglio Limón, Fiorella

2024 Teotihuacan fuera de Teotihuacan. La porción oriental del Bajío Mexicano durante el Clásico. Doctoral thesis. Escuela Nacional de Antropología e Historia, Mexico City.

Forest, Marion and Andrew Somerville
2023 Un suburbio de Teotihuacan: Nuevas investigaciones en el barrio de Hacienda Metepec. *TRACE*, Núm. 84: 219–241 DOI: 10.22134/trace.84.2023.889

Fournier G., Patricia, Juan Cervantes Rosado and M. James Blackman
2006 Mito y Realidad del Estilo Epiclásico Coyotlatelco. *El fenómeno Coyotlatelco en el centro de México: tiempo, espacio y significado*, edited by Laura Solar Valverde, pp. 55–82. Consejo Nacional para la Cultura y las Artes & Instituto Nacional de Antropología e Historia & Coordinación Nacional de Arqueología, Mexico City.

Gallegos, Judith
2018 Vida cotidiana e identidad de la region de Comalcalco en el contexto mesoamericano. *Nuevo Mundo Mundos Nuevos*. https://doi.org/10.4000/nuevomundo.74356

García Capistrán, Hugo
2006 Búhos, lanzadardos y anteojeras: elementos teotihuacanos en Tikal ¿presencia o influencia? Licentiate thesis. Universidad Nacional Autónoma de México, Mexico City.

García Cook, Ángel and Leonor Merino
1998 Cantona: urbe prehispánica en el altiplano central de México. *Latin American Antiquity*, Vol. 9 (3): 191–216.

García-Des Lauriers, Claudia and Tatsuya Murakami (eds)
2022 *Teotihuacan and Early Classic Mesoamerica Multiscalar Perspectives on Power, Identity, and Interregional Relations*. University Press of Colorado, Boulder.

García Pimentel, Alejandra, Avto Goguitchaichvili, Carlos Torreblanca, Rubén Cejudo, Vadim Kravchinsky, Rafael García, Juan Morales and Miguel Cervantes
2020 The memory of fire in El Coporo (Northern Mesoamerica): Apogee and abandonment. *Journal of Archaeological Science: Reports*, Vol. 30: 102274. https://doi.org/10.1016/j.jasrep.2020.102274.

Gonlin, Nancy and Kristin V. Landau
2021 Maya on the Move: Mobility and Migration in the Classic Maya Kingdom of Copan, Honduras. *Mobility and Migration in Ancient Mesoamerican Cities*, edited by Charlotte Arnauld, Christopher Beekman and Grégory Pereira, pp. 131–147. University Press of Colorado, Louisville.

Healan, Dan
1993 Local versus Non-Local Obsidian Exchange at Tula and Its Implications for Post-Formative Mesoamerica. *World Archaeology*, Vol. 24 (3): 449–466.

Helmke, Christophe and Jesper Nielsen
2011 *The Writing System of Cacaxtla, Tlaxcala, Mexico*. Ancient America, Special Publication No. 2. Boundary End Archaeology Research Center, Barnardsville.
2023 The Writing System of Epiclassic Central Mexico. *Western Mesoamerican Calendars and Writing Systems*, edited by Mikkel Bøg Clemmensen and Christophe Helmke, pp. 49–74. Archaeopress Archaeology, Oxford. DOI: 10.32028/9781803274850.
in press Continuity and Change in Central Mexican Writing Systems: From Classic Teotihuacan to the Epiclassic City-States. *From the Maya Script to the Germanic Runes: Case Studies on the Typology of Scripts and Research on Writing Systems*, edited by Michael Schulte, Gaby Waxenberger, Kerstin Kazzazi and Paola Cotticelli. LautSchriftSprache | ScriptandSound, Volume 5, Reichert Verlag, Wiesbaden.

Helmke, Christophe and Juliette Testard
2025 Los textos jeroglíficos mayas en el Altiplano central mexicano. Autoría y audiencia. *Journal de la Société des Américanistes*, Vol. 111 (1): 15-62, https://doi.org/10.4000/14y9z

Hirth, Kenneth
2000 *Ancient Urbanism at Xochicalco. The Evolution and Organization of a Pre-Hispanic Society.* University of Utah Press, Salt Lake City.
2008 The Economy of Supply: Modeling Obsidian Procurement and Craft Provisioning at a Central Mexican Urban Center. *Latin American Antiquity*, Vol. 19 (4): 435–457.

Hirth, Kenneth G., David Carballo and Bárbara Arroyo (eds)
2020 *Teotihuacan, the World Beyond the City*. Dumbarton Oaks, Washington D.C.

Houston, Stephen, Edwin Román Ramírez, Thomas G. Garrison, David Stuart, Héctor Escobedo Ayala and Pamela Rosales.
2021 A Teotihuacan complex at the Classic Maya city of Tikal, Guatemala. *Antiquity*, Vol. 95 (384): e32. https://doi.org/10.15184/aqy.2021.140.

Inomata, Takeshi
2004 The Spatial Mobility of Non-Elite Populations in Classic Maya Society and Its Political Implications. *Ancient Maya Commoners*, edited by Jon C. Lohse and Fred Valdez Jr., pp. 175–196. University of Texas Press, Austin.

Jimenez Betts, Peter
2007 Alcances de la interacción entre el occidente y el noroeste de Mesoamérica en el Epiclásico. *Dinámicas culturales entre el Occidente, el Centro-Norte y la Cuenca de México, del Preclásico al Epiclásico*, coordinated by Brigitte Faugère, pp. 157–163. El Colegio de Michoacán & CEMCA, Zamora.
2020 *The Mesoamerican World System 200-1200 CE: A Comparative Approach Analysis of West Mexico*. Cambridge University Press, Cambridge.

Jiménez Moreno, Wigberto
1959 Síntesis de la Historia Pretolteca de Mesoamérica. *Esplendor del México Antiguo Vol. 2*, coordinated by Carmen Cook and Raúl Noriega, pp. 1019–1108.

Centro de Investigaciones Antropológicas de México, Editorial del Valle de México, Mexico City.

Kabata, Shigeru

2011 Estrategias de abastecimiento de obsidiana en el valle de Toluca durante el Clasico Tardío y el Epiclásico. *Bulletin of the Graduate School of International Cultural Studies Aichi Prefectural University*, (12):195–215.

Kaufman, Terrence

2020 (2013) Olmecs, Teotihuacaners, and Toltecs: Language History and Language Contact in Meso-America. Unpublished manuscript: https://www.researchgate.net/profile/Terrence-Kaufman/publication/340721651_MALP_2020/links/5e9a4336299bf13079a24ec9/MALP-2020.pdf

Knight, Charles

2020 Cálculo del volumen de extracción de obsidiana del yacimiento de pozo en el área de la fuente de Zaragoza-Oyameles, Puebla, México. *Arqueología*, Vol. 61: 60–69.

Le Goff, Jacques

2014 *Faut-il vraiment découper l'histoire en tranches?* Éditions du Seuil, Paris.

