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Orienting West Mexico

The Mesoamerican World System 200–1200 CE

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Dedicated to

Kristian Kristiansen

Abstract

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As world-systems theory came to the fore in archaeology during the 1980s and 1990s, it became evident that the analysis of pre-capitalist core/periphery relations required modifications of this theory for its further use in the discipline. As a result, the comparative approach for world-systems analysis (Chase Dunn and Hall 1997) discerned four interaction networks that defined pre-capitalist world-systems. The appearance of the comparative approach coincided with archaeology's detour into the diverse inquiries of postmodernism, for which conceptual advances in world-systems analysis went largely unnoticed by the discipline. The present study applies the nested network interaction framework of the comparative approach to examine material evidence for core/periphery relations between on the one hand two state level societies of central Mexico: Teotihuacan and Tula; and, on the other, West Mexico, one of the largest subareas of Mesoamerica. The operationalization of the nested networks as a material culture model for the Early Classic and Early Postclassic periods indicates that West Mexico was integrated into macroregional developments and change between 200-1200 CE. The present study represents one of the first comprehensive applications of the comparative approach in areal research undertaken in Mesoamerica.

Keywords: Archaeology, World-systems theory, World-systems analysis, Nested networks, Mesoamerica, West Mexico, Central Mexico, Early Classic, Epiclassic, Early Postclassic

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This study has its origins during many hours of discussion with the late J. Charles Kelley during the 1980s and 1990s. His interest and persistent inquiry into the long-distance relationships forged by both Teotihuacan and Tula into West Mexico is the subject of this monograph. When his wife Ellen insisted I visit his library in Blue Mountain in 2003, six years after his passing, the entrance into this sanctum was a dolorous moment; made even more so upon pondering a number of hand written notes left on his desk for me regarding the subject of Teotihuacan. From his handwritten "your turn to run with this", the present study represents my contribution to one of the problems that enthralled Sir J. for two decades. Prior to the 1990s the subject of Teotihuacan outside of Teotihuacan was the focus of discussions I had with John Paddock as an undergraduate student in the University of the Americas in the late 1970s. His insights on this fascinating issue have never left me.

Around the turn of the millennium three monographs and their authors transformed my understanding of world-systems analysis (WSA). *Europe before History* by Kristian Kristiansen provided an epiphany through the interrelation of empirical-conceptual realms and cyclical patterns observed through WSA over an ancient *longue durée*. It was within the pages of his monograph where I began to understand Mesoamerica from the perspective of West Mexico. Since then Kristian has constantly shared his intellectual insight and enthusiasm. He has been an inspiration and mentor in the formation and undertaking for this study. *Rise and Demise* by Christopher Chase-Dunn and Thomas D. Hall opened a totally new vantage through their innovative conceptual framework of WSA to apply to the field of archaeology. I have been most fortunate in having constant guidance and advice from Tom Hall in all things related to WSA. Previous discussions and insight on WSA with Andre Gunder Frank between 1997 till the time of his passing in 2005 had significant impact on research undertaken below. It was

his suggestion that led me to read and analyze the works of both Kristiansen and Chase-Dunn and Hall, while his insistence on horizontally integrative macrohistory, finely presented in *ReOrient*, enhanced the way I perceive both the past and present.

In Mesoamerica, to undergo a macroregional analysis with the most recent insight and data available was only possible thanks to researchers who generously provided their experience and knowledge: Patricia Fournier, Helen Pollard, Agapi Filini, Achim Lelgemann, Michael Smith, Michael Foster, Ben Nelson, Dan Healan, George Bey III, María Rosa Avilés, Otto Schöndube, Daniel Valencia, Juan Carlos Saint-Charles, Fiorella Fenoglio, Jose Luis Punzo, Jesús Jáuregui, Efraín Cárdenas, Ana Pelz, "Nic" Caretta, Susana Ramírez de Swartz, Lorenza López Mestas, Rodrigo Esparza, Mario Retiz, María Teresa Cabrero, Paz Granados, Alfonso Araiza, Marisol Montejano, Gregory Pereira, Elsa Jadot, Christopher Beekman, Eduardo Williams, Mauricio Garduño, Carlos Torreblanca, Andrew Somerville, Lane Fargher, Verenice Heredia, Linda Manzanilla, Luis Gómez Gastélum, and José Beltrán.

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bestowed astounding support from the first day of my arrival to the final defense. The University's and Sweden's respect for higher education is truly a researcher's dream. Teobaldo Ramírez kindly shared his flat for many weeks in 2008 as we wondered through the complexity of flat hunting in Gothenburg. Birgitta and Emilio Guevara have been my home-away-from-home in Gothenburg during my stays from 2016 to my final defense.

In El Teul, Luis Martínez Méndez contributed greatly through a diverse range of field responsibilities in a full-time field project making it possible for me to concentrate large amounts of time to the present text, while all graphics were enhanced by the creativity of Laura Solar and Myra Rivas. Figure 3.4 is courtesy of Manuel Dueñas.

The vast time required for research, reflection, and writing; the second of these the most time consuming, is done to the delight of one, but more often than not, at a detriment to family time. In this case, it meant being in a room surrounded by books for long hours during months for a number of years, which in essence meant my being aware of not being in the presence of my wife Laura. To remedy this, we shared and discussed most of what is on the following pages during lunch and dinner, as well as during highway trips. Those who know Laura can perceive she is the ultimate discussant for a Mesoamericanist. Many times she took the role of devil's advocate to make my arguments more effective. However, the appearance of Narah in our lives changed this routine making it necessary to maximize time efficiency and energy. It was in the course of what quickly evolved into the habit of the daily walk with Narah in a *Baby Björn* carrier that I realized that walking enhanced mental focus. It was during those months as I carried Narah through the slumbering afternoon streets of El Teul, while she slowly and silently became aware of rural animals in a village setting and the many sounds of this world that the most focused sections of the past's world-system of this study came about. Thus, both Laura and Narah were muses in their contrasting ways: the elder with her abundant and enlightened dialogue and fine eye for detail, and the younger through her prolonged silence and

appreciation for long walks. Ironically, I can now only thank them by finishing this and having dinners without ever mentioning archaeology and Mesoamerica for a while.

To every one of you *Mil Gracias*.

Teul de González Ortega, Zacatecas, September 2017

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Chapter One

West Mexico Coalesced

This study parts from two premises: first, that no region in Mesoamerica can be understood solely in isolation, and second, that Central Mesoamerica had a sequence of rise and fall of state level polities, which during periods of upswing in state development correlated with an increase in the geographical scale of interregional communication and integration. Broad-scale interaction interconnected many regions through links with polities of different levels of complexity, in some cases involving core/periphery relations. However, at no time did any state level polity control Mesoamerica through conquest, or colonization. Integration had considerable effects, stimulating changes and transformations in the societies who were part of this interaction. When state level societies faced disintegration and demise, the long-distance interregional relationships loosened and frayed. The resulting retrenchment significantly reduced interpolity interaction to a regionalized scale. The present study will focus on the interregional interaction of two state level polities, Teotihuacan and Tula, and the links they formed with West Mexico during their rise as powerful cores in central highland Mexico.

The span of 200–1200 CE in highland Mesoamerica can be seen as a sequence of centralization and decentralization of sociopolitical power, which has been deemed a characteristic of world-systems (e.g., Blanton et al. 1996; Chase-Dunn and Hall 1997:206–210; Gills and Frank 1992:678; Marcus 1998:71–74, Fig. 3.4; Price 1977:210). Between 200 and 550 CE the state of Teotihuacan established connections with most of the regions of Mesoamerica. From

550/600–900 CE, following the disintegration of Teotihuacan, all regions of Mesoamerica underwent a readjustment in the scale of interregional interaction. Between 900 and 1200 CE the state of Tula sustained significant long-distance interregional interaction integrating numerous regions of Mesoamerica. The temporal scope covered here addresses the problem of discerning patterns in the archaeological record indicative of core/periphery relations between the pre-Colombian core states of Central Mexico, Teotihuacan and Tula, and West Mexico. This will take us to the complex problem on the characterization and extent of core/periphery relations during the Early Classic (300–550 CE) and Early Postclassic (900–1200 CE) periods. This characterization will allow a preliminary comparison of world-system manifestation between the two periods in question, which ultimately can shed light on the nature of relationships forged by these state level polities beyond the Valley of Mexico.

Mesoamerica, defined as a pre-Columbian culture area, is consistently ascribed to the territory that includes a portion of northern Mexico, all of central and southern Mexico, Guatemala, Belize, as well as parts of Honduras, Nicaragua, El Salvador, and Costa Rica. During the last three decades, archaeological research has advanced significantly in defining the mosaic of distinctive regional cultural developments of what is known as West Mexico (Figure 3.2), the territory extending from the Valley of Toluca—neighboring the Valley of Mexico—through the states of Michoacán, Guanajuato, Jalisco, Nayarit, Sinaloa, Aguascalientes, and Zacatecas, in Mexico widely referred to as *El Occidente* (the West). However, research into the complex problem of how West Mexico was integrated with other segments of this extensive culture area is notably uncommon. To date studies (Filini 2004; Hernández 2016; Jadot 2016) have concentrated on sites located on the eastern fringe of West Mexico where material evidence indicative of contacts and exchange with neighboring Central Mexico has been identified. This has lead researchers to consider those contacts within this particular zone of West Mexico. Hence, research has been constrained to a regional scale of inquiry, while

studies that attempt to understand broader-scaled interregional relationships of social change and cultural development further west of Michoacán are lacking.

Integrating these localized studies into a broader geographical scale, the present analysis addresses the problem of interregional interaction drawing on world-systems analysis, specifically the comparative world-systems approach (Chase-Dunn and Hall 1997). An analysis is undertaken with the objective of detecting and explaining the emergence of world-system sociopolitical relations in West Mexico, the boundaries of interaction networks, and changes in interregional network configurations from 200–1200 CE.

The roots of this study are situated in the research problems I confronted during three decades of fieldwork at three of the major archaeological sites of the state of Zacatecas, Mexico: Alta Vista, La Quemada, and Cerro del Teul (Figure 3.4). All three sites were contemporaries during the Epiclassic period (600–900 CE), an aspect that initially came to the forefront during the years that I have spent investigating the site of La Quemada (e.g., Jimenez 1989; Jimenez and Darling 2000).

Prior to the Epiclassic period, the site of Cerro Chapín, seven kilometers south of the ceremonial center of Alta Vista, in the vicinity of present day Chalchihuites, Zacatecas, manifests evidence of a vague association with Teotihuacan—600 kilometers to the southeast—in the form of pecked-cross petroglyphs (Figure 4.14) commonly found in Teotihuacan and its surroundings (Aveni et al. 1982; Headrick 2007:116–117). The problem relating to the nature of contacts between Alta Vista and Teotihuacan was a subject of constant discussions I had with the late J. Charles Kelley for over a decade, and daily in the early 1990s during excavations in Alta Vista. In absence of evidence for direct exchange with Teotihuacan, discussions gyrated around the significance of certain architectural patterns reminiscent of Teotihuacan found in Alta Vista. Emphatically, how and when had the elaborate Teotihuacan related pecked-cross petroglyphs arrived at Cerro Chapín? These essentially brought to the forefront a fundamental research problem

concerning how West Mexico had integrated into the rest of Early Classic period Mesoamerica (see Chapter 4).

Meanwhile, in the southern extreme of Zacatecas, Cerro del Teul survived both La Quemada and Alta Vista into the Early Postclassic period, experiencing a highpoint, which correlated with contacts between Cerro del Teul and networks on the Pacific Coast. Thus, it became evident that the ceremonial centers at Alta Vista, La Quemada, and Cerro del Teul, and their hinterlands, had formed part of large-scale historical processes linked to the larger realms of both West and Central Mexico at different times. But how were they integrated and what was the nature of their interaction with their contemporaries? Why did Cerro del Teul's occupation continue into the Postclassic period while Alta Vista and La Quemada faced demise at the end of the Epiclassic period? Hence, problems addressed here are: How can processes of core/periphery relations and social changes that affected these sites in distinct manners and times across considerable distance of West Mexico be perceivable in the archaeological record? Is the evidence of these relationships readily observed, or are they manifest in discrete material remains and/or patterns? Can world-systems analysis explain observed patterns in the material record? And ultimately, is archaeological data relevant to understanding long-term change? In essence, this study aims at defining the spatial interregional networks of the world-system that articulated West Mexico with states in Central Mexico during the Early Classic and Early Postclassic periods.

For theoretical frameworks of macroscale approaches such as world-systems analysis to assist in explaining the archaeological record, these need to be able to articulate with observed empirical data at the regional level of analysis. With these criteria in mind, the present study builds on the comparative world-systems approach outlined by Chase-Dunn and Hall (1997) and applies that analytical lens in an initial areal study for Mesoamerica. One of the virtues of this approach for archaeological application resides in the definition of four nested interaction networks that compose a world-system. Chase-Dunn and Hall have advanced a conceptual framework that permits a coherent evaluation of material evidence patterning

to detect interaction networks of relevance. Their model enables archaeology to operationalize, test, and potentially approach, on the world-systems analysis, the study of pre-capitalist past—an issue Immanuel Wallerstein did not intend in his original formulation of the analytical framework (Wallerstein 1974, 1980), which focused on sixteenth century Europe. The present study addresses the empirical problem of what kinds of evidence in the material record are suitable diagnostics for these networks, confronting Early Classic and Early Postclassic West Mexico as cases.

While West Mexico remains the archaeologically most under-researched region in Mesoamerica (Beekman 2010:41; Gorenstein and Foster 2000:8), the emerging patterns described in this study constitute the first broad-scaled network systems defined between Central and West Mexico. The model produced here will allow projections, predictions, and testable assumptions of diagnostic components within the material culture that one can expect to find in excavations at any site within the modeled networks, thus making it possible to correlate the temporal and spatial system in which one is excavating, an essential starting point for most research. Present and future studies will be able to interplay even more complex questions between the local context of change and the larger Mesoamerican realm in which all sites interacted.

One of the most compelling and contended problems in Mesoamerican archaeology to date is to understand the relationship between social change and the continuous transformations of interregional integration in Mesoamerica, from the Early Formative period (2000–1000 BCE) through the Late Postclassic moment of contact with Europeans in 1519 CE. Like all the sub-areas of Mesoamerica, West Mexico has its trajectory regarding this quandary. Starting with Isabel Kelly's pioneering study *Ceramic Provinces of Northwest Mexico* (1948) to the recently edited volume *Greater Mesoamerica: The Archaeology of West and Northwest Mexico* (Foster and Gorenstein 2000), the archaeology of West Mexico has passed through distinct stages in the generation of data and production of knowledge for what is one of the most ecological diverse sub-areas of Mesoamerica. As mentioned above, today it

remains the most understudied, with regional and chronological voids still in need of definition. Yet a perusal of West Mexican archaeology shows a generational advance roughly every fifteen years. As part of the first generation of pioneering Mesoamericanists in West Mexico, Ekholm (1942), Kelly (1938, 1939, 1945a, 1945b, 1947, 1948, 1980), Lister (1949, 1955; Lister and Howard 1955), and Sauer and Brand (1932) made distant correlations to Central Mexico with considerable unknown territory in between. These initial observations were to be expected as this early generation associated material correlates with the few known sites in Central Mexico. These horizontal correlations remained constant during the next four decades as the *tierra incógnita* of West Mexico became increasingly studied and its archaeology elaborated upon by the first wave of *Occidentalistas* (a term for archaeologists studying West Mexico) during the 1950s, 1960s, and 1970s. During this time span, J. Charles Kelley (1971, 1974, 1986) and Clement Meighan (1976b; Meighan and Foote 1968) would be constant instigators of a macroregional perspective connecting West Mexico mainly to Central Mesoamerica, but also to some extent to the American Southwest, proposing the existence of trade routes, traveling merchants, and migrations.

By the mid-1990s, with the addition of an influx of a new generation of researchers, marked strides were made in the definition of regional chronologies, together with in-depth studies on the diverse lake basins and extensive Pacific Coast that make up significant stretches of the territory of West Mexico (e.g., Arnauld et al. 1993; Carot 2001; Filini 2004; Pollard 2000; Valdez et al. 2005). At the time, Helen Pollard observed, "perhaps greater significance in the long run is that regional research is no longer driven primarily by the need to understand *central* Mexican prehistory, but by the challenge of understanding the dynamics of cultural change in *west* Mexico itself" (Pollard 1997:370; emphasis in original). Entering the new millennium, the archaeology of West Mexico has undergone an about-face, presently enthralled by its own core regions and their complexity. Few researchers have picked up on Pollard's concluding comment on the need to retain a

macroscale perspective, in particular, a world-systems perspective (Pollard 1997:371).

At present, *Occidentalistas* are as yet to produce an update on Foster and Gorenstein (2000). One reason is that the archaeology of West Mexico is presently in a generational transition period, between the overt Mesoamericanist generation of Kelly, Kelley, and Meighan, among others, that perceived West Mexico as a subregion tied to macroregional processes of Mesoamerica, and the more recent locally-focused generation, including Cabrero (1989, 2005, 2010), Carot (2001), Mountjoy (1989, 1990, 1995, 2000), Pollard (1993, 2000, 2008), and Weigand (1985, 1992, 1996, 2000), among others, whose research has been critical in establishing a more extensive data base for local developments throughout West Mexico. However, the present transition is complicated because it entails substantial internal/external inquiries.

On one hand, within West Mexico it requires, among other issues, a re-examination of what is commonly known as the Teuchitlán tradition (Weigand 1985, 2000), a hallmark of West Mexican archaeology. The revision in question pertains to the temporal-spatial dimensions of the unique and wide-spread monumental circular architectural pattern centered in highland Jalisco, which for decades was proposed and widely accepted as an expanding core state development dating from 300 BCE–900 CE (e.g., Beekman 1996a, 1996b; Weigand 1985, 2000). However, chronological data and revision, together with inter-site analysis in the core area indicate that the Teuchitlán culture developed between 200 BCE–400 CE as a complex chiefdom (Jimenez and Darling 2000; López Mestas 2011; Trujillo 2015). The comprehensive downsizing of this regional development requires research to understand the significance of the presence of its unique architectural pattern in sites beyond the core area (see Chapter 3).

Outwards, it has become clear that "understanding the dynamics of cultural change in *west* Mexico itself" (Pollard 1997:370, emphasis in original) is not possible without analyses at multiple scales, including the larger scale of interregional connections with the immediate area to the east: Central Mexico. The present study

focuses primarily on the inquiry of West Mexico's external ties; but in doing so it will also contribute insights addressing the dilemma pertaining to sociopolitical change in the Teuchitlán region.

Also, the present study aims to show the necessity and coherence of a distinct analytical approach between earlier macroregional (Kelley 2000) and more recent regional perspectives (Beekman 2010). The integration of these into a multi-scalar approach of region (a network of polities in a geographically defined area that share a material culture), macroregion (diverse interacting regions), and world-system (a political and economic system that incorporates a number of interacting regions composed of numerous regional cultural systems), permits a more balanced middle ground in which to examine the dynamics of West Mexico in its diverse articulations with the rest of Mesoamerica.

Comparing the case of West Mexico with studies of interregional interaction between other parts of Mesoamerica serves as a starting point for identifying some problems discussed in the present study. The example of the analyses of relations between the Maya and Central Mexico in Early Classic Teotihuacan and Early Postclassic Tula are both relevant. The surge in Maya studies during the last three decades have produced an about-face in previous perceptions of central Mexican "influence" that subordinated the Maya, with the latter characterized as passive receptors (Braswell 2003a; Kowalski and Kristan-Graham 2011; cf. Kidder et al. 1946; Sanders and Michels 1977). For the Early Classic period, the present characterization of this interaction suggests a two-way relationship between distant regions exchanging ideas and goods (e.g., Taube 2003). Compared to the conventions of state apparatus of Teotihuacan, Mayan elites present evidence of their interaction with Teotihuacan. Within long-distance trade networks, the "regal nature of contacts" (Taube 2003:312) stimulated, on the part of some Mayan elites, a selective integration of Central Mexican symbols and religious components into localized idioms, together with the manifestation of long-distance contacts as legitimizing strategies in a subarea which was substantially more competitive in power relations among neighboring peer polities (e.g., Braswell

2003a; Demarest and Foias 1993). In pinpointing the focus in this research area at present, Braswell concludes, "we should seek explanatory frameworks that emphasize local innovations yet underscore the complexity of interaction" (2003a:40). An equally noteworthy aspect to be taken into consideration in this specific case of interregional interaction that is pertinent to other subareas, relates to the evidence for the changing nature of Teotihuacan's internal power structure (Manzanilla 2009), and how this might be reflected in the core state's relations abroad (Marcus 2003). Both of these aspects will play into the problem of discerning the nature of core/periphery relations between Teotihuacan and West Mexico.

The situation described above on the interaction between Teotihuacan and the Maya contrasts significantly with the proposals for West Mexico regarding the impact, or "influence," of Teotihuacan on the region to the west. As will be examined in greater detail below, acknowledged material evidence related to Teotihuacan has been distinguished for the region of northern Michoacán (Filini 2004; Michelet and Pereira 2009; Pollard 1997), yet the data has not sustained to date any argument for domination by Teotihuacan. This situation, at first sight, seems perplexing when considering the 235 km that separate Michoacán's Cuitzeo Basin and Teotihuacan, in contrast to the 1000 km between Teotihuacan and the major Early Classic Maya city at Tikal, Guatemala, as one example. However, it has been pointed out that there exists a vast territory between Teotihuacan and the Maya lowlands (Cowgill 2003; Marcus 2003), which require integrative models that take into consideration that, "Instead of a simple dyadic model relationship with Teotihuacan, the Maya had a much wider network of direct and indirect contacts" (Marcus 2003:355). Conversely, the proximity for evidence of connections to Teotihuacan in West Mexico strongly suggests that a distinct process was operating that bound these neighboring subareas. In contrast to Teotihuacan's complex interaction and ties to regions south of the Valley of Mexico with contemporary regional capitals like Cholula (Plunket and Uruñuela 1998) and Monte Albán (Winter et al. 1998), in West Mexico at 200/250 CE sociopolitical complexity does not compare

with the aforementioned polities (Darras and Faugère 2010; Pollard 2000:62–63). This contrast may have contributed towards a different characterization of the world-system relations. In contrast to the current view that the networks integrating Teotihuacan and Michoacán did not extend beyond western Michoacán (Gómez Chávez and Spence 2012; Michelet and Pereira 2009), it will be shown here that Michoacán played a semiperipheral position in a world-system that extended much further than presently acknowledged. This study addresses this contrast and considers the factors that may have played into a distinct core/periphery relationship between Teotihuacan and West Mexico.

The question pertaining to interactions between Early Postclassic period Tula in Central Mexico and Chichén Itzá in northern Yucatán has likewise seen a marked change from the previous prevalence of interpretations that sustained a Tula-Toltec conquest and domination of Chichén Itzá (Kowalski and Kristan-Graham 2011). Knowledge on the nature of the contact has advanced substantially, suggesting institutional ties in the realms of religion and trade (Bey and Ringle 2011:333). The issue of interaction between Tula and Chichén Itzá shows the difficulties of understanding cultural exchange within a short time span. Again, as described above, the intervening territory of over 1100 km between highland Central Mexico and the northern Maya lowlands of the Yucatán Peninsula plays into the difficulties in understanding this problem. A fundamental constraint resides in the lack of interregional studies that could propose how this intervening expanse articulated with both Central Mexico and with the Yucatán Peninsula. In Mesoamerican archaeology, there are very few detailed studies concerning the nature and facets of Tula's presence beyond Central Mexico (Bey and Ringle 2011; Healan 2012). The present study will contribute to filling this void by examining the question of Tula's exterior presence in West Mexico. Tula was considerably closer in distance to West Mexico, yet, as seen in the case of Teotihuacan, Tula has not been associated with empirical data that sustain any argument that proposes direct control in West Mexico. However, evidence suggesting some form of connection with Tula, mainly due

to the presence of Plumbate ceramics and elaborate figurines, has consistently been highlighted since the 1950s (Lister 1949, 1955). This research will examine, from a world-systems perspective, the material evidence for interregional interaction networks between Tula and the Pacific Coast of West Mexico.

A limitation of the present study, which is macroregional in scope, is that in some regions and periods we are still very limited in data. At present, a significantly greater amount of data pertaining to the Early Postclassic period exists in comparison to the existing lacunae in a number of zones related to the Early Classic and Late Formative periods. For the latter we are still very limited in our understanding for basic issues such as architecture, settlement patterns, and social complexity. This factor will limit the depth of interpretation for the Early Classic period, while the material evidence for interaction networks for the Early Postclassic period will permit a number of proposals for interpretation.

Outline of the Study

The present analysis has been structured to take the reader through an extensive spatio-temporal trek. The initial outline of the problems to be covered in this study has been defined above. Since many issues this study deals with have been previously pondered by researchers through recent decades, considerable efforts are made to contextualize the course of the pertinent intellectual inquiries on which this study builds.

Chapter 2 begins with a review of the conditions in Mesoamerican archaeology, which brought about the initial application of world-systems theory to issues concerning macroregional interaction, together with the impediments that would foster its reformulation for its further use in contexts prior to the sixteenth century. The subsequent section introduces the comparative approach for world-systems perspective that will be applied in the present study as a material culture model for the analysis of core/periphery relations during the Early Classic and Early Postclassic periods.

Chapter 3 presents two overviews, the first defining the physical setting of West Mexico focusing on the Mesa Central of Mexico and the Lerma-Santiago Basin. The second presents an approximation to the spatiotemporal context of cultural development in West Mexico at around 200 CE, the baseline from which this study departs.

Chapter 4 examines the Early Classic period (250/300–550/600 CE), focusing on the cultural dynamics of Teotihuacan outside of the Basin of Mexico. The chapter commences with a review of the problems confronted by previous research on the matter of interregional interaction with Teotihuacan. This is relevant to the present study for considerations and insight made from the viewpoint of other regions where this issue has been examined. The second section of this chapter undertakes the review of empirical data from the Valley of Mexico to West Mexico. The objective of this section is to present the material correlates of the interaction networks that extended from the core state into a number of zones of West Mexico. The final section consists of a discussion on the emerging material patterning and a number of issues related to the process of incorporation and the impact this had on West Mexico.

Chapter 5 covers the Epiclassic period (600–900 CE) in West Mexico. An areal overview is presented defining the spatial configuration of the local cultural spheres and the interregional networks that articulated much of this subarea following the transformation of the Mesoamerican world-system at around 550/600 CE. The objective of this chapter is to integrate an updated summary of what is currently known of the diverse local spheres for this period. The spatial configuration and networks of this period are pertinent to the present study since they define the maximum extension of the northern frontier of West Mexico. Subsequently, this northern frontier zone undergoes extensive change at around 950/1000 CE resulting in the retraction of the territorial limits of this segment of Mesoamerica.

Chapter 6 begins presenting the complex problem of how the core state of Tula interacted with West Mexico during the Early Postclassic period (900–1200 CE). The initial section examines previous research in West Mexico in which connections with

Tula were observed. The review is pertinent to the present study since this chapter reiterates, in considerable measure, key insights made on the part of previous researchers stemming from studies in a few sites in West Mexico at a time when empirical datasets were scarce, as were also the conceptual frameworks concerning long distance contacts. The subsequent section of this chapter presents the review of empirical data starting from the region of Tula proceeding across West Mexico to the Pacific Coast. The final section of the chapter contains a discussion on the observed material patterning and an interpretation of this patterning from a different perspective, for its correlation with interaction networks that linked Tula and West Mexico.

Finally, Chapter 7 presents a conclusion regarding emerging patterns observed in the Mesoamerican world-system in West Mexico during the span of one thousand years. Likewise, a number of observations and questions are presented from this study that are pertinent to future research inquiry.

Chapter Two

The Comparative World-Systems Approach and its Application to Archaeology

Mesoamerica and World-Systems: Between Wallerstein and the Postclassic World

> Having amassed a substantial quantity of regional-scale data during a more than decade-long project in Oaxaca, however, we gradually came to the conclusion that although we had learned much about the growth of Zapotec civilization in the Valley of Oaxaca, still it appeared to be the case that changes we and others had documented could be only partially understood in terms of processes operating at this regional scale (Blanton et al. 1981; cf. Kohl 1979; Smith and Heath-Smith 1982; Wolf 1982:390). Activities and relationships at the macroregional scale also seem to have had important determinative effects, and yet we lacked a coherent analytical approach capable of dealing specifically with processes of change that might operate in the context of interaction between regions (Blanton and Feinman 1984:673).

Between the 1960s and 1980s significant advances in Mesoamerican archaeology were underway in many regions through the undertaking of intensive surveys, the hallmark of processual archaeology (e.g., Blanton et al. 1982; Flannery and Marcus 1983; Parsons 1971; Parsons et al. 1982; Sanders et al. 1979). The citation reveals a shortcoming of processual archaeology in its accentuation of the regional approach as an appropriate unit of analysis in seeking to understand the evolution of political complexity of what was primarily viewed (Kowalewski 2004:87–88) as an endogenous,

ecosystemic, self-contained process (e.g., Flannery and Marcus 1983; Grove 1981; Price 1978; Sanders 1974; Sanders et al. 1979; Sanders and Price 1968).

Even though Binford (1965) initially recognized the importance of Caldwell's (1964) interaction sphere concept that was later to weigh heavily in the formulation of the peer-polity interaction model (Renfrew and Cherry 1986), processual archaeology in its strive to distance itself from the excesses of the normative school (i.e. diffusionism), largely left considerations pertaining to interregional relations and exchange out of the picture, in contrast to the preference and weight given to factors relating to how humans adapted to their environment within closed areas (e.g., basins and valleys). In the two decades between the takeoff of the New Archaeology and this citation, the second generation of processual archaeologists was contending with a conceptual void in matters about the role of interregional interaction. Midway through this interval, the appearance of world-systems theory (WST) (Wallerstein 1974, 1980) highlighted a macroscale perspective, which bounded multiple sociocultural systems in the rise of European capitalism during the sixteenth century.

In essence, Wallerstein's conception of the European capitalist world-system is a structured relationship of unequal exchange integrating many political units and cultures in regions designated as cores, semiperipheries, and peripheries. In this socioeconomic system, wealthy, powerful core states which own capital and technology, compete among themselves to incorporate and control peripheries through colonization, securing resources, and cheap labor as a means to strengthen core economies. Peripheries depend on core states for capital and technology. The benefits and surplus capital generated by this extractive relationship remain in the core, while the periphery is bound in a relationship that augments its precarious situation, "the development of underdevelopment" (Frank 1966). Between cores and peripheries, semiperipheries buffer this relationship as intermediary regions, in many cases exerting their own control over peripheries. The semiperiphery shares characteristics both of the core and peripheries. Through

this exploitive system on an increasing global scale, core states accumulate ever-greater capital while the peripheries endure increasing impoverishment. Two subtypes of world-systems exist: world-empires in which a single overarching polity controls the entire system, and world-economies, which have no unified political system. WST highlights that the basic unit of study is the world of interaction rather than individual societies, nations, and regions (Wallerstein 1974, 1980).

In Mesoamerican archaeology this core/periphery framework was quickly advanced as a conceptual scheme from which to perceive the northern frontier of Mesoamerica in proposing core/periphery relations between the peripheral Suchil Chalchihuites culture of northwest Zacatecas characterized by its extensive mining industry being colonized by the core state of Teotihuacan during the Early Classic period, seen as part of the core's world-economy (Weigand 1978a, 1982). At the same time WST was proposed as a conceptual perspective for linking a peripheral American Southwest to a Mesoamerican core (e.g., Mathien and McGuire 1986; Whitecotton and Pailes 1986). This initial use of WST was limited to generalized statements of conceived core/periphery relations from geographical peripheral settings of Mesoamerica. A problem resided in that the WST model, explicitly conceived to explain the modern world-system, could not be simply stretched back in time, since "many of the assumptions that Wallerstein quite reasonably made for study of the capitalist era (i.e. since *ca*. 1450 CE) were either woefully inadequate or downright empirically wrong in precapitalist settings" (Hall 2006:97). On this issue Feinman details,

> Many of the first explicit attempts to grapple systematically with macroscalar phenomena in the deep past aimed to broaden the narrow confines of Wallerstein's (1974) proposed frame, which he outlined to probe the emergence of European capitalism. Modifications were proposed concerning the initial presumption that precious goods did not have systemic significance, the rigid notion that macroscale networks must have definable cores and peripheries, the assumption that broad-scale processes do not have

> significant impacts in worlds composed of smaller-scale polities, and the Eurocentric focus and timing of the original analysis (Feinman 2017:44-45).

Compounded to this, the application of WST to pre-Columbian realms could not move beyond general statements on macroregional relations owing to an inherent shortcoming in that "High-level theory cannot be tested directly, and it offers few clues to explain specific empirical facts" (Smith 2015:22).

In their early essay on the potential of the world-systems approach, Blanton and Feinman argue that "an *analytical framework comparable* to Wallerstein's will prove productive in the investigation of ancient Mesoamerica. However, to do this, we think that Wallerstein's concept of world economy must be refined to take into consideration the systemic properties of luxury trade" (Blanton and Feinman 1984:679, emphasis added). The stress given here to preciosities, and prestige goods, with the subsequent addition of beliefs, symbols, and "elite level communication," was owing to that these were seen as the fundamental features of a Mesoamerican elite exchange system (Blanton et al. 1993; see Schneider 1977) as a characteristic of the culture area from the Early Formative period, 1200–850 BCE (Flannery 1968). This contrasted with Wallerstein's underscoring of the trade of bulk goods in the modern world-system. Their considerations and outline on the structure of a multi-centric Mesoamerican world-system (Figure 2.1) stemed from previous observations for a "sequence involving periods of virtually pan-Mesoamerican intercommunication (horizons) alternating with periods of retrenchment and more localized cultural development (intermediaries)" (Price 1977:210), and the identification of "some Mesoamerican regularities in the cyclic growth and decline of states" (Marcus 1992:409). The coalescence of these spatio-temporal considerations was the antecedent for their integration of WST towards application in Mesoamerica as a part of a larger field of world-systems analysis (WSA) (Blanton et al. 1993), which would take several aspects of WST into precapitalist settings. At the time of their proposal, WSA was underscoring

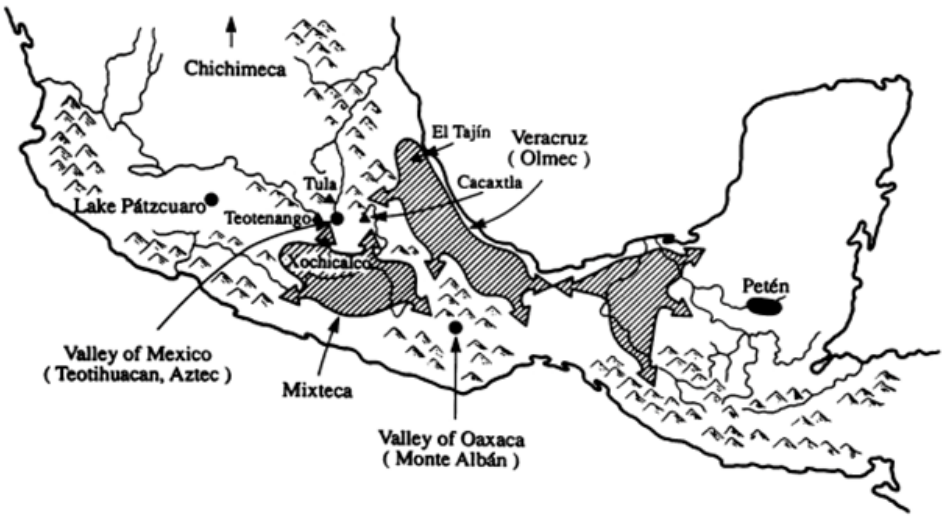


Figure 2.1. *Map illustrating an early attempt to schematize Mesoamerica's core regions and boundary zones from a world-systems perspective (after Blanton et al. 1992:420).*

cycles of political centralization and decentralization concomitant to state development, as a basic pattern of world-systems (e.g., Chase-Dunn and Hall 1991b; Gills and Frank 1992; Frank and Gills 1993; Rowlands 1987).

These advances were occurring as WSA was entering its second phase, which was to deal with an unresolved issue underscored by Wallerstein (1990:289–290):

> The first is the elaboration of world-systems other than the present one. This work has been begun by Christopher Chase-Dunn and Janet Abu-Lughod, as well as by a number of archaeologists […] As we pursue this kind of work, three things will probably happen: (a) we shall reevaluate what is in fact particular to our modern world-system. (b) We shall reevaluate what we mean by a world-system, both in time and space. (c) We shall begin to compare different kinds of world-systems systematically. Whether this will lead us astray and back into a new nomothetic worldview ("the science of the comparative world-systems") or a new idiographic world-view ("the description of the unique world-system that has evolved for at least 10,000 years") remains to be seen.