López Pérez, Claudia María and Claudia Nicolás Careta

2023 La cerámica epiclásica de los túneles. *El inframundo de Teotihuacan. Ocupaciones posteotihuacanas en los túneles al este de la Pirámide del Sol*, edited by Linda Manzanilla, pp. 1023–1240. Instituto de Investigaciones Antropológicas, Dirección General de Asuntos del Personal Académico, Universidad Nacional Autónoma de México, Mexico City.

Manzanilla, Linda R. (ed)

2023 *El inframundo de Teotihuacan. Ocupaciones posteotihuacanas en los túneles al este de la Pirámide del Sol*. Instituto de Investigaciones Antropológicas, Dirección General de Asuntos del Personal Académico, Universidad Nacional Autónoma de México, Mexico City.

Manzanilla, Linda, Claudia López and AnnCorinne Freter

1996 Dating results from excavations in quarry tunnels behind the pyramid of the Sun at Teotihuacan. *Ancient Mesoamerica*, Vol. 7 (2): 245–266.

Mastache, A. Guadalupe, Robert Cobean and Dan Healan

2002 *Ancient Tollan: Tula and the Toltec Heartland*. University Press of Colorado, Boulder.

Moragas Segura, Natalia

2013 Sociedades en colapso: la transición del clásico al epiclásico en Teotihuacán. *Diálogo Andino*, Núm. 41: 185–197.

Nandrin, Jean-Pierre

2016 La périodisation en question(s). Edied by Eric Bousmar. *Hommes et norms. Enjeuxet débats du métier d'un historien*, pp. 539–564. Presses de l'Université Saint-Louis, Brussels.

Nichols, Deborah

2016 Teotihuacan. *Journal of Archaeological Research*, Vol. 24 (1): 1–74.

Nielsen, Jesper and Christophe Helmke

2015 Bellicose Relations between Cacaxtla and Xochicalo in the Epiclassic Period. Paper presented at *Reconsidering the Mesoamerican Epiclassic Period, Part 2: Interregional Interactions*, 80th Annual Meeting of the Society for American Archaeology, San Francisco, April 16th.

Nielsen, Jesper, Christophe Helmke and Fiorella Fenoglio

2023 A Dark Horse of the Early Postclassic: Observations on the Iconography and Epigraphy of El Cerrito, Queretaro. *When East Meets West. Chichen Itza, Tula, and the postclassic Mesoamerican world, Volume I,* BAR S3134, edited by Travis W. Stanton, Karl A. Taube, Jeremy D. Coltman and Nelda I. Marengo, pp. 479–488. BAR Publishing, Oxford.

Nielsen, Jesper, Elizabeth Jiménez García and Ángel Iván Rivera Guzmán

2019 Across the Hills, toward the Ocean Teotihuacan-Style Monuments in Guerrero, Mexico. *Interregional Interaction in Ancient Mesoamerica*, edited by Joshua Englehardt and Michael Carrasco, pp. 176–209. University Press of Colorado, Louisville.

Nieto Hernández, Rubén, Jean-François Cuenot, Claudia I. Alvarado León and Juliette Testard

forthcoming Comunicación interregional entre Xochicalco y Teotenango: aportaciones desde la arqueología y el SIG. *Xochicalco y Teotenango (650-1150 d.C.): dos ciudades sobre cerros. Estudio comparativo*, coordinated by Geneviève Lucet and Claudia I. Alvarado León. Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México, Mexico City.

Parsons, Jeffrey R.

1987 El área central de Teotihuacan. *El auge y la caída del Clásico en el México central*, edited by Joseph B. Mountjoy and Donald L. Brockington, pp. 37–75. Instituto de Investigaciones Antropológicas, Universidad Nacional Autónoma de México, Mexico City.

2006 A Regional Perspective on Coyotlatelco in the Basin of Mexico: Some New Thoughts about Old Data. *El fenómeno coyotlatelco en el centro de México: tiempo, espacio y significado*, edited by Laura Solar Valverde, pp. 83–96. Consejo Nacional para la Cultura y las Artes & Instituto Nacional de Antropología e Historia & Coordinación Nacional de Arqueología, Mexico City.

Parsons, Jeffrey and Yoko Sugiura

2012 Teotihuacan and the Epiclassic in Central Mexico. *The Oxford Handbook of Mesoamerican Archaeology*, edited by Deborah L. Nichols and Christopher A. Pool, pp. 309–323. Oxford University Press, New York.

Parsons, Jeffrey, Elizabeth Brumfiel, Mary Parsons and David Wilson
1982 *Prehispanic Settlement Patterns in the Southern Valley of Mexico: The Chalco-Xochimilco Region*. Museum of Anthropology, University of Michigan, Ann Arbor.

Pastrana, Alejandro and Silvia Domínguez
2009 Cambios en la estrategia de explotación de la obsidiana de Pachuca: Teotihuacan, Tula y la Triple Alianza. *Ancient Mesoamerica*, Vol. 20 (1): 129–148.

Pereira, Grégory, Gérald Migeon and Dominique Michelet
2005 Transformaciones demográficas y culturales en el centro-norte de México en vísperas del Posclásico: Los sitios del Cerro Barajas (suroeste de Guanajuato). *Reacomodos demográficos del Clásico al Posclásico en el centro de México*, edited by Linda Manzanilla, pp. 123–136. Instituto de Investigaciones Antropológicas, Universidad Nacional Autónoma de México, Mexico City.

Pérez Negrete, Miguel
2003 El Templo del Fuego Nuevo en el Huixachtécatl (Cerro de la Estrella). *Foundation for the Advancement of Mesoamerican Studies, Inc.*: www.famsi.org/reports/01082es/

Pfannkuch, Tilman, Soledad García and Alejandro Tovalín
1993 La cerámica arqueológica de Tlalpizáhuac. *Expresión Antropológica*, Núms. 11–12: 43–73.

Prem, Hanns J.
1999 Los reyes de Tollan y Colhuacan. *Estudios de Cultura Náhuatl*, Vol. 30: 23–70.

Rattray, Evelyn
1966 An Archaeological and Stylistic Study of Coyotlatelco Pottery. *Mesoamerican Notes*, Vol. (7-8): 87-211.
1980 *Informe al INAH de las excavaciones en la Hacienda Metepec, Teotihuacan, Estado de México. México.* Unpublished Report. Archivo de la Coordinación Nacional de Arqueología del Instituto Nacional de Antropología e Historia, Mexico City.
1996 A regional Perspective on the Epiclassic Period in Central Mexico. *Arqueología Mesoamericana: Homenaje a William T. Sanders I*, coordinated by Alba G. Mastache, Jeffrey R. Parsons, Robert S. Santley and Mari C. Serra Puche, pp. 213–232. Instituto Nacional de Antropología e Historia & Arqueología Mexicana, Mexico City.
2001 *Teotihuacan: cerámica, cronología y tendencias culturales*. Instituto Nacional de Antropología e Historia & University of Pittsburgh, Mexico City.
2006 El epiclásico de Teotihuacan y Azcapotzalco. *El fenómeno coyotlatelco en el centro de México: tiempo, espacio y significado*, edited by Laura Solar Valverde, pp. 201–214. Consejo Nacional para la Cultura y las Artes & Instituto Nacional de Antropología e Historia & Coordinación Nacional de Arqueología, Mexico City.