Wallerstein outlined the course of a considerable part of WSA and debates for the next decade and a half. The decade of the 1990s is a highly significant period for WSA, which underwent an intense phase of interdisciplinary inquiry, modification, and extensions into precapitalist realms (e.g., Abu-Lughod 1989; Chase-Dunn and Grimes 1995; Chase-Dunn and Hall 1991a, 1991b, 1993; Frank 1990; Frank and Gills 1993; Sanderson 1995; Schneider 1977). Surprisingly, very few Mesoamericanists kept a footing in this process, while many initially attracted to WST distanced from it over the course of the decade that ended the twentieth century.

A review of the preeminent essays elaborated during the 1980s and 1990s indicates that Mesoamerican archaeology's nascent employment of world-systems theory was a tangled proceeding. This process was initiated with the acknowledgement of the potential of the conceptual framework for establishing generalized observations, and of its heuristic value for examining interregional interaction (e.g., Pailes and Whitecotton 1979; Weigand 1978a, 1982; Weigand et al. 1977; Whitecotton and Pailes 1986). Subsequently, this was followed up by the outlining of core and peripheral regions with observations on relations drawn from the researchers' respective region, site, and period of study (e.g., Blanton et al. 1981; Kepecs et al. 1994; Kowalewski 1996). Conclusions included consistent observations that further application of the conceptual framework required refinement to enhance its utility in archaeology, or, that WST was of limited use to archaeology (e.g., McGuire 1989, 1996; Price 1986; Schortman and Urban 1987, 1992b). The complications in adapting WST to further analytical realms paralleled the enthusiasm it had sparked as a model for the analysis of sociopolitical change (Hall 1994:33). In her considerations on WST, Price pinpoints the required refinement:

> […] it is hardly surprising that a model such as that of Wallerstein "fits" the data for which it was developed […]; yet on the other hand, its power would be enhanced if it could be demonstrated as applicable in some form to a wider range of examples - if it could

> be shown as a special case of some more generalized statement of the processes by which states expand (Price 1986:169–170).

Price's interest was brought about by her work concerning ancient state development (e.g., Price 1978), and was characteristic of archaeologists who could see the potential of WST to archaeology but that had perceived a modification was required. Besides this complex impediment, there were various aspects, which played into the indecisiveness that affected not a few researchers in North America in their attention on WST during the 1990s. Among these was the bias due to its intellectual liaison with Marxism, which following the end of the Cold War relegated Marxism and anything tied to it as passé and irrelevant. Curiously, there was a substantial increase in world-systems literature produced during this time, particularly in Europe (e.g., Champion 1989; Chase-Dunn and Hall 1991a; Frank and Gills 1993; Rowlands et al. 1987), which many archaeologists did not engage to keep pace with, simply retaining Wallerstein's initial historical studies (1974, 1980) as a primary reference (Hall et al. 2011:245). This was coupled with an increasing widespread academic tendency "for practitioners to specialise, not only in certain periods and regions but also within certain archaeological categories" (Kristiansen 1998:27). In Mesoamerican archaeology this was seen in the proliferation of epigraphy, iconography, metallurgy, shell production, faunal remains, lithic technology, etc., to which must be considered the recent wave of technologically enhanced analysis and studies on even more minute remains. This specialization ultimately led to a decrease in studies on "explanations of social and historical change on a larger temporal and spatial scale" (Kristiansen 1998:24).

Likewise, during the 1980s and 1990s and since then, a considerable number of archaeologists found themselves immersed in the diverse, pluralistic strands of post-processual archaeology resulting from the "postmodern turn." This shift was cause for considerable commotion throughout the discipline (e.g., Bintliff 1991, 1993; Earle and Preucel 1987; Yoffee and Sherrat 1993; cf. Fahlander 2012). In the post-processual realm important priority

to considerations of contextualism, historicity, and individual agency as a primary focus of archaeological inquiry went against the grain of the grand theory narratives of which world-systems studies had become associated (cf. Frank 1998). Nevertheless, as Kohl forewarned, "Diversity is strength, but it may also result in an archaeology that refuses to confront significant problems, to address unresolved difficulties in our understanding of the past" (Kohl 1993:16). Kohl's reluctance seems to have been confirmed: if processual archaeology inadvertently overlooked interaction studies in its predisposition to advance regional surveys to comprehend sociopolitical complexity, post-processual archaeology simply sidelined interaction studies (Kristiansen and Larsson 2005:30).

When observed within the course of archaeological theory through the last four decades, WST came onto the scene in the discipline when processual archaeology had reached a highly advanced stage of data analysis and interpretation in Mesoamerica, brought to the fore by the doyens (i.e., Blanton, Feinman, Kowaleski, Peregrine) during the mid-1980s in their quest to broaden analysis beyond the regional scale to explain sociopolitical evolution. This coincided with a second phase of world-systems inquiry, which involved modifications of WST for its use in precapitalist settings as a framework for WSA during the early 1990s (e.g., Chase-Dunn and Hall 1991b; Peregrine and Feinman 1996), at which time archaeology was in the midst of the transition into post-processualism. In essence, WST revision and reformulation into WSA surged just as the processual wave had crested with archaeology transiting into post-modernism. Thus WSA, having evolved conceptually, went largely unperceived by the majority within archaeology. The perusal of research on the evolving use of a world-systems framework in Mesoamerican archaeology shows that, against the flow of the times, a continual progression in the refinement of WST was attained through a handful of researchers. Their insights were being integrated into a thorough conceptual revision; an elaborate reworking required for expanding WSA into the past (i.e. Chase-Dunn and Hall 1991b). However, this reformulation was largely undertaken from the disciplines that had

instigated WST, mainly sociology and history. As the state of affairs entailed, the comparative world-systems approach that evolved (Chase-Dunn and Hall 1997) is a comprehensive alternative.

The extensive background of both researchers in sociology hints to a rationale for their refinement of WST into the comparative WSA as essentially a middle-range theory as originally proposed by Robert Merton (1968). The breakthrough consists of Chase-Dunn and Hall making a highly abstract and limited WST amenable to empirical inquiry. This echoes of Merton:

> For Merton, the problem with such total systems theorizing is that they were too far removed from empirical study in the sense that empirical studies could only offer particular instances of the general theory. In a sense, the theory was almost immune from empirical challenge and thus there was little scope for the discipline to actually use empirical studies to develop *new* theories. Observation was not really being used to *generate* theory but merely to illustrate it. Merton argued that theory needed to be built up from empirical data; he saw it working in the following way. Day-to-day research involves all kinds of guesses and speculations about what data means; these comprise working hypotheses and are essentially the bottom-level theorizing implied in his scheme. Based on this, scholars construct more rigorous middle-range theories, but these are still fairly local or particular to a certain set or range of phenomena. For Merton, total theories needed to be built up from these […] (Lucas 2015:19–20 emphasis in original)

Underscored as an intermediate range of theory that bridges high-level, or grand theory, and straightforward empirical observation (Smith 2011a, 2015), middle-range theory such as the comparative WSA permits the integration of the micro-scaled perspective (i.e. site or polity) to the macroregional scale of analysis. "Thus, we are able to evaluate an untestable, high level theory by reducing that theory to a number of middle range, testable propositions" (Maschner 1996:469). This is pertinent to the discipline of archaeology where, as within other social sciences, WST is seen as

grand theory, against the insight of Wallerstein who has stressed the preeminence of world-systems inquiry as a research strategy (Wallerstein 2002:371).

The recasting of world-systems as a comparative approach (Chase-Dunn 1988, 1992; Chase-Dunn and Hall 1997; Hall and Chase-Dunn 1993, 1996), which is considered "a work in process," derives from a decade-long examination of empirical evidence generated from the disciplines of ethnography, history, archaeology, ethnohistory, and geography. They do not claim to present a "final word" with this approach, but point out that by way of the comparative approach archaeologists "can shed light on ancient world-systemic processes and the origins of the modern world-system, provide empirical backing for hypotheses, and raise new theoretical and empirical questions" (Hall et al. 2011:233).

It is not coincidental that a groundbreaking volume on the Mesoamerican Postclassic period world-system (Smith and Berdan 2003c), discussed in greater detail below, was integrated following the criteria of the model of interaction networks bounding the world-system as defined by Chase-Dunn and Hall (1997).

As the comparative world-systems approach constitutes the basic framework adopted in the present study as a material culture model, together with some related processes highlighted in this formulation, a review of Chase-Dunn and Hall's schema of WSA is germane.

World-Systems *Refonte*

> The comparative world-systems perspective is a strategy for explaining social change that focuses on whole interpolity systems rather than single polities. The main insight is that important interaction networks (trade, information flows, alliances, and fighting) have woven polities and cultures together since the beginning of human sociocultural evolution. Explanations of social change need to take whole interpolity systems (world-systems) as the units that evolve. […]. World-systems are whole systems

> of interacting polities and settlements. Systemness means that these polities and settlements are interacting with one another in important ways—interactions are two-way, necessary, structured, regularized and reproductive. Systemic interconnectedness exists when interactions importantly influence the lives of people and are consequential for social continuity, or social change (Chase Dunn et al. 2014:1).

The citation presents a delineation of the reworking of WSA, that when set side-by-side with Blanton and Feinman's views cited above regarding an "intersocietal interactive approach," discerns networks as the conduits that bind "social actors," their "social formations," and "culture codes" beyond local boundaries to other social formations. Chase-Dunn and Hall conceive that, "world-systems, properly conceptualized and bounded, are the *fundamental unit of analysis of social change*" (Chase-Dunn and Hall 2000:85, emphasis added). Their formulation extends beyond the initial definitions of the modern world-system of Wallerstein to enable the examination of earlier and much smaller world-systems. Proposing that "all regularized material and social exchanges should be included as criteria for bounding world-systems" (Chase-Dunn and Hall 1991a, 1991b, 1997:52), their approach discerns world-systems into four specific spatial interaction networks that define the boundaries of the system; bulk-goods, political/military, prestige goods, and information networks (Chase-Dunn and Hall 1997) (Figure 2.2).

Chase-Dunn and Hall (1997:52) suggest, with good reason, that within a world-system the bulk-goods networks generally are the smallest exchange networks in geographical extension, and are related to activities associated with the production, distribution, and consumption of food, raw resources, basic necessities, or "low value-to-weight ratio goods" (i.e. grains, wood, minerals). Hence, this network corresponds to the territory required to assure daily sustenance, i.e. the subsistence or social economy. Bulk-goods networks are usually the least geographically extensive kind of network simply because these are, to a significant extent, determined by available transport technology and infrastructure

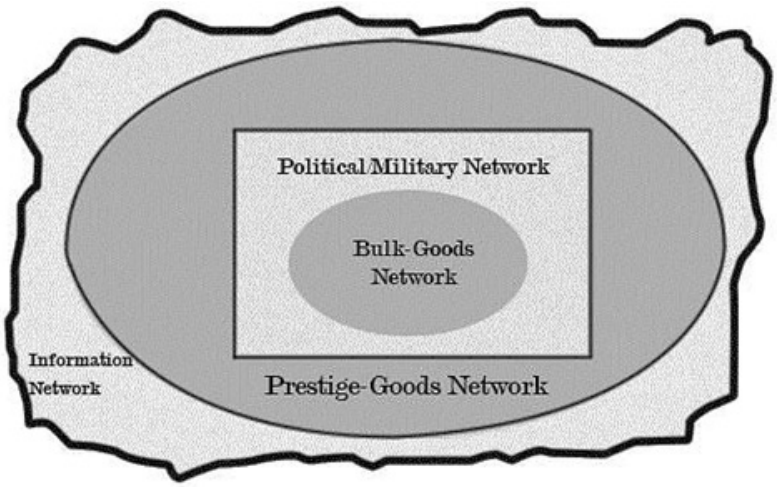


Figure 2.2. *The nested networks and spatial boundaries in a world-system (after Chase-Dunn and Lerro 2014).*

that condition the ability to move large quantities of goods in an energy-efficient manner. Hence, bulk-goods networks, among all networks Chase-Dunn and Hall suggest, are the most constrained, ultimately, by energy requirements. Kowalewski (1996:31) argues, "People can move bulk items efficiently only over short distances. Bulk items are in regular use and dependence on them is rather urgent. Most food, fuel, and fiber is consumed fairly soon after production and transfer, so the need is urgent and the cycle is often repeated, establishing a regular route of interaction."

Political/military networks are more extensive than bulk-goods networks; these are characterized as interpolity interactive networks of sovereign political units with regular interaction and exchanges that include political alliances, or conversely bellicose relations. In relations with the core, the polities of these networks count with the means to defend themselves against incorporation on the part of the core either through military strength, or conversely through sustained interaction and political alliance. In the nested network model political/military networks are found beyond the boundary zones of the bulk-goods networks (Chase-Dunn and Hall 1997:52–53).

Prestige goods networks are extensive in a world-system. The exchanges of luxury, prestige goods, or goods of a high value in proportion to their weight characterize these networks. Chase Dunn and Hall (1993:855) point out that, "prestige-goods economies constitute systemic networks because the ability of local leaders to monopolize the supply of these goods is often an important source of stability and change in local power structures." Local elites use of and potential dependence on prestige goods is rooted in their manipulation of these goods to legitimate, bestow, enhance, and maintain status in local political structures (e.g., Blanton et al. 1993; Frankenstein and Rowlands 1978; Helms 1979; Peregrine 1992). Goods that circulate through these networks are usually distributed through down-the-line exchange over considerable distance.

Closely tied to prestige goods networks are information networks, which have the potential to be the most extensive, dealing with a wide range of information exchange that goes from technology transfers to ideology, religion, and culture. Due to its lightweight, information is easily exchanged over long distances.

Prestige goods and information play important roles in the geographical expansion of world-systems. However, in processes of interpolity interaction, Carlson underscores the complexity involved in considering the significance of both,

> While contact between societies can have immediate socio-cultural impact (e.g., disease, new technology, new precious resources, mere "awareness", identity re-structuring) it is not as clear how luxury trade shapes the political and economical arenas. Yet, a "'prestige system' represents the myriad of ways in which prestige is accrued and maintained in the society. It includes knowledge, rituals, and symbols, which convey and display status" (Peregrine 1999:39). Political power, derived from status, comes from prestige systems. This introduces two additional points. First, is "knowledge" a luxury good? Dealing with information networks and exchange of knowledge is one area of world-systems theory that needs to be expanded, and should prove fruitful. Second, what roles do

> symbols and rituals associated with "prestige" play in changes that result after the initiation of trade? Can the exchange of information or ritual create systemic interdependence (Peregrine 2000)? *These are worthwhile points to consider when identifying cultural and social change, and they become good measures of cultural and social incorporation* (Carlson 2012:89, emphasis added).

Carlson's observations will implicitly come to the fore below in Chapters 4 and 6.

In summing, it is pertinent to reiterate that these four networks combined, nested, constitute a world-system (Chase-Dunn and Hall 1997:53). A world-system is thus multi-dimensional and diverse, rather than a hegemonic entity. Chase-Dunn and Hall conceive that, through time, the sizes of networks may shift. However, before these changes can be examined the system must be bound. The existence of a bounded network must be shown empirically, hence, the "first question for any focal locale is about the nature and spatial characteristics of its links with the above four interaction networks" (Chase-Dunn and Hall 2000:90).

Another important aspect of the comparative perspective is the refinement of core/periphery relations, which is conceptualized in two distinct forms: core/periphery *hierarchy* and core/periphery *differentiation*. Core/periphery hierarchy exists when one composite unit dominates or exploits another; here "political, economic, or ideological domination exists" (Chase-Dunn and Hall 1997:28) among composite units of the world-system. Core/periphery differentiation occurs when two composite units interact systemically with one of them characterized by higher social complexity and a higher population density than the other. This distinction is especially pertinent to world-systems analysis, since it "allows us to deal with situations in which larger and more powerful societies are interacting with smaller ones but are not exploiting them" (Hall and Chase-Dunn 2006:37). Core/periphery differentiation constitutes the broad-scale relations that will be examined in the present study during the Early Classic period (250–550 CE) and the Early Postclassic period (900–1200 CE).

In the nested network model, core/periphery relations are tied to the process of incorporation, a tendency by which world-systems expand, particularly when state formation is involved. Incorporation corresponds to the manner in which new territory and population are assimilated or integrated into an expanding system.

> First, incorporation is not unidimensional, but multidimensional along the four types of world-systems boundaries. Incorporation can be economic (for either bulk-goods or luxury goods), political/military, or socio-cultural, which includes all types of information and symbols; Second, incorporation creates multiple frontiers, corresponding to each of the boundaries; Third, *ceteris paribus*, incorporation will begin at the furthest boundaries (cultural, symbolic, or luxury goods) and proceed to the narrower, more intense forms along the political-military boundary and finally along the bulk-goods dimension; and Fourth, relations among the dimensions of incorporation and the resulting frontiers is complex theoretically and empirically (Hall 2002:45).

In the analysis of core/periphery differentiation incorporation represents a wide-scale integrative process of transformation operating through the expansion of the networks that defines the geographic dimensions of the system. In essence, as Carlson (2001:226) underscores, "A region does not just become part of a system, *something*—some change—must occur." As new regions are incorporated into a world-system, sociopolitical processes are transformed.

Related to the process of incorporation, an important issue for the analyses of world-systems over the long-term and therefore addressed in this study relates to what Chase-Dunn and Hall define as the phenomena of pulsation.

> All world-systems pulsate in the sense that the spatial scale of integration, especially by trade, becomes larger and then smaller again. During the enlarging phase, trade networks grow in territorial size and become more dense in terms of frequency

> of transactions. During the declining phase, trade slackens and local areas become less connected and reorganize around self-sufficiency. Local identities and the cultural distinctions between local groups and outsiders are emphasized (Chase-Dunn and Hall 1997:204).

Hence, all four networks: bulk-goods, political/military, prestige goods and information increase in density of interaction as the system integrates new regions: "When interaction increases, there are more exchanges with consequences over a greater distance" (Chase-Dunn and Hall 1997:100). As perceived in this model, the process of incorporation, concomitant with pulsation, has considerable tempo-spatial impacts in interregional interaction as exchanges in the nested networks increase. In world-systems analysis, the change and transformations brought about by this integrative process constitute important issues for empirical inquiry.

Another aspect highlighted in the comparative perspective of WSA that is pertinent to this study is the role and importance of the semiperiphery. Chase-Dunn and Hall (1997:37) define the semiperiphery as a region "that mixes both core and peripheral forms of organization," which "may be spatially located between the core and peripheral regions," likewise it may be situated "between two or more competing core states." They further state that mediations between the core and peripheral region may be undertaken in the semiperiphery. Lastly they posit that the semiperiphery region may present "institutional features which are intermediate in form between those forms found in adjacent core and peripheral areas." Chase-Dunn and Hall (2000:96) underscore that the semiperiphery "is fertile ground for social, organizational, and technological innovation and is in an advantageous location for the establishment of new centers of power." This semiperiphery will come into greater focus below when concluding on the patterns observed within West Mexico as part of the Mesoamerican world-system in the course of a millennium.

In sum, the comparative approach as a material culture model with its emphasis on spatial boundaries for four interaction networks

is relevant to archaeology, as the discipline is "fundamentally spatial in orientation, focusing on the search for patterns in spatial data and relating them to the world of social, economic, and political behavior. It is precisely this kind of socio-political analysis that the world-systems perspective allows one to do" (Peregrine 1996:2).

The Nested-Network Approach in World-System Analysis: West and Central Mexico

> Having identified the unit of study in the interaction paradigm, we immediately confront a perennial archaeological problem, the drawing of boundaries. This is, of course, a difficulty on all analytical scales, including delimiting sites and particular societies. *The reconstruction of ancient intercommunication networks depends on our ability to identify the material correlates of contact* (Schortman and Urban 1992a:236, emphasis added).

The quotation from the concluding section of a classic treaty on interregional interaction from the early 1990s illustrates two substantial problems confronted by researchers in analysis of broad-scale interaction. In the above section it was emphasized that world-systems theory underscores that any region, composed of numerous polities, can only be understood through its interactions with other regions. The subsequent refinement of world-systems theory for world-systems analysis through the definition of Chase-Dunn and Hall's model of four nested networks provide the criteria for defining the spatial scales for bulk-goods, political/military, prestige goods, and information networks. However, Schortman and Urban's underscoring of material correlates is highly pertinent to any study of this nature.

In a recent study of Postclassic Mesoamerica (Smith and Berdan 2003c) the nested networks model as conceived by Chase-Dunn and Hall is utilized to outline the broad extension of the Late Postclassic world-system. In doing so, the large-scaled networks of prestige goods and information networks that bound this world-

system were defined. However, in breaking down the system into interregional components, they propose a division of Mesoamerica into zones of resource-extraction and unspecialized peripheries, articulated to the system through interregional exchange circuits, analogous to Abu-Lughod's (1989) conceptualization of the Eurasian world-system in the thirteenth century (Smith and Berdan 2003a). Thus, the application of the nested-network approach in The *Postclassic Mesoamerican World* is innovative, reflecting the utility of a WSA at the generalized macro-scale of inquiry, while likewise, they acknowledge the difficulty of taking WSA to the interregional scale (Smith and Berdan 2003b:22).

In this last sense, the present study confronts the pending approach to the interregional scale, narrowing the focus of inquiry parting from a recognizable core zone through a number of contiguous areas. WSA undertaken at this scale is lacking for Mesoamerica. Undertaking an areal analysis and applying the nested-network model in a spatial continuum as was originally conceived by Chase-Dunn and Hall (1997), is proposed to constitute a fertile ground for conceiving processes that integrate diverse archaeological data accumulated throughout decades of research within that territory. In this way, I will rely upon West Mexico and Central Mexico's relationship to examine and define material correlates and empirical patterns for interaction networks in core/periphery relations for two periods: the Early Classic and the Early Postclassic.

Initial considerations of core/periphery relations require extrapolating the networks described above to material evidence that would correlate with their proposed spatial characteristics and boundaries. When "drawn as sharp lines in diagrams (e.g., Chase-Dunn and Hall 1997:54, Fig. 3.1), the networks give a false sense of precision. Rather, they should be imagined as a contour map where the isoclines of the density of exchanges are bunched together. Such sharp falloffs, or cliffs, would be the 'boundary' of a network. They are frontiers internal to a world-system" (Hall et al. 2011:242). From the conceptualization of the four nested networks, a number of assumptions are relevant to defining material correlates for

empirical patterning from the core (bulk-goods network) to the periphery (prestige goods and/or information networks) for the Early Classic and Early Postclassic periods.

For bulk-goods networks, normally the geographically least extensive of the networks, the probability of the core state exerting some form of political-administrative control in the surrounding territory required for the production of daily foodstuffs and raw materials for the sustenance of the highly dense populated urban zone would suggest empirical patterning which shows a tendency toward the homogeneity of material culture related to the core (Smith and Montiel 2001). Hence an issue for the analysis of the extension of bulk-goods networks requires focusing on material patterning in territory beyond the core urban zone, which may suggest hinterland territorial integration. Likewise, as the boundaries of bulk-goods networks are reached, the material patterns of these networks should present a fall-off in density as the limits on these networks give way to a transition zone or boundary to territory of political/military, prestige goods, and information networks.

Political/military networks should contrast with material patterning of bulk-goods networks in at least two ways. If a relationship of sustained conflict exists (e.g., Pollard and Smith 2003) the presence of strongholds and of fortresses indicative of a closed militarized border would be present in the zone of transition between bulk-goods and military networks. Conversely, in the case of alliances between a state level society and sovereign polities of political networks these relations are considerably more difficult to distinguish and characterize (e.g., Chase Dunn and Hall 1997:59-69; Cowgill 2003; Marcus 2003). In the case of core/periphery differentiation a sustained relationship articulated through the mediation of local elite interactions with elites of a state level society would suggest material correlates indicative of emulation on the part of sovereign elites through the use of elite material culture (i.e. exotic imports, symbols) which could play into the political economy of the polities within these networks (Filini 2004; Marcus 2003:352). In the specific cases of polities interacting with Teotihuacan and/or Tula, alliance with polities

of political/military networks may present core-like material and symbolic culture, presenting discernible patterns of modification through emulation, essentially grafting core ideology into local idioms. Here, material culture of local cultural tradition would present evidence of integrating aspects of core ideology for use by local elites (e.g., Filini 2004; Hernández 2016; Stoner 2011). As prestige goods and information networks are nested with political/military networks (Chase-Dunn and Hall 1997) imports, status markers, and ritual paraphernalia symbolically related to the core might be present in the polities of these networks. These are posited here as potential diagnostic patterns indicative of alliances within political/military networks.

From the zone of political/military networks, the transition to prestige goods networks, which as seen above may be of considerable geographic extension, would present material culture indicative of links to the state level society. In the specific cases of networks related with the core states of Teotihuacan and/or Tula, material correlates for prestige goods as exemplified by Neff's *Pots as Signals* (2014) are relevant to this study, involving Thin Orange ceramics (Teotihuacan), Plumbate ceramics (Tula), and obsidian (e.g., Carballo 2013; Fahmel 1981, 1988; Golitko and Feinman 2015; Healan 2011; Neff and Bishop 1988).

The last transition zone into the territory of information networks should present a fall-off of prestige goods, characterized by the presence and distribution of discrete elements in local contexts that would evidence modified versions or local interpretations of ideational elements related to ideology and culture of state level society. In information networks evidence of core/periphery differentiation would be characteristically discernible in behavior, ideas, and symbols in contrast to the portable objects in circulation between polities of prestige goods networks. Likewise, it is pertinent to recall that, in some cases, the boundaries of prestige goods networks and information networks may be very similar (Chase-Dunn and Hall 1997:53). The above assumptions were drawn from an initial consideration of the nested-network model in relation to the archaeology of Central Mexico and West Mexico (Jimenez 2005).

The macroregional areal spatial analysis undertaken for this study in the determination of networks and their boundaries was undertaken in the following manner: A) The discernment of the spatial dimension of the bulk-goods networks of Teotihuacan and Tula. B) The subsequent spatial dimension to be established corresponded to the total spatial dimension of diagnostic categories of prestige goods ascribed for both core states. C) The definition of political/military networks determined through the analysis of material culture from areas adjacent to the boundaries of bulk-goods networks. D) The determination of information networks was undertaken through a revision of the three initial networks to identify material culture that would have required the transmission of information to contextualize its presence or use (behavior, ideas, technology, and symbols).

A comprehensive study of this nature was undertaken through the analysis of localized studies and data sets from Central Mexico and West Mexico. The studies used here derive from published material, unpublished theses and dissertations, numerous unpublished archival reports from past excavations and materials analysis, and the revision of archaeological collections from rescue and salvage excavations. Likewise, a source of information was recuperated from archaeological collections from museums where provenience is established. Lastly a source of data comes from ongoing research where colleagues have produced preliminary reports and have kindly submitted contexts for inclusion in this study; this includes data from our ongoing projects in Cerro del Teul and Cerro de Las Ventanas.

Chapter Three

The Regional Setting of West Mexico at 200 CE

Mesoamerica: Unfurling the Spatial Dimension of Inquiry

It is often overlooked that when Robert Weitlaner, Wigberto Jiménez Moreno, and Paul Kirchhoff teamed with a group of advanced students in a research committee to undertake the survey of the vast territory of present day Mexico and the adjacent area south to discern and classify the diagnostic traits and boundaries of the area, they submitted a summary report of preliminary results of a work in progress (Jáuregui 2008). The report *Mesoamerica* (Kirchhoff 1943) was prepared to elicit a thorough analysis and discussion with colleagues to enhance a second round of inquiry that was to follow. Kirchhoff expresses in the essay that he is "eager for suggestions concerning the best way to continue this study" (Kirchhoff 1943:107, translation by the author), along with a petition for additional research which might have a bearing on the inquiry. The consultation and review Kirchhoff and committee anticipated never occurred. Mesoamerica as conceived in this brief account was promptly assumed, promoted, and taken for granted (Jáuregui 2008). Half a century later however it has begun to receive both the scrutiny and discussion originally sought by Kirchhoff. Most recently this stems from the inadequate definition of its northernmost limits where Mesoamerican worldview along the Sierra Madre Occidental has been documented by ethnography (e.g., Jáuregui 2008, 2017; Sociedad Mexicana de Antropología 1990).

From the original demarcation of Mesoamerica (Figure 3.1) the delimitation of the northern boundary as determined from

the examination of linguistic and ethnohistorical data resulted in the pronounced depression distinguishable on most maps of Mesoamerica to date. This left a number of archaeological sites, among them La Quemada and Alta Vista, out of the bounds of the mid-sixteenth century Mesoamerica. Concerning this matter, Kirchhoff pointed out the movements of the boundary, initially expanded northwards, only to retract due to invasions by non-Mesoamerican groups. The expansion and contraction of the northern frontier became the focus of Pedro Armillas' work at the site of La Quemada where he proposed climate change having occurred sometime between the twelfth and thirteenth centuries as stimuli for the conflicts, which resulted in this retraction (Armillas 1964, 1969; Braniff 1974).

The hypothesis of climate change held considerable sway for four decades, only recently being shown to have not been a factor in the demise of the sedentary Mesoamerican occupation (i.e. La

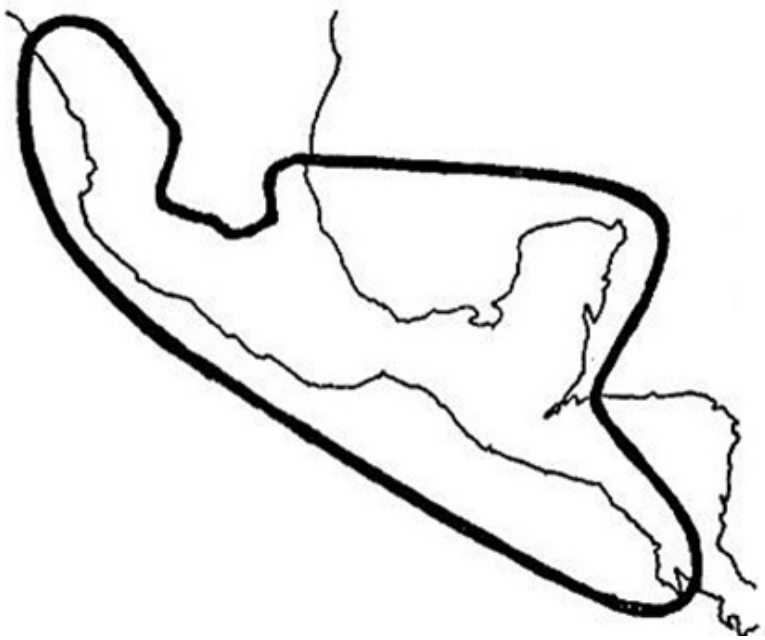


Figure 3.1. *Spatial configuration of Mesoamerica in the sixteenth century (after Kirchhoff 1943).*

Quemada and Alta Vista) of the northern frontier (Elliot et al. 2010; Somerville 2015). However, the issue of the expansion and retraction of the northern frontier stimulated the notion of the northern reaches of Mesoamerica as an analytical region apart, separated and marginal, characterized by prolonged bellicose relations with nomadic groups, the *Chichimecs* (i.e. Armillas 1964, 1969; Braniff 1989; Hers 1989).

From the initial definition of Mesoamerica (Figure 3.1), the culture area has been divided into several regions based on shared distinctive stylistic characteristics in material culture highlighting the diversity within Mesoamerica (e.g., Marquina 1951; Noguera 1965; Willey 1966). Over time these divisions have become accepted as general reference points for classification and definition of research areas (Evans 2012). The regional division of Mesoamerica as proposed by Willey et al. (1964: Fig. 23) conveys the integration of West Mexico and its northern frontier (Figure 3.2). The coherency of this early integration is highly relevant having defined the material evidence from the frontier settings from the sites of Alta Vista and La Quemada that bind this frontier to West Mexico in the Epiclassic period (Jimenez and Darling 2000; Jimenez 2013). Diverse aspects pertaining to West Mexico's northern boundary expansion, apogee, and subsequent contraction will come to the fore in the course of Chapters 4–6 below.

Likewise, but at an even greater scale, West Mexico's regionalization has consistently constituted an obstacle due to the collateral conceptualizations of having been a bounded region, isolated, and marginal from the rest of Mesoamerica (Schöndube 1980:118). A substantial part of this conceptualization stems in large part owing to West Mexico's distinctive Shaft-tomb and Teuchitlán traditions (described below), the apparent lack of an Olmec presence, and a seemingly low concentration of Mesoamerican pyramids across the region. More specifically, West Mexico's integration into Mesoamerica is viewed as a late occurrence, dated to the Early Postclassic period (900 CE) (Schöndube 1980:215–230).

From the first example mentioned above, natural barriers did not constrain, obstruct, nor separate what has been conceived as

Figure 3.2. *Regional division of Mesoamerica proposed by Willey et al. (1964: Fig. 23).*

West Mexico and its northern frontier, but rather the opposite; riverine corridors integrated this region from around 500/550 CE., if not earlier (Jimenez and Darling 2000; Kelley 1974). Likewise, when considering interregional interaction between West and Central Mexico, geographical features underscore a spatial dimension absent of barriers that neither separated, nor could have impeded interactions between these regions. Here, geography is especially propitious for interregional interaction.

The geography of middle Mexico is highlighted by the physiographic region of the Mesa Central, flanked on its southern edge by the Neovolcanic Axis, the vast chain of volcanoes that crosses middle Mexico. The Mesa Central is highlighted by the chain of lake basins that extend from Central Mexico through West Mexico. West details the relevance of the Mesa:

> In terms of human habitation the most significant landforms of the Mesa Central are the flat-floored basins that today cover much of the plateau surface between surrounding volcanic features. In size these basins vary from very small pockets of a few square kilometers to large areas such as the Valley of Mexico (45 by 75 km.) or the extensive area of interconnected basins, called the Bajío of Guanajuato near the center of the Mesa Central […] Abundant aquatic wild life in and around the remaining lakes and the fertile, easily worked soils on adjacent volcanic slopes attracted dense aboriginal settlement within the basins […] Although scattered throughout the plateau, one of the most important sources of obsidian in all Mesoamerica in ancient times was The Cerro de las Navajas, a rhyolitic hill east of the Valley of Mexico (Aubert de la Rüe, 1958). Other especially abundant deposits are found in the Sierra de San Andres, near Ucareo, northern Michoacán; near Cadereyta de Montes, Querétaro; and in the Sierra de la Venta, near Magdalena, Jalisco. In preconquest times obsidian was one of the most important items traded into adjacent nonvolvanic areas (West 1964:45–47).

The chain of interior drainage lake basins extending through the Valley of Mexico to extreme West Mexico (Figure 3.3) were highly favorable environments of sustained long term human occupation and diverse social complexity. These basins correlate well with Rosenswig's (2011:242) analogy drawn from Braudel (1992), as "cultural islands, forming an archipelago" for interregional interaction (Arnauld et al. 1993; Cárdenas 1999, 2004; Carot 2001; Darras 1998; Filini 2004; Liot et al. 2006b; López Mestas 2011; Pollard 1993, 1997, 2000, 2003b, 2008; Sanders and Price 1968; Sanders et al. 1979; Schöndube 1980; Valdez et al. 2005; Weigand 1985, 1996, 2000; Weigand et al. 2008; Williams 2014).