Sánchez, Jesús E.
2013 *Para comprender el Epiclásico en el centro de México. Problemas y propuestas teórico-metodológicos*. Instituto Nacional de Antropología e Historia, Mexico City.

Sanders, William T.
2006 Late Xolalpan-Metepec/Oxtotipac-Coyotlatelco; Ethnic Succession or Changing Patterns of Political Economy: A Reevaluation. *El fenómeno coyotlatelco en el centro de México: tiempo, espacio y significado*, edited by Laura Solar Valverde, pp. 183–200. Consejo Nacional para la Cultura y las Artes & Instituto Nacional de Antropología e Historia & Coordinación Nacional de Arqueología, Mexico City.

Sanders, William, Jeffrey Parsons and Robert Santley
1979 *The Basin of Mexico. Ecological Processes in the Evolution of a Civilization*. Academic Press, New York.

Serra Puche, Mari Carmen and Jesús Carlos Lazcano Arce
2008 Configuración Urbana en Cacaxtla-Xochitecatl. *El urbanismo en Mesoamérica Vol. II*, edited by Alba G Mastache, Robert Cobean, Ángel G Cook and Kenneth Hirth, pp. 133–163. Instituto Nacional de Antropología e Historia & Pennsylvania State University, Mexico City.
2011 *Vida Cotidiana Xochitécatl-Cacaxtla*. Instituto de Investigaciones Antropológicas, Universidad Nacional Autónoma de México, Mexico City.

Solar Valverde, Laura
2006 Apuntes para una Reflexión Integral del Fenómeno Coyotlatlelco. *El fenómeno Coyotlatelco en el centro de México: tiempo, espacio y significado*, edited by Laura Solar Valverde, pp. 393–430. Consejo Nacional para la Cultura y las Artes & Instituto Nacional de Antropología e Historia & Coordinación Nacional de Arqueología, Mexico City.
2023 The Epiclassic and Early Postclassic Mesoamerican Weave: Multiregional Warp, Ideological Weft. *When East Meets West. Chichen ltza, Tula, and the postclassic Mesoamerican world, Volume II*, BAR S3134, edited by Travis W. Stanton, Karl A. Taube, Jeremy D. Coltman and Nelda I. Marengo, pp. 793–826. BAR Publishing, Oxford.

Staines Cicero, Leticia and Christophe Helmke
2017 *Las Pinturas Realistas de Tetitla, Teotihuacan. Estudios a través de la obra de Agustín Villagra Caleti*. Secretaría de Cultura, Instituto Nacional de Antropología e Historia & Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México, Mexico City.

Stuart, George
1992 Mural Masterpieces of Ancient Cacaxtla. *National Geographic*, Vol. 182 (3): 120–136.

Sugiura, Yoko
1990 El Clásico y el Valle de Toluca. Estudio de Patrón de Asentamiento. Doctoral thesis. Universidad Nacional Autónoma de México, Mexico City.

2001 La zona del Altiplano central en el Epiclásico. *Historia Antigua de México. El horizonte Clásico, Vol. II*, edited by Linda Manzanilla and Leonardo López, pp. 347–390. Porrúa, Mexico City.

2002 Después de Teotihuacan: Epiclásico del valle de Toluca; caos y orden, dos caras de una moneda. *Arqueología mexicana, historia y esencia, siglo XX. En reconocimiento al doctor Román Piña Chán*, edited by Jesús Nava, pp. 209–222. Instituto Nacional de Antropología e Historia, Mexico City.

Sugiura, Yoko, Elizabeth Cepeda, Carmen Pérez and Shigeru Kabata

2010 El desarrollo de un asentamiento lacustre en la Cuenca Alta del Río Lerma: el caso de Santa Cruz Atizapán, México Central. *Arqueología Iberoamericana*, Núm. 5: 5–22.

Sugiyama, Nawa, William L. Fash, Barbara W. Fash and Saburo Sugiyama

2020 The Maya at Teotihuacan? New Insights into Teotihuacan-Maya Interactions from the Plaza of the Columns Complex. *Teotihuacan: The World Beyond the City*, edited by Kenneth G. Hirth, David M. Carballo and Barbara Arroyo, pp. 139–172. Dumbarton Oaks Research Library and Collection, Washington, D.C.

Sugiyama, Nawa, Saburo Sugiyama, Clarissa Cagnato, Christine A. M. France, Atsushi Iriki, Karissa S. Hughes, Robin R. Singleton, Erin Thornton and Courtney A. Hofman

2022 Earliest evidence of primate captivity and translocation supports gift diplomacy between Teotihuacan and the Maya. *Proceedings of the National Academy of Sciences*, 119 (47): e2212431119.

Sugiyama, Saburo

2005 *Human Sacrifice, Militarism, and Rulership: Materialization of State Ideology at the Feathered Serpent Pyramid, Teotihuacan*. Cambridge University Press, Cambridge.

Sugiyama, Saburo and Leonardo López Luján

2006 Simbolismo y función de los entierros dedicatorios de La Pirámide de La Luna en Teotihuacán. *Arqueología e Historia del Centro de México, Homenaje a Eduardo Matos Moctezuma*, edited by Leonardo López Luján, Davíd Carrasco and Lourdes Cué, pp. 131–152. Instituto Nacional de Antropología e Historia, Mexico City.

Testard, Juliette

2018 Intercambiar en Mesoamérica durante el Epiclásico (600 a 900 d.C.): poder, prestigio y alteridad. Un análisis de la cultura material de Puebla-Tlaxcala y Morelos (México). *Journal de la société des américanistes*, Vol. 104 (2): 153–201.

2023 *La fábrica del prestigio en Mesoamérica. Interacciones y Alteridad en el Altiplano Central durante el período Epiclásico (600–900 d.C.)*. Paris Monographs in American Archaeology 60. Archaeopress Access Archaeology, Oxford. DOI: 10.32028/9781803275574

Turner, Andrew and Cynthia Kristan-Graham

2023 Tula and the Origins and Characteristics of an Epiclassic-Early Postclassic Art Tradition. *When East Meets West. Chichen ltza, Tula, and the postclassic Mesoamerican world, Volume I,* BAR S3134, edited by Travis W. Stanton, Karl A. Taube, Jeremy D. Coltman and Nelda I. Marengo, pp. 427–478. BAR Publishing, Oxford.

Volta, Beniamino and Geoffrey E. Braswell

2014 Alternative Narratives and Missing Data. Refining the chronology of Chichen Itza. *The Maya and their Central American Neighbors*, edited by Geoffrey E. Braswell, pp. 356–402. Routledge, London.