Supplementary to the lacustrine chain of the Mesa Central, the extensive river system of the Lerma-Santiago basin initiates its course in the Valley of Toluca, west of the Basin of Mexico. Passing through the Bajío the Rio Lerma empties into Lake Chapala, the

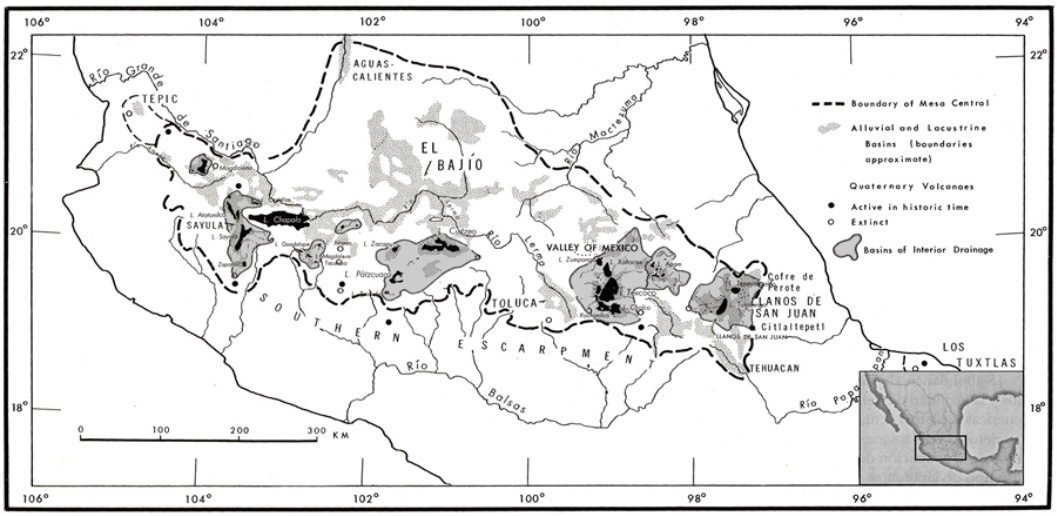
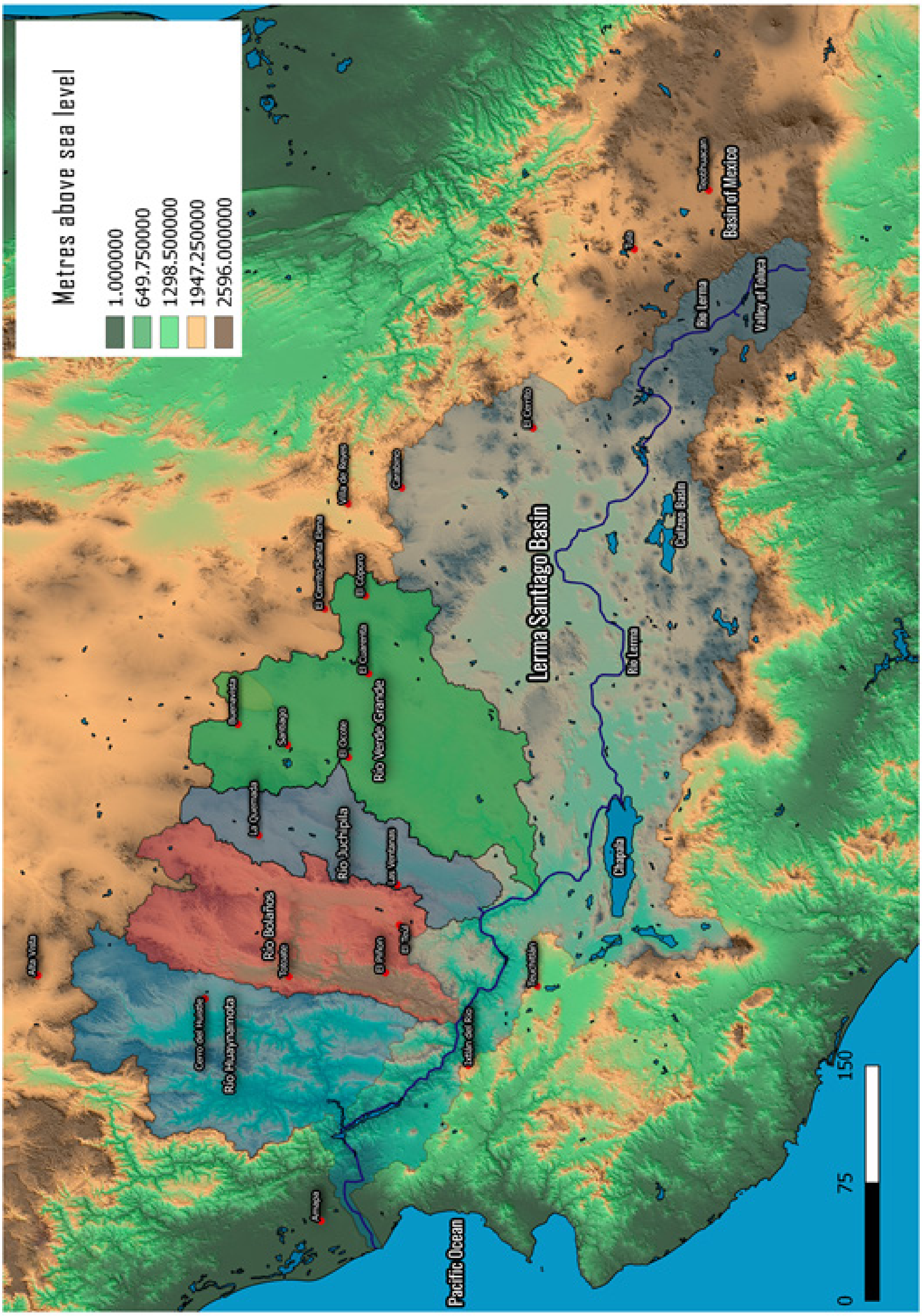


Figure 3.3. *The Mesa Central of Mexico (integrating West 1964: Fig. 8 and Tamayo and West 1964; insert from Editorial Raíces).*

center of West Mexico. From Chapala the second segment of this system, the Rio Santiago, traverses the remaining distance to the Pacific (Tamayo and West 1964). The second segment of the river system receives four tributaries from northern areas: Rio Verde, Rio Juchipila, Rio Bolaños, and Rio Huaynamota. These four rivers integrate the interstitial valleys of southern Zacatecas and northern Jalisco, as well as the deep ravines of the Sierra Madre Occidental, the territory of the northern frontier of West Mexico (see Araiza 2000; Cabrero 1989, 2005; Hers 1989; Jimenez 1988; Jimenez and Darling 2000; Kelley 1971; Pérez 2007).

The final leg of the Rio Santiago integrates the Pacific coastal plain with inland West Mexico. The Sierra Madre Occidental separates the Pacific coastal plain from the inland valleys of central Durango (Figure 3.4). However, even the natural barrier of the Sierra Madre did not hinder intense interaction between coastal and inland societies (Kelley 1986; Punzo 2013), as is shown by archaeological research along the Pacific coastal plain extending

Figure 3.4. *(overleaf) Lerma-Santiago Basin (QGIS Development Team, <2005>. QGIS Geographic Information System. Open Source Geospatial Foundation Project. http://www.qgis.org/) (positioning of sites Manuel Dueñas and Peter Jimenez; elevation data from INEGI (Instituto Nacional Estadística y Geografía, Mexico).*


Metres above sea level
1.000000
649.750000
1298.500000
1947.250000
2596.000000
Lerma Santiago Basin
Basin of Mexico
Valley of Toluca
Río Lerma
Cuitzeo Basin
Chapala
Río Verde Grande
Río Juchipila
Río Bolaños
Río Huaynamota
Pacific Ocean
0
75
150

from present day Michoacán to Sonora, which has advanced substantially in the last three decades (Beltrán 2001; Carpenter 1996; Foster 1999, 2000; Meighan 1976b; Mountjoy 1995, 2000; Olay 2004, 2012; Scott and Foster 2000; Villalpando 2000).

Thus it is underscored that between West Mexico and Central Mexico, the alluvial zones and lacustrine basins of the Lerma-Santiago system and the chain of lakes of the Mesa Central were considerably favorable for long-term Mesoamerican occupation (Williams 2014:33–55).

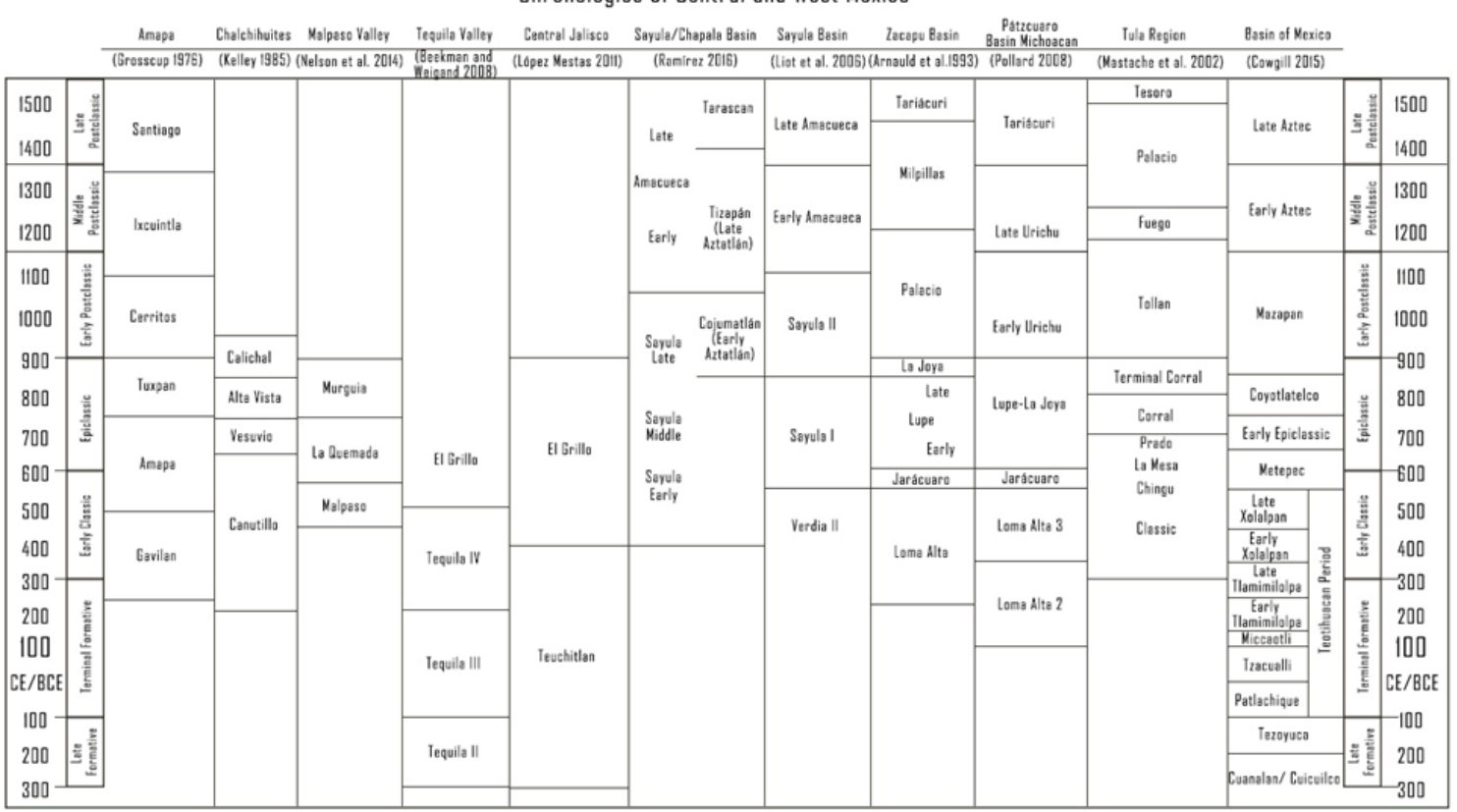
The Cultural Setting at 200 CE

The above overview has defined the spatial horizon of inquiry to be covered throughout this study to determine the effects of the expansion of the Mesoamerican world-system into West Mexico during the Early Classic (250–550 CE) and Early Postclassic (900–1200 CE) periods. The subsequent chapters of the regions of West and Central Mexico examine material evidence for the spatial-temporal advance of interaction networks. As a starting point for this study a general description of the cultural setting of Late Formative period West Mexico at 200 CE serves as a backdrop against which to examine changes beginning between 200–300 CE as West Mexico increasingly integrated into interaction networks with Central Mexico (Table 3.1).

Above it was pointed out that significant segments (temporal and spatial) of the pre-Columbian past of West Mexico remain sketchy. In chronological terms, as will be seen below in greater detail, the knowledge of the Postclassic (900–1531 CE) and Epiclassic (600–900 CE) periods is considerably more abundant in the region than the understanding of the Late Formative period (300 BCE–300 CE). For example, what is known of the Postclassic period, Tarascan development, and subsequent empire in Michoacán (central West Mexico) in terms of subsistence, sociopolitical organization, economy, and trade (Pollard 2000) strikingly contrasts to the extremely modest state of knowledge

Table 1. *(overleaf) Comparative chronologies of regions discussed in the text.*

Chronologies of Central and West Mexico

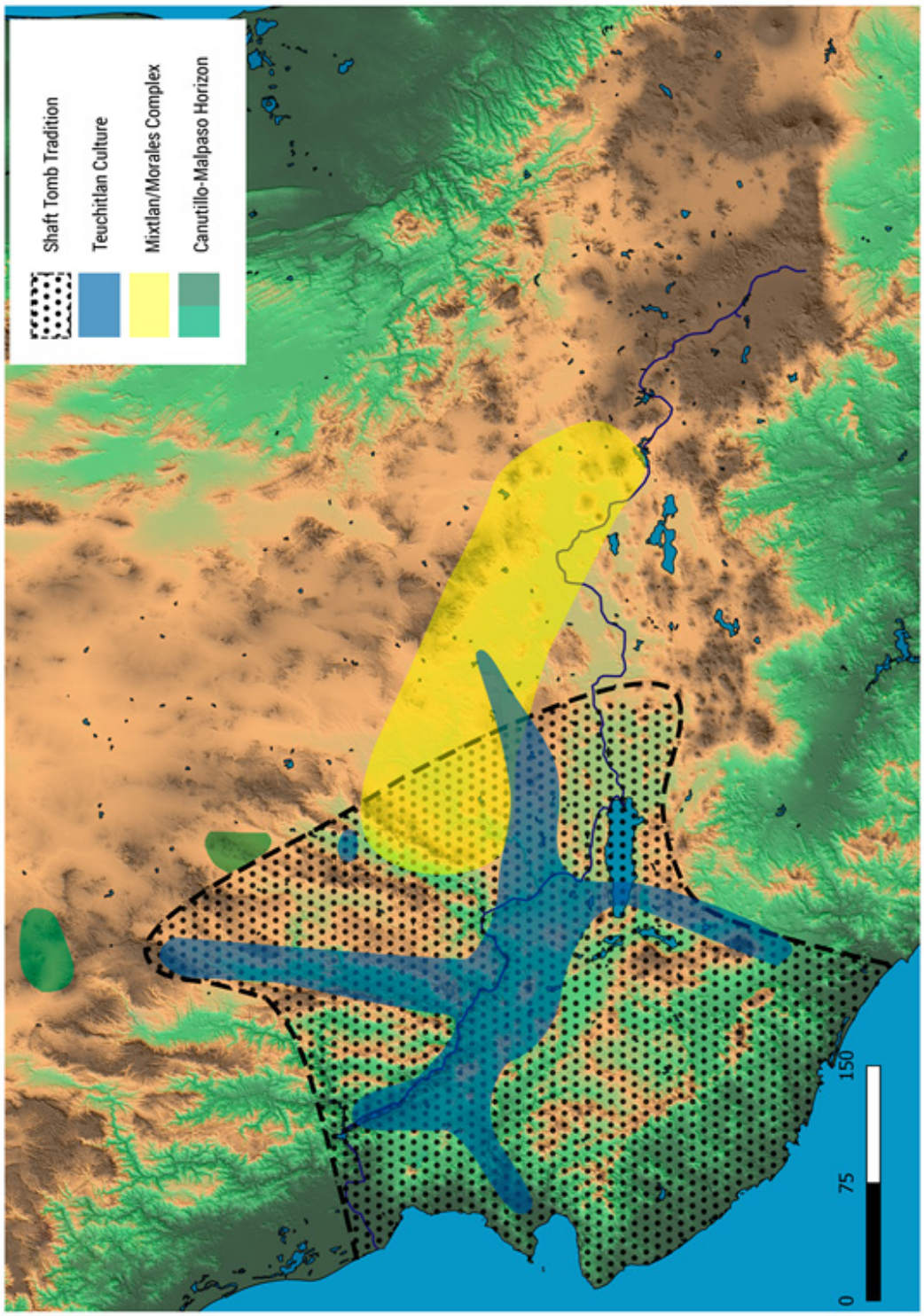


for what is known for the Late Formative period (Beekman 2010). The shortage of data sets, coupled with the high degree of deterioration of contexts pertaining to the Late Formative period make any statements on the above-mentioned categories highly speculative and troublesome (Beekman 2012). West Mexico at 200 CE is characterized by four cultural developments, the first three of which were in existence previous to this date: 1) the Shaft-Tomb tradition; 2) the Teuchitlán and Bolaños cultures; 3) the Mixtlán complex of the Bajío, and 4) the Canutillo-Malpaso horizon of the northern frontier (Figure 3.5).

At 200 CE the West Mexican Shaft-Tomb tradition (300 BCE–400 CE), a hallmark of the archaeology of West Mexico, extended throughout a considerable portion of western West Mexico (Figure 3.5) (e.g., Beekman and Pickering 2016; Cabrero 2005, 2010; Schöndube 1980; Solar 2010b; Townsend 1998b). The tombs consisted of an excavated vertical shaft that subsequently expanded into a horizontal burial chamber, generally containing numerous ceramic vessels, large hollow zoomorphic and anthropomorphic figurines, elaborate shell ornaments, and multiple human burials. A classic overview of West Mexico (Schöndube 1980) has shown extensive localized styles of vessels and figurines throughout the zone of this tradition. Architecture associated with this tradition is still to be defined. Since most of the material remains known from this tradition have been brought to light by looting during the twentieth century, only since the 1990s have a limited number of tombs been identified and excavated by archaeologists, for which further knowledge of this regional basic Mesoamerican village horizon is pending. A recent in-depth study on the Shaft-Tomb tradition establishes its surmise at 400 CE (López Mestas 2011).

Within the zone of the Shaft-Tomb tradition, the Teuchitlán culture is widely considered the culmination of West Mexico's Late Formative period, with the Teuchitlán culture the most complex sociopolitical development at 200 CE (Beekman 2010; López Mestas 2011; Weigand 2000). At this time, the Teuchitlán culture—

Figure 3.5. *(overleaf) The culture setting of West Mexico at 200 CE (sphere dimensions based on Beekman 2010:61, Fig. 4; Braniff 2000; Jimenez 1988; Jimenez and Darling 2000; Kelley 1989, 1990a; Solar 2010a: Fig. 6).*


Shaft Tomb Tradition
Teuchitlan Culture
Mixtlan/Morales Complex
Canutillo-Malpaso Horizon
0
75
150

highlighted by monumental circular architectural patios with circular central altars, or *Guachimontones*, and its regional variants of shaft-tombs (Ramos de la Vega and López Mestas 1996)—is at its highpoint of development previously known as the Ahualulco phase, recently readjusted as the Tequila IV phase (Beekman 1996b, 2010; Beekman and Weigand 2008, 2010; Weigand 1985, 2000). For decades a few archaeologists considered the Teuchitlán culture an archaeological tradition that had achieved a state level development during the Late Formative period (Weigand and Beekman 1998) based on the concentration of monumental architecture detected around the Magdalena lake basin.

Early work in Bolaños Canyon (Rio Bolaños; Figure 3.4), north of the Magdalena Basin, had revealed the existence of the distinctive circular architectural pattern in the mid-section of the canyon at the site of Totoate (Hrdlicka 1903; Kelley 1963, 1971). Surveys and excavations have since shown the pronounced northward extension of localized versions of the Teuchitlán culture architectural pattern extending through Bolaños into the Valley of Valparaiso of present day southern Zacatecas (Cabrero 1989; Cabrero and López 2002). The subsequent identification of the circular architecture pattern at isolated sites north and east of the Magdalena Basin is intriguing since it is not clear what processes would have produced this distribution (Figure 3.5). Beekman has summed inferences and problems concerning the circular architecture pattern, and the sociopolitical organization of the Teuchitlán culture:

> I interpret these as elite lineages or perhaps elite members of lineages present on the broader landscape, but authority shared in some way in a corporate mode (in the sense of Blanton et al. 1996). In larger circles the relationships are distinct, and there may be structures around a circle that were constructed using disparate methods, suggesting larger social alliances (Beekman 2008a). Individual ceremonial centers may have from one to ten guachimontones of varying sizes (Ohnersorgen and Varien 1996; Weigand 1985), creating a conundrum for archaeologists as to how this shared power structure may have been instantiated at larger scales. In a

> sense, we need to close the gap between older regional studies and newer local studies in order to understand how this local political activity created the apparent core and periphery distribution of guachimontón sites across west Mexico (Beekman 2010:63).

Recent studies and revisions have determined that Teuchitlán constituted a complex chiefdom, which subsequently fell from regional prominence at 400 CE (López Mestas 2011; Trujillo 2015).

To the eastern extreme of West Mexico, in the Bajío and the Cuitzeo Basin (Figure 3.4) a localized cultural development known as the Mixtlán complex (0–420 CE) refined to Mixtlán 1 (0–250 CE) and Mixtlán 2 (250–420 CE) phases (Darras and Faugère 2010). This complex has largely been associated with sedentary villages, and a reduced number of sites with a "geographically privileged position" possibly related to elites (Darras and Faugère 2010:294). An aspect consistently overlooked pertaining to the Mixtlán complex of the Bajío is the close cultural relationship with the contemporary subregional Morales complex (Braniff 1972; Darras and Faugère 2010:314–315), which extends northwestwards out of the Bajío into the Los Altos of Jalisco and the Juchipila Valley of southern Zacatecas (Braniff 2000; Jimenez 1988, 1989; Jimenez and Darling 2000). In this zone, during the first to third centuries CE there is a mixing of the Shaft-Tomb and Mixtlán derived traditions (Figure 3.5). This cultural confluence of the western and the eastern zones of West Mexico is present in the Juchipila Canyon, 75 km south of La Quemada on the northern frontier.

North of Juchipila Valley of southern Zacatecas and the Teuchitlán zone of central Jalisco, the Canutillo-Malpaso horizon (Figure 3.5), characterized as the basic Mesoamerican sedentary village occupation of the northern frontier, has been defined in the Suchil and Bolaños subregions of Zacatecas and Jalisco (Cabrero 1989; Kelley 1956, 1971, 1989; Jimenez 1988, Jimenez and Darling 2000). The ceramics of the Canutillo-Malpaso horizon are present in the Malpaso Valley, yet in contrast to the Suchil zone to the northwest, village contexts of this horizon have not been excavated (Trombold 1985; Weigand 1985).

It has been posited that the early Mixtlán phase of the Bajío was the origin of the initial colonization of the northern frontier during the first and second centuries CE, which brought the square patio village architecture into the realms of the northern frontier (Braniff 1972, 2000; Jimenez 1988, 1989; Jimenez and Darling 2000; Kelley 1963, 1971, 1974). Significant change in the social complexity of the Suchil and Malpaso zones of the northern frontier zone, as well as in many other areas of West Mexico, occur later at around 450/500 CE with the appearance of ceremonial centers. This issue will come to the fore in the following chapter. With the exception of the Teuchitlán culture, at 200 CE agricultural villages characterized the region beyond the Rio Santiago. Many of these retained elements of distant traditions (i.e. circular architecture, square patio architecture, and ceramics) while incorporating distinctive local variants into their material culture, which distinguish them within the mosaic of early frontier cultural spheres (e.g., Cabrero 1989, 2005, 2010; Kelley 1974; Solar 2010a). This northern frontier scenario corresponds in many aspects with what is occurring in general throughout most of the region at 200 CE where the Late Formative period "is distinguished by rapid population growth and expansion into many new areas, increased differentiation between subregions in the highlands, evidence for social inequalities across most of western Mexico, and rapid political centralization in some areas" (Beekman 2010:61). However, after 200 CE, the eastern portion of West Mexico would manifest evidence of early interaction with Teotihuacan, henceforth giving way to ever increasing interaction, stimulating social change throughout much of West Mexico as the region integrated into the expanding Early Classic Period World-System.

Chapter Four

The Late Formative-Early Classic Period Transition in West Mexico 200/250–550 CE

Teotihuacan before the mirror of empire

The period 200–250 CE was a dynamic time in Central Mexico. In the semi-arid plain of the northeastern Basin of Mexico the urban zone of Teotihuacan covered approximately 20 square km, containing a population between 80,000 to 100,000 people (Cowgill 2015:79; Millon 1981:221). The monumental structures of the ceremonial precinct (i.e. *La Ciudadela*, the Pyramid of the Sun, and the Pyramid of the Moon) were already in place, subsequently undergoing periodic augmentations throughout the next two centuries (Sugiyama 2012:221). Concurrently, the state of Teotihuacan undertook expansion beyond the Basin of Mexico into adjacent areas of Central Mexico in order to secure a sustaining hinterland (Hirth 1978).

Beyond the hinterlands, archaeologists working in regions both distant and adjacent to Teotihuacan have proposed that, "Teotihuacan's foreign relations were a mosaic of trade diasporas, diplomatic exchanges, pilgrimages, emulation, and strategic direct interventions of limited duration" (Nichols 2016:1). This kaleidoscope is indicative of the complex range of interactions that occurred between Teotihuacan and other regions. Marcus observes "there can be no 'one-size-fits-all' model for contacts with Teotihuacan. In some cases, there is evidence for a single short-term contact; in other cases, there seems to have been repeated contact over many centuries" (Marcus 2003:347). Thus, inquiry in the latter cases involves even more complex considerations in order

to distinguish how relations may have changed over the course of three centuries in any one region (Cowgill 2003:328–332). The quandary of understanding Teotihuacan's presence outside the Basin of Mexico has been a thought-provoking issue for both research and debate for many decades (Braswell 2003; Coggins 1983; Cowgill 2015; Demarest and Foias 1993; Filini 2004; Rattray 1987; Santley and Alexander 1996; Spence 1992, 1996; Stark 1990; Stone 1989; Stoner 2011). Paradoxically, part of the convolution in understanding the foreign presence of Teotihuacan resides in how researchers perceive the nature of rulership at Teotihuacan itself. This inside/out rendering is polarized (Braswell 2003b) while considerations pertaining to the internal organization of Teotihuacan are regarded highly speculative (Cowgill 2003, 2015:190). Internal interpretations vary for instance as to the nature of its central organizational hierarchy, ranging from a highly institutionalized religious authority to a pervasive martial coercive rule (Cowgill 1997, 2003; Headrick 2007; Manzanilla 2006, 2009; Millon 1988 Pasztory 1997; Sugiyama 1993, 2005; Taube 2003).

Not surprisingly, the silhouette of a Teotihuacan empire, an idea from the mid-twentieth century (Bernal 1966), still lingers within the milieu of Mesoamerican archaeology (see Cowgill 2003 for a critique). The origins of this interpretation can be found in the decades between the 1940s and the 1960s when the state of knowledge of regional developments outside of Central Mexico was in the process of initial definition through the acquisition of the first radiocarbon dates and the beginning of systematic surveys in diverse regions. During this time, the recovery of a Teotihuacan artifact, or evidence of a Teotihuacan inspired trait, immediately provoked the image of a direct line from Teotihuacan to the site of the find or context. The further away from Teotihuacan an artifact was located, the greater the astonishment for the distance covered by the perceived weight or influence of Teotihuacan in the region. Through this course of reverential release the idea of a Classic Period empire was understandably perceived, promoted, and posited (Ball 1974; Borhegyi 1971; Cheek 1977; Hellmuth 1975; Kidder et al. 1946; Sanders and Michels 1977).

In 1966 the *Sociedad Mexicana de Antropología* held a Round Table meeting on Teotihuacan with researchers from diverse regions expounding new data. This was a major reunion of the foremost minds converging to examine the archaeology of the great metropolis that set the pace for the next generation of research. The two volumes emanating from the Round Table, published six years apart, are benchmark (Socieded Mexicana de Antropología 1966, 1972). On the crucial issue of Teotihuacan widespread presence in Mesoamerica, Paddock undertook the task of evaluating published data (Paddock 1972a), as well as elaborating the concluding commentary on the section of the Round Table's studies presented pertaining to regional perspectives on the extension of Teotihuacan culture (Paddock 1972b). By the mid-1960s the increasing use of absolute dating was seen as a means to reduce the necessity of having "to tie everything together" through relative dating (Paddock 1972a:224). Focusing on the crux of the matter at hand Paddock states,

> Today we can study social contacts as such, and not be in search of dates. And from this new point of view, Teotihuacan "influence" appears to have been over exaggerated in the majority of archaeological reports. Any distant reflection of the Teotihuacan style almost anywhere, prior to 1950, was a beautiful pearl among vulgar data […] *Our needs are different now, and we must proceed very carefully among Teotihuacan objects, local imitations, the traces of reflections of the Teotihuacan style, and the clear mistakes that arise once in a while due to the intensity with which connections are sought* (1972a:224; translation by the author, emphasis added).

As will be seen below, the distinction made by Paddock is relevant to the material patterning proposed within this study in applying the comparative approach. Paddock's second essay, written after reflecting on the new data expounded during the Round Table, contains his concluding thoughts on this problem.

> Some tell us with deep conviction that there was a Teotihuacan empire; but if we try to apply a definition based on the empires of the Old World, we would have to force ourselves a great deal to conform it to the Mesoamerican facts. The flaw, if that is how it can be characterized, is not in the Mesoamerican cultures but in our definitions. Useful concepts of the archaeology of the Old World have had to be reformed—and improved—to make them extensive to America […] Why shouldn't the idea of the empire have to be refined slightly to accommodate the Teotihuacan phenomena? (Paddock 1972b:325–327; translation by the author).

From Paddock's interrogative, Wallerstein's *The Modern World-System* (1974), which would distinguish world-empires from world economies, was just a few years away. These concepts would have an immediate impact, as Phil Weigand was quick to see the heuristic value of WST in his positing of a core-periphery relationship between Teotihuacan and the distant Chalchihuites region on the northern frontier of Mesoamerica. Weigand's framework was one of the first attempts to graft Wallerstein's core/periphery model of a world-economy on Mesoamerica (Weigand 1978a, 1978b, 1982; Weigand et al. 1977). Notwithstanding, Weigand's proposal was significant in that the Classic period frontier could be perceived to have a systemic connectedness to the Central Mexican core, a hypothesis that seemed very conceivable. There remained a problem on how core presence, or the "cultural influences" (Weigand et al. 1977:23) would be reflected empirically in the site of Alta Vista, Chalchihuites.

Six hundred kilometers north of Teotihuacan, archaeological research undertaken in the Chalchihuites territory of northwestern Zacatecas and southern Durango discerned and defined an early basic Mesoamerican village horizon identified as the Canutillo phase (200–650 CE) (Kelley 1986). The Canutillo phase constitutes the basic Mesoamerican village cultural development of the region during the Early Classic period in what is known as the Suchil branch of the Chalchihuites culture (Kelley 1971, 1989; Kelley and Kelley 1966). Along the San Antonio and Colorado Rivers,

the remains of extensive mining activities undertaken for the extraction of mineral pigments and chert between 350/400–1000 CE distinguished this frontier development (Kelley and Abbot Kelley 1966; Weigand 1968, 1982; Schiavitti 1995). The visual impact of the contours of prehispanic tailing mounds over the landscape of some eight major groups of mines is astounding even to this day. Radiocarbon dates from burned ocote pine (*Pinus montezumae*) splints, used to illuminate the mines, were correlated as evidence for proposing this region having been colonized by Teotihuacan at 350 CE (Weigand 1968, 1982).

In the Colorado Valley of the Chalchihuites Suchil zone the ceremonial center of Alta Vista consisting of at least four elaborate square plaza complexes, a single pyramid, and the distinctive Hall of Columns was the center of political power (Gamio 1910; Kelley 1983b). Excavations at the site in the early 1970s produced dates from 400–900 CE (Kelley 1971, 1983b, 1985). Research into the pecked-cross petroglyphs found on the Chapín Mesa, 6 km south of Alta Vista (Figure 4.13), defined a triangulation for a horizon calendar in the Observatory of Alta Vista (Aveni et al. 1982). Here, the thin passage between the northern wall and the free standing gnomon found at the end of the Observatory permits a direct visual path with the distant Picacho, where the sun rises directly above on the equinoxes (Kelley and Abbott Kelley 2000). "Thus, it was determined that Alta Vista was the planned center of a three-site archaeoastronomical complex, anchored on the pecked cross-circles on Chapín. These pecked cross-circles indicate a significant relation of the local system with Teotihuacan, where they occur in considerable numbers" (Kelley and Abbott Kelley 2000:182). The evidence of the Chapín pecked-crosses has been widely argued for a Teotihuacan presence in the area (Aveni et al. 1982; see below). Taken together with the above mentioned mining activities gave the proposal of a direct colonization of Alta Vista by Teotihuacan (Weigand 1968, 1982; Kelley 1983b) considerable weight at a time when the idea of a Teotihuacan empire was being pondered (Millon 1988). However, by the 1980s the only site south of Alta Vista with a reported Teotihuacan occupation was Tingambato, Michoacán

(Piña Chán and Oí 1982:99), 500 km southeast of Alta Vista. This left a considerable territorial gap between a proposed core and its northern periphery, a space in which little or no archaeological investigations existed to address the above hypotheses of direct intervention by a Mesoamerican core.

In the three decades since archaeological research has advanced gradually in a few of the many areas that come into play for this inquiry. In the late 1980s survey, surface collections, and small-scale excavations in the Bajío—the extremely fertile area in the states of Querétaro and Guanajuato neighboring the Valley of Mexico and Teotihuacan—brought to light a number of local sites, which manifest a Teotihuacan "influence" in ceramics (Brambila and Velasco 1988). This incipient pattern was highlighted recently by the discovery of the El Rosario murals in Querétaro, 150 km northwest of Teotihuacan, with depictions of curved obsidian knives in clear Teotihuacan style. El Rosario has been considered an obvious candidate as a Teotihuacan enclave (Saint-Charles et al. 2010). Recent research southwest of El Rosario, in the state of Michoacán, at sites within the Cuitzeo Basin and the Ucareo Valley, has brought the question confronting the nature of the Teotihuacan presence in this segment of West Mexico into new focus (Filini 2004; Hernández 2016). To the other extreme and closer to Alta Vista and the Chalchihuites area, in southern Zacatecas and northern and central Jalisco, research in the regions of La Quemada, the Juchipila Canyon, the Bolaños Valley, and core zone of the Teuchitlán culture have been key in establishing regional chronologies, ceramic sequences, and contexts that are all very pertinent to the problem of Teotihuacan's ties to West Mexico. The remainder of this chapter covers the results of research from fieldwork in the 600 km long zone between Alta Vista and Teotihuacan in an approximation to address this research question. This will be undertaken using the networks of the comparative world-systems approach, commencing from the Basin of Mexico for the determination of empirical patterning corresponding to the bulk-goods networks of Teotihuacan itself.

The West Mexican Segment of the Early Classic Period World-System

Bulk-Goods Networks

In the extrapolation of Chase-Dunn and Hall's criteria of bulk-goods networks to the Valley of Mexico, where the city of Teotihuacan at 200 CE had reached a population of 100,000 inhabitants (Cowgill 2003:37), a precedent is Sanders' central Mexican symbiotic region model. The lacustrine Basin of Mexico was characterized

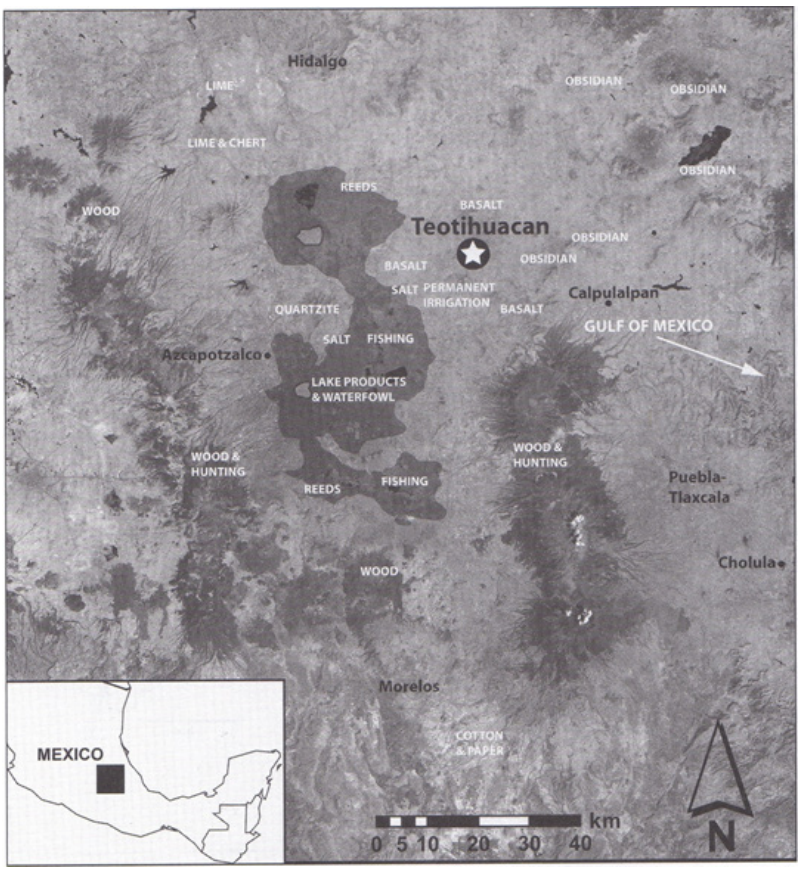


Figure 4.1. *Resources and regions surrounding Teotihuacan (after Carballo 2013: Fig. 5.3).*

by ecological diversity, which fostered a rich resource base (Figure 4.1). In Sanders' model, these conditions and its considerable size favored the Basin as a constant sociopolitical core for the development of complex societies from the Late Formative period up till Spanish contact (Sanders 1981; Sanders and Price 1968; Sanders et al. 1979).