# Resúmenes

## Capítulo 1: Dilucidando el Epiclásico

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En principio, el concepto del Epiclásico buscó incorporar en un solo periodo todas aquellas transformaciones políticas, sociales y económicas que sufrieron las distintas sociedades mesoamericanas tras la descentralización del estado teotihuacano y que condujeron a la configuración de los estados posclásicos. Esta condición ha llevado a que, en muchos ocasiones, se le relegue a una mera etapa transitoria entre la caída de Teotihuacan y el surgimiento de Tula Grande.

Si bien es cierto que el Epiclásico se caracteriza por cambios significativos como migraciones, la aparición de nuevos centros y la reconfiguración de redes comerciales, entre otros, reducirlo a una mera transición minimiza la importancia, profundidad y complejidad de los procesos sociales sucedidos en el periodo. El análisis cerámico y lítico, los datos bioarqueológicos, así como los estudios iconográficos y epigráficos demuestran que, el Epiclásico fue mucho más que un momento de cambio: fue un periodo con sus propias dinámicas, procesos de desarrollo e innovaciones que sentaron las bases para las sociedades del Posclásico.

Para comprenderlo en toda su complejidad, es crucial refinar la cronología, estableciendo marcos precisos que permitan trazar con mayor claridad la evolución de las sociedades epiclásicas. En este texto, se presenta una propuesta de dividir el Epiclásico en tres fases: temprana, media y tardía. El objetivo es abrir la discusión y formar un marco temporal que permita entender con más detalle los procesos sociales que sucedieron desde la formación de nuevas ciudades-estado, su consolidación y su caída.

## Capítulo 2: Cerrando un ciclo: repensando el Epiclásico de Teotihuacan

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El estudio del Epiclásico en Teotihuacan requiere una comprensión profunda del desarrollo del conocimiento arqueológico y del contexto histórico en el que se insertan las investigaciones. A lo largo del siglo XX, la percepción de este periodo estuvo marcada por la necesidad de validar las teorías sobre el colapso de la ciudad, reduciendo el Epiclásico a la mera presencia de la cerámica Coyotlatelco y a un periodo de discontinuidad cultural.

Sin embargo, la evidencia arqueológica actual, enriquecida por nuevas técnicas analíticas y perspectivas teóricas, permite re-evaluar el Epiclásico como una etapa dinámica de reorganización y adaptación. La coexistencia de poblaciones teotihuacanas y grupos "coyotlatelcos" en un espacio urbano en transformación plantea interrogantes sobre las interacciones sociales, las estrategias de subsistencia y la reconfiguración del paisaje cultural.

El análisis de la evidencia material, como la cerámica, la pintura mural y las estructuras arquitectónicas, en conjunto con la reinterpretación de datos históricos, abre nuevas vías de investigación sobre la complejidad social, la resiliencia y la reconstrucción de identidades en un contexto de cambio. El Epiclásico en Teotihuacan, lejos de ser un periodo residual, se revela como una etapa crucial para comprender las transformaciones que dieron forma al Altiplano Central durante la transición hacia el Posclásico.

## Capítulo 3: Diversas aproximaciones al mundo post-teotihuacano: el Epiclásico en el Valle de Toluca y el Altiplano Central de México

***Yoko Sugiura***

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*El Colegio Mexiquense A.C.*

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El Epiclásico en el centro de México se caracteriza, más que por una ruptura abrupta con el periodo Clásico, por una serie de complejas transformaciones. Este periodo presenció la desintegración del dominio político de Teotihuacan y el surgimiento de nuevos poderes regionales, reflejado en cambios en los patrones de asentamiento y estilos cerámicos, particularmente en la amplia difusión de la cerámica Coyotlatelco. Mientras algunas regiones experimentaron discontinuidad y una disminución en su población, otras, como el Valle de Toluca, exhibieron continuidad en los patrones de asentamiento y un aumento en el número de sitios.

La cerámica Coyotlatelco, un rasgo definitorio del Epiclásico, exhibe una notable variabilidad regional, lo que sugiere la existencia de múltiples centros de producción. Si bien esta tradición cerámica se extendió ampliamente por el Altiplano Central, algunas áreas como Xochicalco y el occidente de Morelos, mantuvieron una marcada autonomía cultural desarrollando estilos propios. Por otro lado, el declive de Teotihuacan y su extenso sistema de intercambio propició una reorganización de las interacciones interregionales, manifestada en la contracción de las redes de larga distancia y la intensificación de las relaciones de los centros regionales con los vecinos más próximos, forjando nuevas dinámicas de intercambio y configurando identidades locales distintivas.

Sin embargo, el Epiclásico conservó una continuidad cultural significativa con la tradición teotihuacana, como se observa en los motivos cerámicos, figurillas e iconografía. Esta continuidad finalmente se disipó en el Posclásico al presenciar una ruptura más pronunciada con los cánones teotihuacanos y el surgimiento de nuevos estilos e identidades regionales. En esencia, el Epiclásico representa un periodo dinámico de declive y consolidación entrelazados, donde el legado de Teotihuacan se desvaneció gradualmente, preparando el camino para el diverso panorama político y cultural del Posclásico.

## Capítulo 4: Nuevos enfoques al Epiclásico en la región de Tula, México

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Este capítulo se centra en la región de Tula, específicamente en el Distrito Alfarero del Valle del Mezquital, con el objetivo de reevaluar las hipótesis sobre migraciones del norte o del Bajío durante el Epiclásico (600–850 d.C.). A través de un enfoque basado en la teoría de los Sistemas Mundo y utilizando evidencia empírica como patrones de asentamiento, datación por radiocarbono, análisis de ADN y estudios de la cultura material, se busca comprender las dinámicas poblacionales de la región en tiempos precolombinos.

El estudio se basa en dos casos: en el asentamiento epiclásico de Chapantongo y el del Posclásico temprano de Cerro Magoni. En Chapantongo, los análisis de cerámica, obsidiana, ADN y patrones funerarios sugieren continuidad cultural y poblacional, refutando las teorías migracionistas. Además, se cuestiona la validez de la cronología y demarcación previamente establecidas para la región de Tula, proponiendo una revisión basada en datos arqueológicos más robustos.

Los resultados de la investigación en el Distrito Alfarero del Valle del Mezquital indican que no es posible continuar sosteniendo las hipótesis sobre migraciones para explicar el desarrollo del Epiclásico en la región. En cambio, se propone un modelo basado en la continuidad cultural y en las interacciones entre grupos locales, destacando la importancia de revisar críticamente las fuentes etnohistóricas y arqueológicas para comprender la complejidad de este periodo.

## Capítulo 5: Conflicto y comunidad durante el Epiclásico en la Cuenca de México y el sur del Valle del Mezquital

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El periodo Epiclásico en el centro de México se caracterizó por cambios drásticos en el panorama político. La competencia, el conflicto y el militarismo fueron factores claves en la creación de un paisaje geopolítico descentralizado y fragmentado que influyó en el surgimiento de Tula.

El modelo más utilizado para explicar la elección de terrenos elevados (mesas, cerros, etc.) en la región norte de la Cuenca de México y la zona sur del Valle de Mezquital refiere a un conflicto regional entre los asentamientos relacionados con Teotihuacan y posibles migrantes que tuvieron que establecerse en posiciones defendibles.