Concurrently, as the city of Teotihuacan grew and consolidated into a state level society at around 150–200 CE (Cowgill 2015) so too did the scale of its most basic necessities. The intermediate resource base of Teotihuacan consisting of wood, lime, obsidian, waterfowl, basalt, chert, and maize (Figure 4.1), constitutes a considerable segment of bulk-goods of foodstuff, raw resources, and basic necessities required to assure daily subsistence of the inhabitants in both rural and urban settings throughout the Basin. For an idea of the demands placed upon its habitat to feed the city of 100,000,

> If we adopt a conservative nutritional requirement of 1800 calories (kcal) per person per day, the residential population of Teotihuacan would have needed to extract 180,000,000 kcal from the supporting environment every day. In terms of maize (Zea mays), assuming that off the cob maize contains 3610 kcal/kg (Drennan 1984; Leung and Flores 1961), this figure suggests that the equivalent of nearly 50t (49,861 kg) of maize would have been needed *daily* to maintain the population of the city (Sugiyama and Somerville 2016:2, emphasis in original).

The need to establish food security has been considered the main motive that impelled Teotihuacan to expand its immediate sphere of influence throughout the Basin of Mexico (Hirth 1978:320). In his examination of the regional configuration of "Teotihuacan's greater Central Mexican subsistence hinterland," Hirth proposes two distinct hinterland formations, the first being the "inner hinterland,"

> This is a relatively small area which included the Valley of Mexico, and perhaps the adjoining portion of western Tlaxcala and southern Hidalgo. Within this core area we see the emergence of Teotihuacan's top-heavy administrative structure and a settlement structure characterized by urban primacy. The second of these hinterland structures emerged after Teotihuacán solidified its power base within the Valley of Mexico and began to take the characteristics of an expansionistic state. New areas were added to its sphere of control, which grew to compromise its "outer hinterland." These areas supplied regional commodities to support Teotihuacan's large population and provided regional markets for its burgeoning craft industries. *Distance from Teotihuacán and cultural diversity prior to its control led to variation both in the way these areas functioned and integrated into its supportive system*. Areas in the outer hinterland appear to have included Rio Amatzinac Valley; central and northwestern Morelos; and portions of Toluca, Puebla, Tlaxcala, Hidalgo, and Guerrero for which we lack adequate data at this time (Hirth 1978:331–332, emphasis added).

Hirth (1978) has proposed the consolidation of Teotihuacan's power through the incorporation of the inner hinterland at around 100 CE, followed by the incorporation of the outer hinterland between 100 and 200 CE. Recent research into both, the intraregional structure within the inner hinterland, and regions outside the Valley of Mexico in the outer hinterland of Teotihuacan, has added insight into the complex query on the territorial organization of Teotihuacan's political-administrative hinterlands. Montiel's study in the outer hinterland region of the Yautepec Valley of Morelos (Figure 4.1), 100 km south of Teotihuacan, suggests the implementation of a distinct strategy for incorporation of this region by Teotihuacan with the acquiescence of local elites into a larger system, which seemingly brought them benefits that outweighed the encumbrance of tribute.

> The political hierarchy, economic interactions, and political-ideology interactions between the Yautepec Valley and Teotihuacan are most indicative of a hegemonic controlled tributary periphery. […] Teotihuacan extracted materials and labor from its inner hinterland in the Basin of Mexico probably using direct control […] The outer periphery, including the Yautepec Valley, appears to have been *indirectly controlled* by the Teotihuacan Valley (Montiel 2010:246–247, emphasis added).

In determining the spatial extent of the bulk-goods networks associated with Teotihuacan, to the other extreme of the Basin the site of Chingú, in southern Hidalgo, 70 km north of Teotihuacan, has been identified as a major regional center established by Teotihuacan (Barba et al. 2009; Díaz 1980). During the Chingú phase (1–550 CE),

> The site of Chingú was the head of a three-tiered settlement hierarchy […] In addition to the suddenness and magnitude of the Chingú-phase settlement, several lines of evidence suggest that Chingú functioned as an administrative center for Teotihuacan and, indeed, *that Teotihuacan colonized the region outright. Most ceramics from Chingú-phase sites are virtually indistinguishable from those used at Teotihuacan for most of its history*. […] It thus appears that Teotihuacan's interest in accessing raw materials available in the Tula region led to landscape modification and settlement location that facilitated a sizeable population that outstripped anything that had previously been present (Anderson et al. 2015:438, emphasis added).

Limestone, together with wood, would have been used in "staggering quantities" (Carballo 2013:125) for the former's thermal transformation into quicklime for large-scaled construction and maintenance programs in Teotihuacan, but even more so, to sustain daily substenance in undertaking the nixtamalization process (i.e. the hulling, soaking, and cooking of kernels of corn in an alkaline mixture of water and lime) for tortilla elaboration for a population

of 80,000–100,000 inhabitants (Fournier 1998:23; Rattray 2001:158; Widmer and Storey 2012:105).

In the present examination of the neighboring territory of the Basin of Mexico relevant to the determination of the geographical extension of bulk-goods networks, the directionality of this study requires attention to the territory of the Valley of Toluca. For over three decades the Valley of Toluca has been intensely studied by Yoko Sugiura and her associates. Sugiura assigns the Atizapán phase (200–400 CE) to the Late Formative/Early Classic period transition. After a decrease in population during most of the Late Formative period, the Atizapán phase is characterized by an influx of population from the neighboring Valley of Mexico who brought with them the entire Teotihuacan cultural apparatus (Sugiura 2009). Changes in settlement pattern for the Valley of Toluca during the Atizapán phase are indicative of intensification in agricultural production, apparent from the increase of sites along the floodplain of the valley. It is thought that the Valley of Toluca became an important producer of grains for the neighboring metropolis (González de la Vara 1999; Sugiura and McClung 1990). The nature of the incorporation as seen in ceramics comprises the characteristic Teotihuacan markers (*floreros* [bottles], *braseros* [braziers], and mold made figurines), but also includes domestic plain wares. Sugiura stresses that even culinary wares present the same morphology, colors, and manufacture techniques as those of the Valley of Mexico, which she interprets as indicative of the arrival and occupation of the Valley of Toluca by groups from the adjacent valley (Sugiura et al. 2013:71).

During the following Atzcapotzaltongo phase (400–550 CE) there is a marked increase in the number and size of sites in the Valley of Toluca, together with increasing social complexity manifested by the appearance of regional ceremonial centers in strategic places (Sugiura et al. 2013:73). During the Atzcapotzaltongo phase, and beginning in the previous Atizapán phase, potters of the Valley of Toluca manufactured a local version of Thin Orange ceramics, an important marker of Teotihuacan's exchange system (Carballo 2013), which Sugiura and colleagues refer to as

"Pseudo Thin Orange" (Sugiura et al. 2013:77). She concludes that the sociopolitical development of the Valley of Toluca was closely tied to that of Teotihuacan itself (Sugiura 2009:99). Considering the 100 km distance from Teotihuacan to both the Valley of Toluca and the Yautepec Valley of Morelos, a distinct relationship of these valleys with Teotihuacan is observed through material evidence. The contrast noted above relating to the evidence of Teotihuacan's direct/indirect control could indicate that the state had an overt interest in controlling the Valley of Toluca. The importance of the Valley of Toluca is likewise reflected in the analysis of sixteenth century historical sources of the tribute paid to the Mexica city of Tenochtitlan, which strongly suggests that a quarter of all foodstuffs tributed to the Aztecs came from the Valley of Toluca (Sugiura and McClung 1988:112). The direct presence of Teotihuacan seen in Toluca, versus the indirect presence in Yautepec, suggests a strategy on the part of Teotihuacan to assure peripheral source zones of primary foodstuffs. The archaeological evidence from the Valley of Toluca correlates with its incorporation into the western-most realm of the Teotihuacan bulk-goods network starting around 200 CE.

For the remaining circumscription of the northwestern extension of Teotihuacan's bulk-goods network to the region north of the Valley of Toluca, the Valley of Temascalcingo presents evidence of considerably reduced density of occupation (Paz Granados, pers. com. 2015; Morrison Limon, pers. com. 2015; Yoko Sugiura, pers. com. 2016). There, excavations at the site of Cerrito de La Campana (Folan et al. 1987) uncovered two burials with abundant ceramic vessels offerings consisting of bowls and vases pertaining to Teotihuacan's Early Tlamimilolpa phase through the Early Xolalpan phase (170–450 CE).

The above revision corroborates both Hirth's and Cowgill's observations on the chronology, strategy, and significance of the material culture of Teotihuacan's interactions with its immediate surrounding realms. "Thus, within the Basin of Mexico and a little beyond, most ceramics were locally made but stylistically so close to those made at Teotihuacan that, whatever the ethnic identity of their makers, they imply a high degree of shared culture, and

probably political subjugation by the Teotihuacan state" (Cowgill 2015:136).

The examination and definition of the western quadrant of Teotihuacan hinterland reiterates the geographic delimitation outlined by Rovira (2009: Fig. 4) of territories under the "influence, control and subject to Teotihuacan," areas which Smith and Montiel have likewise defined as controlled by Teotihuacan (Montiel 2010; Smith and Montiel 2001). In the perspective of this study, the area delimited by Montiel, Rovira, and Smith constitute the extension of the bulk-goods networks associated with Teotihuacan.

From the above analysis, empirical patterning for bulk-goods networks associated to a core state consists predominately of shared material culture presenting a continuous stylistic uniformity to urban ceramic types distributed across the spatial extension of these networks. Prestige goods, like Thin Orange ceramics, are likewise distributed throughout. Since bulk-goods networks constitute the complete incorporation of territory by the core (Chase-Dunn and Hall 1997:63) this patterning would be indicative of direct "control," "administration," and "political subjugation," as Clayton, Cowgill, Hirth, and Montiel have observed above. Following the nested network model used in this study, the density of this patterning should present a drop-off as the boundaries of bulk-goods networks transition into zones of political/military networks.

Political Networks
Southeastern Bajío

Political-military networks are zones where sovereign polites have regular political or military exchanges with a core zone. In this case evidence suggestive of political alliances is examined. At present, two continuous regions can be identified as displaying material evidence indicative of political networks associated with Teotihuacan: the southeastern Bajío of the present day states of Guanajuato and Querétaro, and the lake district (Cuitzeo-Zacapu-Pátzcuaro) of northern Michoacán. The first of these includes

the valleys of San Juan del Río and Querétaro of what appears to correspond to a transition zone between the boundary of bulk-goods networks, which included the site of Chingú, and political networks. Ninety kilometers northwest of Chingú, the discovery of sections of elaborate murals found buried within the mound of the site of El Rosario, Querétaro (Figure 4.2), have brought back into center stage the question of Teotihuacan's presence in the region (St. Charles et al. 2010). The murals, bearing representations of large obsidian knives nearly identical to those found on murals in Teotihuacan, together with both the architectural design and construction techniques used in El Rosario suggest a strong link to Teotihuacan (Figure 4.2).

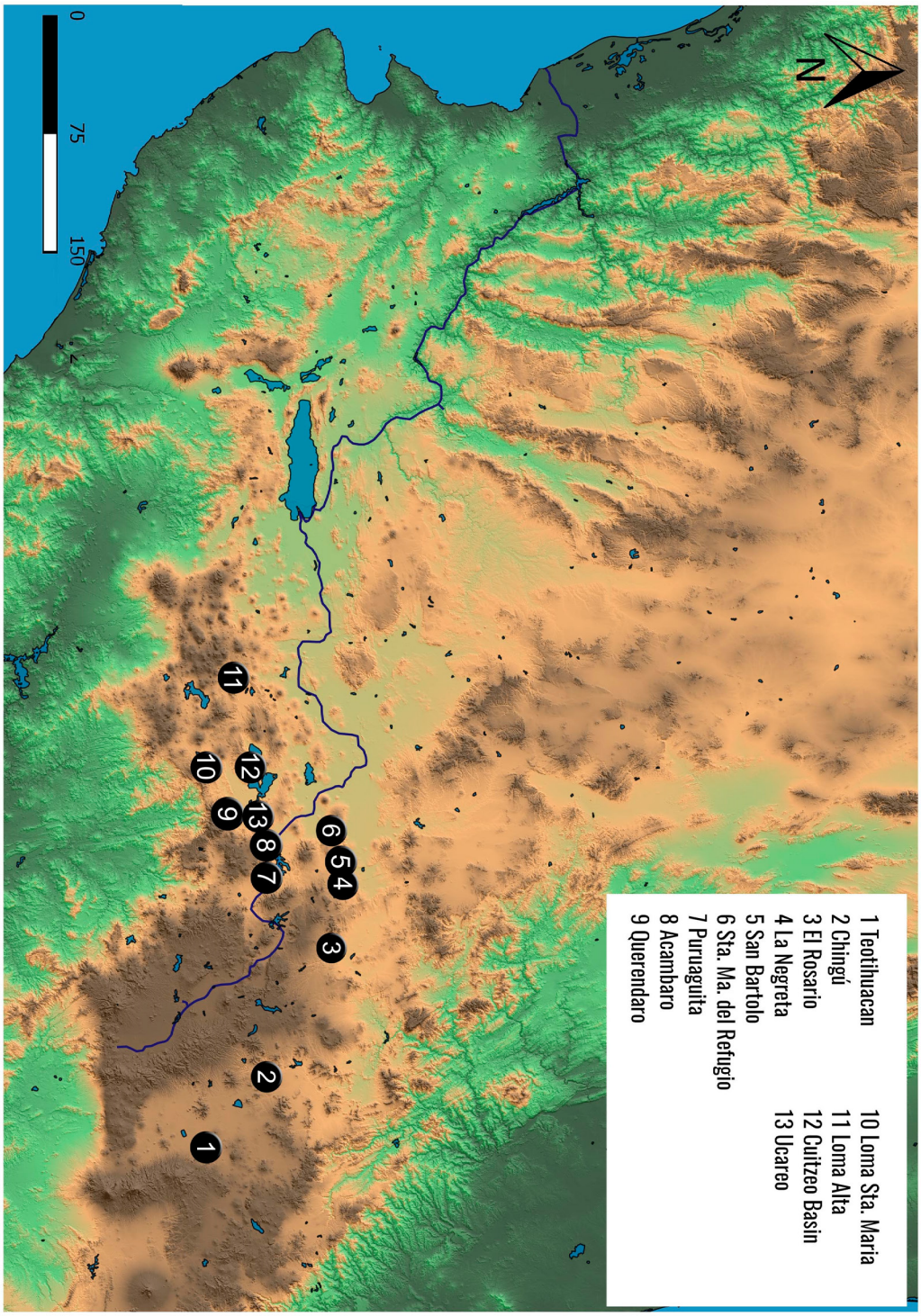
At present the limited contexts of the murals recuperated during the El Rosario salvage excavations have been perceived by researchers as evidence for the arrival of elites from Teotihuacan at around 200 CE who brought with them the core's cosmological system and paraphernalia, building the site as an enclave to maintain commercial ties in the region. The *Teotihuacanos* were to have considerable impact on the sociopolitical structure of the

Figure 4.2. *The El Rosario murals (http://www.pinturamural.esteticas.unam.mx/node/61).*

region bringing the local elites and population into a new cultural milieu with closer links to Teotihuacan during the next four centuries (Saint-Charles et al. 2010:357–358).

However, ceramic analysis from El Rosario presents a problem for the enclave hypothesis, as Hernández (2016:224) argues, "What has not been revealed to date is a ceramic assemblage that speaks directly of residents with Teotihuacan origins." Comparative analysis of the ceramics from Early Classic period sites of the southeastern Bajío, the lake district of northern Michoacán, and the Ucareo Valley, the latter located 90 km southwest of El Rosario (Figure 4.3), indicate that El Rosario was integrated with the provinces of Southeastern Bajío and the lake district of northern Michoacán (Hernández 2016). As such, an examination of material culture patterns of this zone is pertinent to the present study in order to establish proxies and the spatial density for political networks linked to Teotihuacan.

Forty kilometers northwest of El Rosario, in the Valley of Querétaro, salvage excavations in a small segment of the site of La Negreta recovered the remains of a habitation area with fine stucco floors, together with a high density of lithic debitage of basalt and obsidian. Ceramic analysis showed that 90% of the materials collected were made of clays of local origin, of which 60% of these presented forms, finishes, and color emulating ceramics of the Xolalpan phase (350–550 CE) of Teotihuacan, while the remaining 40% were elaborated in local traditions (Brambila and Velasco 1988:294–296). Intrusive types identified include Thin Orange ceramics (predominantly annular based bowls), fragments of a *candelero* (a distinctive Teotihuacan diagnostic), and a stuccoed vessel of the Queréndaro type, associated with the site of the same name located near the Cuitzeo Basin of northern Michoacán (Figure 4.3). Shell from both the Gulf and Pacific Coasts was identified. Among the ceramics of local origin, the decorated Red-on-Buff corresponds to a regional diagnostic type that are found in Santa María del Refugio, east of La Negreta, and in the Valley of San Juan del Río (Brambila and Velasco 1988:296). Brambila and Velasco consider La Negreta as part of a Teotihuacan centered network


N
0
75
150
1 Teotihuacan
2 Chingú
3 El Rosario
4 La Negreta
5 San Bartolo
6 Sta. Ma. del Refugio
7 Puruaguita
8 Acambaro
9 Querendaro
10 Loma Sta. Maria
11 Loma Alta
12 Cuitzeo Basin
13 Ucareo

in which "objects that had a prestigious character" (1988:292, translated by the author) were circulating.

West of La Negreta, the site of Santa María del Refugio near the La Laja River consists of substantial architectural compounds, and is highlighted by a well-preserved pyramid-closed patio complex. Test trenches in Platform A recovered a burial with an offering consisting of ceramic vessels related to Early and Late Tlamimilolpa phases (170–350 CE) of Teotihuacan, and a Thin Orange vessel (Castañeda et al. 1996).