Sin embargo, revisiones de la cronología de la región de Tula evidencian una ocupación durante el periodo Clásico en Tula Chico y un desarrollo similar en sitios sobre cerros, lo que lleva a reconsiderar la posibilidad de un conflicto persistente entre los asentamientos teotihuacanos y los recién establecidos. Además, estudios más recientes indican una contemporaneidad entre las construcciones monumentales de Tula Chico y la de los sitios elevados, apuntando a un cambio extenso en la constelación de la autoridad regional después del declive de la influencia de Teotihuacan. Este capítulo revisa los nuevos estudios en relación con investigaciones previas para explicar la configuración político del área. Se examinan dos posibilidades: un conflicto persistente entre centros independientes o una confederación de entidades políticas con Tula Chico como el centro de autoridad. Ambas posibilidades podrían haber contribuido a la centralización del poder en Tula Grande al final del Epiclásico.

## Capítulo 6: El Epiclásico en la región del Río San Juan, Querétaro, México. Un caleidoscopio de posibilidades

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El periodo Epiclásico (540–900 d.C.) en la cuenca del Pánuco-Moctezuma, específicamente en la subcuenca del río San Juan en Querétaro, se caracteriza por una transformación en los patrones de asentamiento con un aumento en el número de sitios y una tendencia a ubicarse en mesetas y cimas de cerros. Esta reorganización del paisaje se atribuye a la inestabilidad y el conflicto generados tras el colapso de Teotihuacan.

El análisis de cinco sitios arqueológicos revela diferencias y similitudes en patrones de asentamiento, arquitectura, cerámica y presencia de petroglifos. A pesar de las variaciones, se observa una tendencia a la construcción de complejos ceremoniales con patios, plataformas y estructuras en forma de L, así como la presencia de cerámica rojo sobre bayo y otros tipos característicos de la región.

A partir de los resultados de los análisis se propone la existencia de tres fases en el Epiclásico de Querétaro: una fase inicial de respuesta a la crisis con movimientos poblacionales y construcción de sitios defensivos; una fase de estabilidad con reocupación de valles y laderas; y una fase de colapso con abandono de sitios y presencia de grupos cazadores-recolectores.

El Epiclásico en Querétaro fue un periodo de transformación y adaptación, con un aumento en la densidad poblacional y una reorganización del paisaje. La diversidad en los patrones de asentamiento, arquitectura y cultura material refleja la complejidad de este periodo y la necesidad de un análisis contextualizado para comprender su significado en la historia de Mesoamérica.

## Capítulo 7: El Epiclásico en el centro-sur de Michoacán

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*Instituto Nacional de Antropología e Historia*

Esta investigación analiza la región de Tierra Caliente en Michoacán durante el periodo Epiclásico (500–1000 d.C.), área que caracterizó por una reorganización del paisaje y el surgimiento de ciudades como Tingambato y Mexiquito.

En el Balsas Medio se identifican diversos tipos de sitios arqueológicos, desde restos de casas hasta pirámides truncadas y juegos de pelota. La cerámica se caracteriza por su simplicidad decorativa, mientras que las figurillas Delicias A y las tapaderas Capiral son elementos diagnósticos del periodo, así como el uso de obsidiana procedente de Ucareo-Zinapécuaro y la presencia de esculturas de piedra.

Tingambato, ubicado en la confluencia de tres esferas arqueológicas, alcanzó su mayor desarrollo durante el Epiclásico. Ahí se construyó una gran plataforma que cubrió los edificios anteriores, se crearon patios hundidos y un juego de pelota. En las tumbas 1 y 2 del sitio se hallaron ricas ofrendas que incluyen cerámica, objetos de concha y material lapidario, lo que indica la presencia de una élite social.

El Epiclásico en la Tierra Caliente de Michoacán fue un periodo de consolidación de ciudades y de transformación social. La aparición de espacios palaciegos y tumbas ricas sugiere el surgimiento de una élite y una reorganización del poder. La presencia de juegos de pelota y otros elementos arquitectónicos e iconográficos refleja la interacción entre las diferentes esferas culturales de la región, así como cambios en la organización social y política.

## Capítulo 8: La arquitectura monumental de Rincón de las Flores (Zacapu, Michoacán) en el contexto del Epiclásico del Centro-Occidente y del Centro de México

***Grégory Pereira***

*Archéologie des Amériques*
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Tras la caída de Teotihuacan surgieron numerosas entidades políticas que extendieron su dominio sobre vastas regiones. El poder de los grupos gobernantes se manifestó en programas de construcción monumental, incluyendo palacios, complejos residenciales con acceso restringido que cumplían funciones administrativas, políticas, económicas y ceremoniales. Si bien el concepto de palacio está bien establecido en regiones como el área Maya, Oaxaca y el centro de México, en el occidente de México su presencia antes del surgimiento del estado Tarasco no es tan evidente. Investigaciones recientes en la cuenca de Zacapu revelan la existencia de grandes centros monumentales con patrones arquitectónicos que sugieren la presencia de este tipo de construcciones.

El sitio de Rincón de Las Flores destaca por la presencia de un complejo de patios interconectados, cuya configuración se asemeja a lo que se interpreta como un palacio en otras partes de Mesoamérica. El análisis espacial de este complejo, denominado Las Majadas, sugiere que pudo haber sido un palacio multifuncional, combinando actividades residenciales, ceremoniales, públicas y administrativas. Su tamaño y complejidad lo distinguen de otros complejos residenciales en la región y lo relacionan con la tradición de grandes complejos monumentales del Bajío.

La comparación con ejemplos de arquitectura palaciega en el centro de México, como Cacaxtla, revela similitudes en la organización espacial, lo que plantea interrogantes sobre la existencia de un modelo arquitectónico compartido o de procesos de interacción e influencia entre ambas regiones. Por ello, la presencia de arquitectura palaciega en el occidente de México antes del Posclásico tardío implica un mayor grado de complejidad social y política de lo que se había considerado previamente.

## Capítulo 9: El panorama lingüístico del Epiclásico: ubicando el nahua entre las lenguas del occidente de Mesoamérica

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Para comprender el panorama lingüístico del occidente de Mesoamérica durante el Epiclásico es crucial ubicar el origen del proto-náhuatl. La evidencia lingüística, incluyendo préstamos y patrones dialectales, sugiere que el proto-náhuatl se desarrolló en el centro de Mesoamérica en contacto con otras lenguas. Esta hipótesis contrasta con modelos previos que ubican el origen nahua fuera de Mesoamérica.

Este modelo propone una expansión del náhuatl en tres etapas. Primero, los hablantes pre-nahuas migraron al Valle de México, donde su lengua se mesoamericanizó, dando lugar al proto-náhuatl. Luego, con el declive de Teotihuacan, el proto-náhuatl se dividió en dos ramas, la oriental y la occidental. Finalmente, durante el Posclásico, el nahua occidental se expandió, posiblemente, a través de las redes comerciales.

Esta interpretación coincide con la evidencia arqueológica que indica un aumento en la comunicación y el comercio a larga distancia durante el Epiclásico, por lo que la expansión del náhuatl pudo ser impulsada por su adopción como lengua franca y no solo por conquistas militares. El modelo propuesto tiene implicaciones para comprender la identidad etnolingüística de grupos como los olmeca-xicallanca, quienes podrían haber sido hablantes de nahua oriental.

Es importante obtener mayor evidencia epigráfica, genética y arqueológica para corroborar este modelo, por lo que el análisis de la escritura de Teotihuacan y la investigación de los movimientos de población con estudios genéticos son cruciales.

## Capítulo 10: La identificación de modelos exógenos en la cultura visual del altiplano central: aproximaciones a los procesos de emulación en los sistemas figurativos de Cacaxtla-Xochitécatl y Xochicalco

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El Epiclásico fue una época de intensas interacciones culturales donde la emulación de sistemas figurativos de diferentes áreas culturales generó un sistema ecléctico. En este sentido, la identificación de "modelos" o cánones permite comprender de forma detallada, las modalidades de esas interacciones, la transmisión de objetos y sistemas figurativos, así como las dinámicas de continuidad e innovación entre el Clásico y el Posclásico.

En Mesoamérica, la transmisión de códigos figurativos se realizó, probablemente, a través de objetos portátiles. Vasijas, esculturas y pinturas murales evidencian la emulación de modelos foráneos, revelando la circulación de ideas y la adaptación creativa a contextos locales. El análisis de artefactos procedentes de Cacaxtla-Xochitécatl y Xochicalco muestra el préstamo de modelos mayas, del Golfo y de Oaxaca evidenciando, en algunos casos, la presencia de artesanos foráneos o con formación exógena en la producción local de objetos con características ajenas. Además de la emulación sincrónica, se observa la reinterpretación diacrónica de modelos antiguos, como lo demuestran los "revivals" neo-xochicalcas en el Posclásico y los clásicos en el Epiclásico.

La identificación de los códigos y criterios de selectividad en la emulación de modelos es fundamental para comprender la hibridación cultural. El fenómeno de "modelos apilados" ilustra la complejidad de las redes de interacción y la creatividad en la producción de nuevos significados locales que sieven para sostener nuevas retóricas en torno al sistema político-ritual.

Este estudio tiene como objetivo presentar pautas para la identificación de los referentes y de los procesos de emulación latentes en la cultura visual del Epiclásico, revelando la capacidad creativa y de innovación de las sociedades mesoamericanas para definirse y legitimarse en el espacio y el tiempo.

## Capítulo 11: Desde el oriente: reflexiones sobre la naturaleza, el origen y la cronología de los rasgos mayas en los sitios epiclásicos del centro de México

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***Claudia I. Alvarado León***

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A diferencia de la visión tradicional que atribuye los rasgos mayas en Xochicalco al "eclecticismo", se argumenta que la evidencia material, iconográfica y arquitectónica apuntan a una emulación deliberada de la cultura maya por parte de las élites de Xochicalco.

El debate sobre la influencia maya en Xochicalco se remonta al siglo XIX, con autores como Nebel y Seler sosteniendo posturas opuestas. Actualmente, la mayoría de los investigadores reconocen la presencia de elementos mayas, pero la naturaleza e intensidad de esta influencia siguen siendo objeto de discusión. Este estudio analiza la evidencia arquitectónica, iconográfica y material para comprender la dinámica cultural del Epiclásico. Se observa la presencia de elementos arquitectónicos mayas, como los juegos de pelota con anillos y la estructura palaciega, que reflejan la adopción de cánones estéticos y formas de organización social.

Por otro lado, la iconografía de Xochicalco también muestra una fuerte influencia maya con la presencia de motivos como esteras, quetzales y deidades mayas, lo que sugiere una apropiación de símbolos de poder y creencias religiosas. El descubrimiento de murales polícromos en Xochicalco, análogos a los de Cacaxtla, refuerza la idea de una amplia influencia maya en la región.

La evidencia sugiere que las élites de Xochicalco emularon la cultura maya para legitimar su autoridad en un contexto de cambio social. Este proceso de apropiación y adaptación de modelos foráneos ilustra la dinámica cultural del Epiclásico mesoamericano.

# Author Biographies

Claudia I. Alvarado León obtained her Doctorate degree in Mesoamerican Studies from Universidad Nacional Autónoma de México. Her research has focused on processes of socio-political development and their impact on the organisation of the built environment at the site of Xochicalco, Morelos. She was a post-doctoral fellow at the Centro INAH-Morelos (2021) and at the University of Copenhagen in the project "The origin and development of the Central Mexican writing systems and calendars (ca. 200-1600 CE)" (2023–2024). She is currently teaching undergraduate courses at the Escuela Nacional de Antropología e Historia and is a Professor at El Colegio de Morelos, Cuernavaca, Morelos, Mexico. She is member of the National System of Researchers Level I. Her interests are focused on the sociopolitical organization and interactions of Epiclassic societies, as well as the dissemination of central Mexican Precolumbian history.

Fiorella Fenoglio Limón obtained her Master and Doctorate degrees in archaeology from Escuela Nacional de Antropología e Historia. She has participated in a number of archaeological projects in the State of Mexico, Zacatecas, Baja California and, primarily, in the state of Queretaro. She is currently the director of the Project Strategies for the Protection of the Archaeological Heritage in the state of Queretaro and she also serves as the co-director of the Archaeological Project El Rosario. Since 2005, she has been a researcher at the Instituto Nacional de Antropología e Historia and has presented numerous scientific papers and conferences in Mexico and abroad. Her research interests include archaeology, rock art in Baja California, heritage protection, analytical methodologies, and social movements. She has published four scientific books and several dissemination books. Her research focuses on the Classic and the presence of Teotihuacan in Queretaro, the Epiclassic in the Bajío, and the protection and dissemination of cultural heritage.

Patricia Fournier G. She holds a Doctorate degree in Anthropology from the Universidad Nacional Autónoma de México, an MA in Anthropology from the University of Arizona, and a Licentiate in Archaeology from the Escuela Nacional de Antropología e Historia. She is a two-time winner of the Alfonso Caso Prize of the Instituto Nacional de Antropología e Historia. She is a full professor of archaeology at the Escuela Nacional de Antropología e Historia in Mexico City. She has supervised more than 40 theses at all levels and has lectured in Latin America, the United States, Europe and China. She specialises in the study of ceramics and traditional beverages in historical archaeology, ethnoarchaeology and archaeometry. Her research has covered the Maya region, the historic centre of Mexico City, Arizona, Puebla, Zacatecas and Durango, among others.

Christophe Helmke has a PhD in Archaeology from the Institute of Archaeology of University College London in England. He is Associate Professor of American Indian Languages and Cultures at the Institute of Cross-cultural and Regional Studies, University of Copenhagen, Denmark. He has been actively involved in archaeological and epigraphic fieldwork since 1996, conducting work at a series of sites in Belize, Guatemala and Mexico. He has been investigating Epiclassic writing and iconography since 2007 and dedicated his post-doctorate (2009–2013) to documenting Mesoamerican scribal practices and the writing system of Cacaxtla, resulting in a co-authored monograph on the subject (2011). Since 2010 he has served as epigrapher for the proyecto *La pintura mural prehispánica en México*, of the Instituto de Investigaciones Estéticas of the Universidad Nacional Autónoma de México. With his co-authors, he has published syntheses of the writing system of Teotihuacan (2021 and 2024) and of Epiclassic central Mexico (2023).

Natalia Moragas Segura Lecturer in the History and Archaeology Department, specialising in American History. Member of the Institute of Archaeology and the Archaeological and Archaeometric Research Team of the University of Barcelona. Her main area of research is the archaeology of Teotihuacan, where she has participated in and directed several research projects since 1992. Her field of interest has led her to study the later stages of Teotihuacan culture, especially the transition processes from Classic to Epiclassic. She is currently interested in the later phases of Teotihuacan and the written sources of the colonial period as a tool for understanding the processes of abandonment and ruralisation. She is also a visiting researcher on the ABERIGUA project, directed by Sandra Montón of the Universitat Pompeu Fabra, which studies the impact of Spanish colonialism in the Mariana Islands.

Christopher Morehart received his PhD in Anthropology from Northwestern University, Evanston, Illinois, USA. He is currently Associate Professor of Anthropology and Archaeology in the School of Human Evolution and Social Change, Arizona State University, Tempe, Arizona, USA. He is also Director of ASU's Teotihuacan Research Facility in San Juan Teotihuacan, Mexico. Morehart studies the historical political ecology and ethnobotany of the Basin of Mexico and Central Mexico.

Jesper Nielsen is Associate Professor at the University of Copenhagen and from 2020, serves as Head of Studies at the Department of Cross-Cultural and Regional Studies. He received his MA (1998) and PhD (2003) from the Department of American Indian Languages and Cultures from the University of Copenhagen. His research can be characterised as cross-disciplinary and focuses on Mesoamerican iconography, epigraphy, history and religion, in particular focused on Maya, Teotihuacan and Epiclassic cultures. He also has a strong interest in early Colonial studies in central Mexico and the Maya region, as well as research history in the field of Mesoamericanist studies. He has published numerous books, chapters and articles in international peer-reviewed journals (including *Ancient Mesoamerica*, *Antiquity*, *Latin American Antiquity*, *Mexicon*, *The PARI Journal* and *Ancient America*) and edited volumes. Recent book publications include *The Restless Blood: A Biography on Frans Blom*. Precolumbia Mesoweb Press/Middle American Research Institute, San Francisco and New Orleans (2017, with Tore Leifer and Toke Sellner Reunert), "The Early Classic Murals of El Rosario, Queretaro, Mexico: Description and Iconographic Analysis", Ancient America Vol. 14 (2019, with Christophe Helmke, Fiorella Fenoglio and Juan Carlos Saint-Charles Zetina) and *El franciscano danés que se convirtió en santo indígena: El legado de Fray Jacobo Daciano* (2021, co-edited with Lorena Ojeda Dávila).
Jesper has presented academic papers in more than 15 countries, and in 2014, Jesper received the Einar Hansen Research Foundations Prize for excellence in humanistic research. Since 2015, he has been a member of the editorial committee of the journal *Arqueología Mexicana*.

Rubén Nieto Hernández is a full-time research professor in the Archaeology Department of the Centro Universitario UAEM Tenancingo, of which he was the founder and first coordinator in 2003. He is an archaeologist from the Escuela Nacional de Antropología e Historia. He holds a Master's degree in Social Anthropology from the Faculty of Anthropology of the Universidad Autónoma del Estado de México and a Doctorate in Mesoamerican Studies from the Faculty of Philosophy and Letters of the Universidad Nacional Autónoma de México. Since 1980 he has worked in research and heritage management at the Instituto de Investigaciones Antropológicas of the UNAM, the Centro INAH Estado de México, the Instituto Mexiquense de Cultura and the Centro Universitario Tenancingo of the UAEM. His main areas of interest and research are regional archaeology (the Alto Lerma basin, the Malinalco valley, the south, north and east of the State of Mexico and the Sierra de las Cruces), museums, cultural heritage and social power studies. He is a member of the National System of Researchers Level 1. He has participated in the research and assembly of the Museum of Lake Cultures of the Alto Lerma 'Dra Yoko Sugiura Yamamoto'. He is currently the Research Coordinator of the University Centre and has been the chronicler of this academic space since 2004.

Grégory Pereira is a research director at the French National Centre for Scientific Research (CNRS) in the Archaeology of the Americas Laboratory (UMR 8096, CNRS-Université Paris 1). He obtained his PhD in Archaeology from the University of Paris 1 in 1997 and since then has been conducting research on the settlement of the highlands of Michoacan and the Bajío Guanajuato. He is currently coordinating the Uacusecha archaeological project in the Zacapu region of Michoacán. He has also worked on several projects in the Maya area (Balamku, Río Bec), Central Mexico (Teotihuacan and Templo Mayor) and the Huasteca (Vista Hermosa) as a specialist in the study of mortuary contexts.

Magnus Pharao Hansen is a linguistic anthropologist studying the social, historical, and geographical variation of Nahuatl, as well as its cultural contexts and political implications. He is the author of *Nahuatl Nations: Language Revitalization and Semiotic Sovereignty in Indigenous Mexico* (Oxford University Press, 2024), and numerous articles on Nahuan language history and politics. Currently, as director of the ERC-funded SUAHIST project, he works on documenting several Uto-Aztecan languages and reconstructing the linguistic history and oral traditions of the peoples speaking Southern Uto-Aztecan languages.

José Luis Punzo Díaz Doctorate in Archaeology from the Escuela Nacional de Antropología e Historia, Mexico City. Member of the National Research System Level 2. Researcher in Archaeology at the National Institute of Anthropology and History since 2004. In the last three decades he has carried out several archaeological projects in Durango, Chihuahua and Michoacan

México. He has been in charge of the museum in Paquime, Chihuahua, archaeological zones such as the Ferrería in Durango, Tzintzuntzan and Tingambato in Michoacan. His main lines of research are the relations between the American Southwest and Mesoamerica, archaeometallurgy and the archaeology of western Mexico. Also the use of drones, GIS, LiDAR and digital applications for archaeology. He is based in Morelia, Michoacan.

Fermín Sánchez-Aldana Libano is doctoral candidate in Archaeology at the Escuela Nacional de Antropología e Historia. He has collaborated in archaeological projects in: Morelos, Colima, Tlaxcala, Oaxaca, Tula, Hidalgo, Chiapas and Mexico City. Specialist in archaeometry, western cultures, osteological analysis and migration studies.

Yoko Sugiura Doctorate in Anthropology from the Universidad Nacional Autónoma de México Emeritus Member of the National System of Researchers. Full-time researcher at the Instituto de Investigaciones Antropológicas of the UNAM until 2017. Recognitions and awards include: 2021 State Prize for Science and Technology in the Social Sciences and Humanities, awarded by the Consejo Mexiquense de Ciencia y Tecnología, Government of the State of Mexico; 2023 Recognition of the Chancellor of Japan. She participated in the projects of Tlapacoya (State of Mexico), Querendaro (Michoacan), Caballo Pintado (Puebla), Chichen Itza (Yucatan), Cuicuilco (Mexico City), Edzna (Campeche), Terremote-Tlaltenco (Mexico City), among others. In 1977 she started the Toluca Valley Archaeological Project, which includes prospective archaeology, ethnoarchaeology of traditional knowledge and techniques in the Alto Lerma, and the conservation and management of Mexico's cultural heritage. She has supervised more than 50 bachelor's, master's and doctoral theses at the Escuela Nacional de Antropología e Historia, Universidad Autónoma del Estado de México and Universidad Nacional Autónoma de México. She has more than 100 publications in books, articles, chapters and editions of academic and popular books.

Juliette Testard holds a PhD in Archaeology from the University of Paris 1 Panthéon-Sorbonne (Prize of the Musée du Quai Branly-Jacques Chirac, 2015) and is a research engineer at the CNRS in the Archaeology of the Americas laboratory (CNRS-University of Paris 1). She studies the figurative representations of the Mesoamerican Central Highlands during the Epiclassic period in order to understand how these societies constructed their ideological and political universe and, in particular, their otherness. She is currently conducting the "Circul-Art" project on circulation, emulation and prestige processes on Epiclassic visual and material cultures of Central Mexico. She has published on iconography (Testard 2013, 2014, 2014, 2019; Testard *et al.* 2024), figurative analysis (Testard and Serra Puche 2011, 2020; Forest *et al.* 2019, 2021; Jadot and Testard 2020; Alvarado *et al.* 2023; Testard and Faugère 2023), as well as on interactional processes (Testard 2017, 2018, 2021, 2023). She has been teaching courses and seminars in archaeology and art anthropology since 2011, is involved in the supervision of several master's and doctoral theses and has been in charge of internships since 2019.

This volume examines the Epiclassic period (AD 550/600–900/1000) in Central Mexico, which has long been viewed as a transitional era marked by societal upheaval and the rise of independent city-states. This period has typically been characterised by shifting settlement patterns, the intensification of militarism, and increased contact with foreign regions, such as the Maya. However, recent scholarship has begun to question these assumptions, prompting renewed interest in this key period.

Drawing on a diverse range of archaeological, iconographic and linguistic evidence, the Copenhagen Epiclassic Roundtable aimed to reassess the defining features of this period and evaluate continuities and discontinuities from Classic to Postclassic times. Scholars from diverse disciplines presented evidence from various sites across Central Mexico and adjacent regions to analyse the advent of horizon markers, regional material culture, distinctive artistic styles, the emergence of new political institutions and the complex interplay between conflict and cooperation. They critically address questions regarding militarism, cultural homogeneity and exchange, geopolitical dynamics, trade networks and identity formation processes.

The twelve chapters of the volume investigate general issues, site-specific archaeology and thematic contributions as they explore the legacies of Teotihuacan and the impact of Epiclassic developments on the rise of the ensuing high cultures of Central Mexico. By emphasizing the heterogeneity of the Epiclassic landscape, this volume offers a more holistic and nuanced understanding of the complexities and enduring significance of this pivotal period of Mesoamerican history.

*Claudia I. Alvarado León* obtained her PhD in Mesoamerican Studies from the Universidad Nacional Autónoma de México. She was a postdoctoral fellow at the University of Copenhagen in the Central Mexican Writing Systems and Calendars project. With over fifteen years as researcher in the Xochicalco project, she focuses on socio-political development processes and their impact on the built environment. Currently, she teaches at the Escuela Nacional de Antropología e Historia and El Colegio de Morelos.

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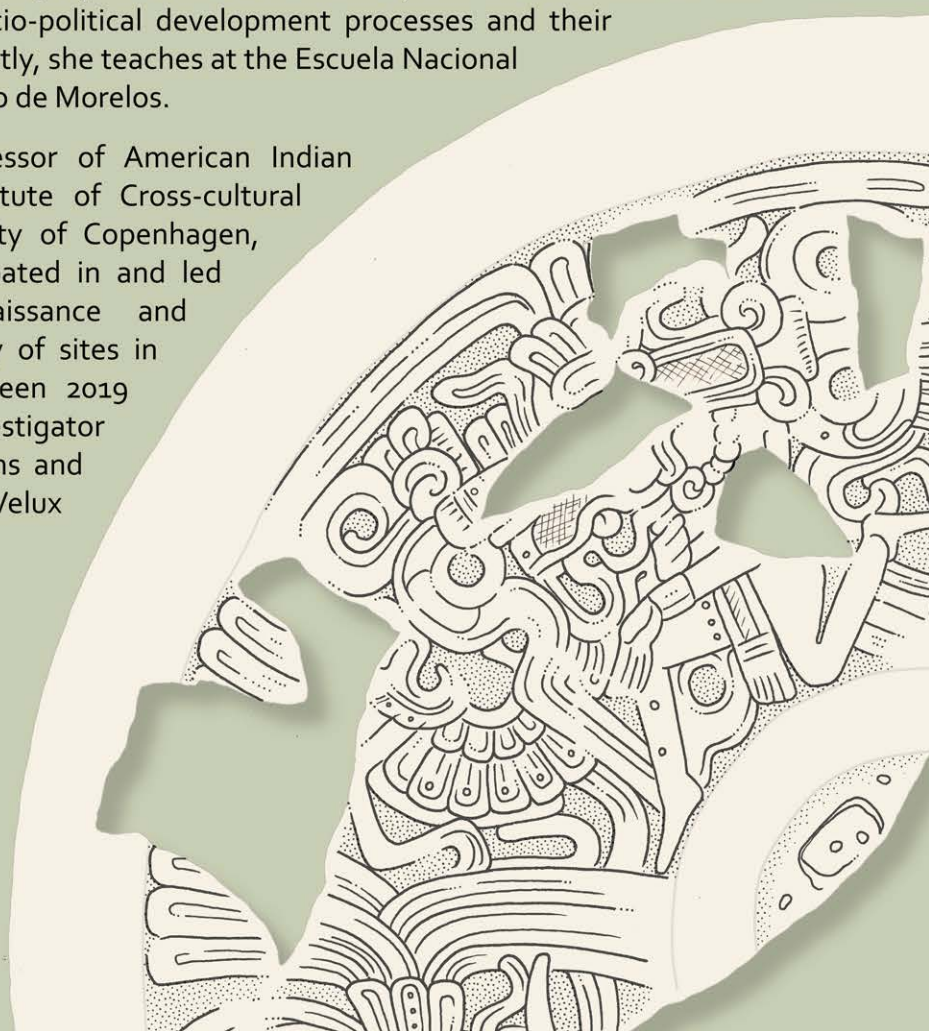

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