The long-term study by Ana María Crespo on political-territorial units of the north-central region, with the Valley of Querétaro as focal point, is presented in an overview on the interaction between this region and Teotihuacan (Crespo 1998). Pertinent to this chapter are the phases IIa–IIc (Crespo 1998:324–330). Phase IIa "corresponds to the first manifestations of Teotihuacan expansion toward the northwest; this movement did not occur directly, but through regions with previous Teotihuacan impact" (Crespo 1998:325, translation by the author). During phase IIa, Tzacualli and Early Tlamimilolpa phase (1–250 CE) related materials were identified. For phase IIb, the site of San Bartolo Aguacaliente becomes the predominant settlement in the southwestern part of the Valley of Querétaro. "Its architecture—foundation and closed space (Brambila and Castañeda 1993)—and ceramics evoke Teotihuacan elements, however, it is important to point out the scarcity of remains of direct Teotihuacan provenience" (Crespo 1998:326, translated by the author). Phase IIc represents the height of development in the Valley of Querétaro during the Classic period. This phase,

> Coincides with the height of Teotihuacan and corresponds to the fluorescence of regional centers of population. In this phase there is a tendency to concentrate population in major settlements. Elite groups in the Valley left proof of their presence by means of funerary offerings that contained objects from exchange networks controlled by the metropolis; the materials pertain to the Xolalpan phase of Teotihuacan (Crespo 1998:326; translation by the author).

Figure 4.3. *(previous) Sites in the Bajío mentioned in Chapter 4.*

Crespo's synthesis for the Valley of Querétaro posits that its relations with Teotihuacan cover at least four and a half centuries (100–550 CE). Regional emulation in ceramics was constant, whereas intrusive materials were uncommon but appear to increase as components of burials during the later phase (350–550 CE). Material culture from the Querétaro area does not correlate with the pattern described above for Valley of Toluca within the bulk-goods network, but rather parallel the characteristics described previously by Santley and Alexander for what they ascribe as the "secondary periphery," which they see as an approximation to Teotihuacan's political/military interaction network:

> Most of the secondary periphery was not overly reliant on goods produced in the city, but some centers in this region consistently made imitations of Teotihuacan products. At most sites these materials rarely occurred as a discrete assemblage in domestic contexts, patterning that would be expected if families of resident Teotihuacanos were present […] Rather, their occurrence was a highly variable phenomenon involving a few different objects of Teotihuacan derivation from different civic and domestic contexts (Santley and Alexander 1996:182).

From the above review for the territory of the southeastern Bajío, empirical patterning of materials can be observed that contrasts with those proposed above for the bulk-goods networks. Further evidence for this patterning will be examined below for the territory adjoining this portion of the Bajío to the south, which is artificially separated here to facilitate analysis.

The Lake District of Northern Michoacán

South of the Bajío, the second region that comes into scrutiny for the political networks is the Cuitzeo-Zacapu-Pátzcuaro lake district of northern Michoacán, where excavations undertaken in the last three decades have been enlightening to understanding the

nature of the ties between Teotihuacan and West Mexico. During the late 1980s and into the 1990s, the Cuitzeo Project advanced the definition of the region's chronology following excavations at two sites: Huandacareo and Tres Cerritos (Macías 1990, 1991, 1997; Macías and Vackimes 1988). At the site of Tres Cerritos *talud-tablero* architecture, the diagnostic stylistic construction technique used in small pyramids, altars, and platforms in Teotihuacan, was detected on buildings in a sunken patio complex, together with Thin Orange ceramics, Teotihuacan style figurines, and green obsidian from Cerro de las Navajas, Hidalgo (Macías 1997). Salvage excavations at the site of Loma Santa María, on the edge of the city of Morelia (Manzanilla López 1984, 1988, 1996), likewise produced material culture with ties to Teotihuacan, including talud-tablero architecture. The evidence detected in Loma Santa María correlated with the Teotihuacan artifacts and traits found in the Cuitzeo Basin during Macías's work in Tres Cerritos, highlighting that settlements in the basin had interacted with Teotihuacan.

In the city of Teotihuacan the discovery of two tombs inside Structure N1W5:E19, 150 m from the "Oaxacan barrio," with associated offerings consisting of elaborate ceramics and figurines of Michoacán origin suggests direct contacts between Teotihuacan and the lake district of northern Michoacán (Gómez Chávez 2002; Gómez Chávez and Gazzola 2007; Filini 2004). The Michoacán materials consist of elaborate stuccoed bowls (Holien 1977), a distinctive black excised polychrome inlaid bowl (Gómez Chávez 2002:594), a pair of female "Pátzcuaro style" figurines (Begun 2008), and an obsidian blade from Zinapécuaro-Ucareo, Michoacán (Begun 2013; Gómez Chávez and Gazzola 2007) (Figure 4.4).

Analysis of the ceramic assemblage associated with the contexts of the burials of Structure N1W5:E19 in Teotihuacan (Begun 2013:116) indicates that 88% of the materials are wares of Teotihuacan provenience with the largest volume of these pertaining to both the Early and the Late Xolalpan phase (350–550 CE), followed in percentage by material of the earlier Late Tlamimilolpa phase (250–350 CE), and the smaller percentage belonging to the Metepec phase (550–650 CE). Likewise, the

Figure 4.4. *Stuccoed bowl (Burial 30), black excised polychrome inlaid bowl (Burial 27), and pair of female figurines of Michoacán style (Burial 27) (after Gómez Chávez and Gazzola 2007: 123–125).*

N1W5:E19 dates correlate with the chronology in Michoacán for the diagnostic ceramics found in the tombs which pertain to Loma Alta 2 and 3 phases (250–550 CE) as defined by Carot (2005:105–107). Gómez considers that the migrants from Michoacán arrived in Teotihuacan at around 300 CE, settling into the city close-by the Zapotec barrio and maintaining ties to their home territory, probably associated with long-distance commercial activities (Gómez Chávez 2002).

The presence of Pátzcuaro style figurines in Structure N1W5:E19 links Teotihuacan to the province of Loma Alta 2b and 3 phases (250/300–550 CE) of the northern lake district of Michoacán. Based on shared ceramic and figuring types, the Cuitzeo, Zacapu, and Pátzcuaro Basins have been aggregated into the Loma Alta cultural sphere (Pollard 2015:96). Further evidence of these links is found on a vessel fragment with inlaid decoration from the site of Loma Alta, Zacapu (Figure 4.5) which represents "a very important person of the most pure Teotihuacan style" (Carot 2005:107, translation by the author). This ceramic fragment is relevant as it represents a reproduction of Teotihuacan's iconography elaborated through a local decorative technique (the Cherán Style Stripped Investment defined by Holien 1977).

Figure 4.5. *Right: Vessel fragment with inlaid decoration from the site of Loma Alta, Zacapu (after Carot 2005: Fig. 3). Left: Wooden box fragment showing Teotihuacan distinctive iconography (after Berrin and Pasztory 1994: Fig. 55).*

Further to the west, and midpoint between the Zacapu and Sayula Basins, the Michoacán style figurines have been found in Jiquilpan, Michoacán (Noguera 1944). The distribution of this figurine type is indicative of an interaction network linking the Chapala Basin of Jalisco/Michoacán to the lake district of northern Michoacán and lastly to the Basin of Mexico (Teotihuacan) between 350–550 CE.

A comprehensive analysis of material culture from the Cuitzeo Basin has detailed the presence of Teotihuacan symbolism modified through local conversion in a process that involved the manipulation and grafting on portions of the Teotihuacan ideological system into local mediums by Cuitzeo elites (Figure 4.6). Filini states that,

> In the Cuitzeo Basin, Teotihuacan ideology was manifested in a very discreet way, encoded in symbolic imagery possibly to be read only by those who were acquainted with Teotihuacan symbols. It implies, in addition, some resistance to the wholesale adoption of Teotihuacan ideology since their own ethnic identity would be at stake by the presence of foreign elements. Therefore there was a process of conscious stylistic channelization so as to control the

Ref. No	Sign	Reference	Identification
1	Almena	Langley (1986:301,ref. 514,72)	
2	Array feather	Langley (1986:229, ref. 8)	
3	Butterfly	Langley (1986:240, ref. 277), Von Winning (1987:I:116)	
4	Circles concentric	Langley (1986:305, ref. 746, 8), Von Winning (1987:I)	
5	Comb and Bar	Langley (1986:241, ref. 247), Von Winning (1987:II:17)	
6	Dots Multiple	Langley (1986:246)	
7	Eye elongated	Langley (1986:249, ref. 8), Von Winning (1987:II:68)	
8	Eye Goggled A	Langley (1986:307, ref. 23), Von Winning (1987:I:77)	
9	Feathered Serpent	Von Winning (1987:II:67)	
10	Flower Frontal Q	Langley (1986:256, ref. 408), Von Winning (1987:II:31)	
11	Half-star	Langley (1986:261, ref. 787), Von Winning (1987:II:9)	
12	Hatching fourway	Langley (1986:264, ref. 69)	
13	Line wavy	Langley (1986:273, ref. 771)	
14	Mountain triple	Langley (1986:274, ref. 275), Von Winning (1987:II:11)	
15	Quatrefoil C	Langley (1986:317,ref. 2.:19)	
16	Saltire	Langley (1986:282, ref. 86)	
17	Sawtooth-equilateral	Langley (1986:283, ref. 8), Von Winning (1987:II:16)	
18	Scroll chain	Langley (1986:283, ref. 4), Von Winning (1987:II:11)	
19	Scrolls	Langley (1986:283)	
20	Stepped fret	Langley (1986:336, ref. 451)	
21	Trapeze and Ray	Von Winning (1987:II:25)	
22	Trilobe	Langley (1986:296, ref. 786), Von Winning (1987:II:8)	

Figure 4.6. *List of Teotihuacan notational signs occurring at the Cuitzeo Basin, Michoacán (Filini 2004: Table 5.1).*

> degree of Teotihuacan "influence" and ensure "that it remains objectifiable, and thus, observable, controllable, and censurable" (Filini 2004:113).

Her study supports a previous observation referring to the empirical evidence of Teotihuacan's prestige in other regions of Mesoamerica where Cowgill observes, "Many reflect adoption of a limited number of Teo-related symbols by local elites for their own" purposes (1997: 135). However, Filini considers Teotihuacan from a broader world-systems perspective concluding:

> The process of adoption of and translation of Teotihuacan symbolic forms into the local fabric *is seen in architectural patterns, burial practices, and associated offerings*. The Cuitzeo Basin people not only accepted Teotihuacan artifacts in their religious factory but reproduced many of them using local resources. […] *The Teotihuacan-related offerings were deposited exclusively in the elite burials along with local artifacts*. […] In strict world systemic parlance the Cuitzeo Basin fits into the *category of a semi-periphery* for the following reasons: a) *It does not resemble in any way the peripheral sites in Teotihuacan's inner hinterland ("primary periphery") where the vast majority of material culture is purely Teotihuacan and whose agricultural production was destined for Teotihuacan,* b) *They maintained a relative degree of autonomy and deliberately transformed Teotihuacan elements into the local fabric,* c) Foreign elements are present from other regions as well such as West Mexico and the El Bajío culture in southern Guanajuato, and d*) Nothing so far indicates that Teotihuacan or any other societal unit held control over sites*. And as Hall and Chase-Dunn (1996:18) postulate, when the nature of intersocietal interaction is not supported by military coercion, the adoption of core-like features is rather quick. As a semi-periphery, the Cuitzeo Basin would have facilitated Teotihuacan's connections farther to the West and Northern Mesoamerica (Filini 2004:112–113, emphasis added).

As described above, contexts recovered from the southeastern Bajío and the Cuitzeo Basin present material patterning consisting predominantly of local wares, followed by a significantly reduced proportion of local wares emulating Teotihuacan types, and sporadic prestige goods imports from Teotihuacan. This contrasts with the empirical pattern of the bulk-goods networks where material culture is characterized by formal and stylistic uniformity to types emanating from Teotihuacan.

Subsequent to Filini's study of the Cuitzeo Basin, the discovery of the El Rosario murals (Saint-Charles et al. 2010), and the recent ceramic study of the Valley of Ucareo, located on the southeastern edge of the Cuitzeo Basin and 100 km southwest of El Rosario, have prompted an interpretation which shares some aspects of Filini's study (Hernández 2016). As mentioned above, Hernández (2016:233) points out an inconsistency in the Teotihuacan enclave proposal for the site of El Rosario due to the paucity of material evidence for an initial and extended occupation on the part of people from Teotihuacan.

Parting from the importance of Zinapécuaro obsidian source of the Cuitzeo Basin, Hernández examines stylistic correlations of ceramics, and shared diagnostics between the Ucareo Valley, the lake district of northern Michoacán, and the Bajío. A proposal is advanced which integrates Teotihuacan and El Rosario into the cultural dynamics of the Cuitzeo Basin that distinguishes this material to a particular form of interaction. Hernández argues,

> Rather than establishing another in a network of colonies, I believe Teotihuacan emissaries and merchants initiated and encouraged a form of cultural hegemony (Domínguez 2002:68) among emerging elites in the southern Bajío. The evidence suggests that Teotihuacan merchants created and administered long-distance trade between the Basin of Mexico and the West just as societies in the southern Bajío were undergoing sociopolitical change. With access to the exchange network of Teotihuacan imports and associated demands on behalf of the metropolis for commodities and raw resources through the site of Chingú only 125 km to the

> east, *southern Bajío elites may have begun to emulate and adopt the cultural institutions, ideology, and select elements of Teotihuacan elite material culture (as they perceived them or learned of them) in order to promote and advance the development of their own elite status and culture*. This alternative model would suggest that the Teotihuacan style elements in the material culture (architecture, art forms [polychrome murals], symbolism [images of obsidian knives, for example], and luxury pottery) present at El Rosario and at other Bajío sites were some of the ideological tools used by local elites *to compete not only for political and economic control of hinterlands, but to forge a Bajío elite culture*. […] The *material culture associated with these sites include many elements recognized as components of Teotihuacan elite culture: monumental architecture (sometimes in talud-tablero style), elite burials in well-constructed tombs, and burial goods that include a host of imported exotic items like marine shell, precious stones, crystals, hematite, green obsidian lithics, greenstone objects, ceramics with postfired decoration (al fresco, overlay, and cloisonné), and Thin Orange ceramics* […] a model of "colonialism without colonies" (Domínguez 2002) puts the focus on local actors and their motivations within specific historical circumstances to help explain why high status people in northcentral Mexico would adopt and translate non-local ideology and objects […] The modal ties linking the Bajío ceramic sequences with those of Teotihuacan throughout the Classic period suggest that the fortunes of both cultural centers were closely synchronized (Hernández 2016:233–234).

The proposal of Hernández has much in common with Filini's view concerning the southeastern Bajío and the lake district of northern Michoacán. Both describe a material culture pattern that can be correlated as diagnostic of political networks. The density of this pattern distinguishes this network from the material pattern of bulk-goods networks to the east. As described above, contexts recovered from the southeastern Bajío and the Cuitzeo Basin present material patterning consisting predominantly of local wares, followed by a significantly reduced proportion of local wares emulating

Teotihuacan types, and sporadic prestige goods imports from Teotihuacan. This contrasts with empirical patterns of the bulk-goods networks where material culture is characterized by stylistic uniformity to types emanating from Teotihuacan. Above, Filini states that the Cuitzeo basin constituted a semiperiphery, which would have facilitated connections further into West Mexico. This takes us to an examination for material evidence of prestige goods networks extending beyond the boundary of political networks.

Prestige Goods Networks

Initial Phase (350–400 CE)

At present, the evidence of early prestige goods networks into West Mexico is associated with the black excised polychrome inlaid bowls, like those found in burial 27 in Structure N1W5:E19 Teotihuacan (Figure 4.7b), and in contexts from the lake districts of Michoacán (Carot 2005:105–106; Filini 2004:36; Gómez Chávez 2002:594) where its appearance has been dated to the Loma 2 phase (250–350 CE) in Zacapu (Figure 4.7c).

In the Cuitzeo Basin two vessels of this type were found in the salvage excavations of Loma Santa María during the 1970s (Agapi Filini, pers. com. 2015). Beyond the lake district of northern Michoacán the distribution of this black excised polychrome bowl extends 300 km northwest, through Jalisco to the site of El Piñón, in the middle Bolaños Valley (Cabrero 2007) (Figure 4.7a). The interregional distribution extending from Teotihuacan, through northern Michoacán to Bolaños, Jalisco, as evidenced by this ceramic type suggest an early phase (350–400 CE) of the extension of prestige goods networks into this segment of West Mexico (Figure 4.8).

Ceramic analysis from El Piñón indicates that the middle Bolaños territory of northern Jalisco was in contact with the extensive Canutillo-Malpaso cultural horizon to the north and northeast, in central Zacatecas (Figure 3.5), the early sedentary horizon that commenced at around 200 CE when this northern

area was characterized by a horizon of sedentary Mesoamerican village occupation (Jimenez and Darling 2000; Kelley 1989). In El Piñón this is evidenced by the presence of Canutillo Incised-engraved ware (Kelley and Kelley 1971) of the Chalchihuites culture, and a number of the early Malpaso Valley incised-engraved wares (Villalobos 2001). The convergence of the northward extension of prestige goods networks in middle Bolaños with the Canutillo-Malpaso horizon between 400–450 CE marks a critical interregional linkage, which would have brought the territory of Suchil-Chalchihuites into the realm of networks extending across central and eastern West Mexico.

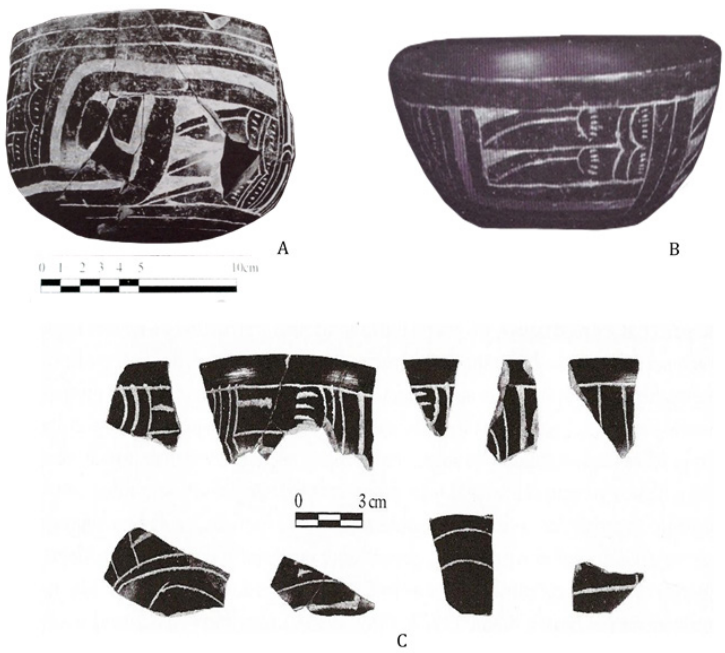
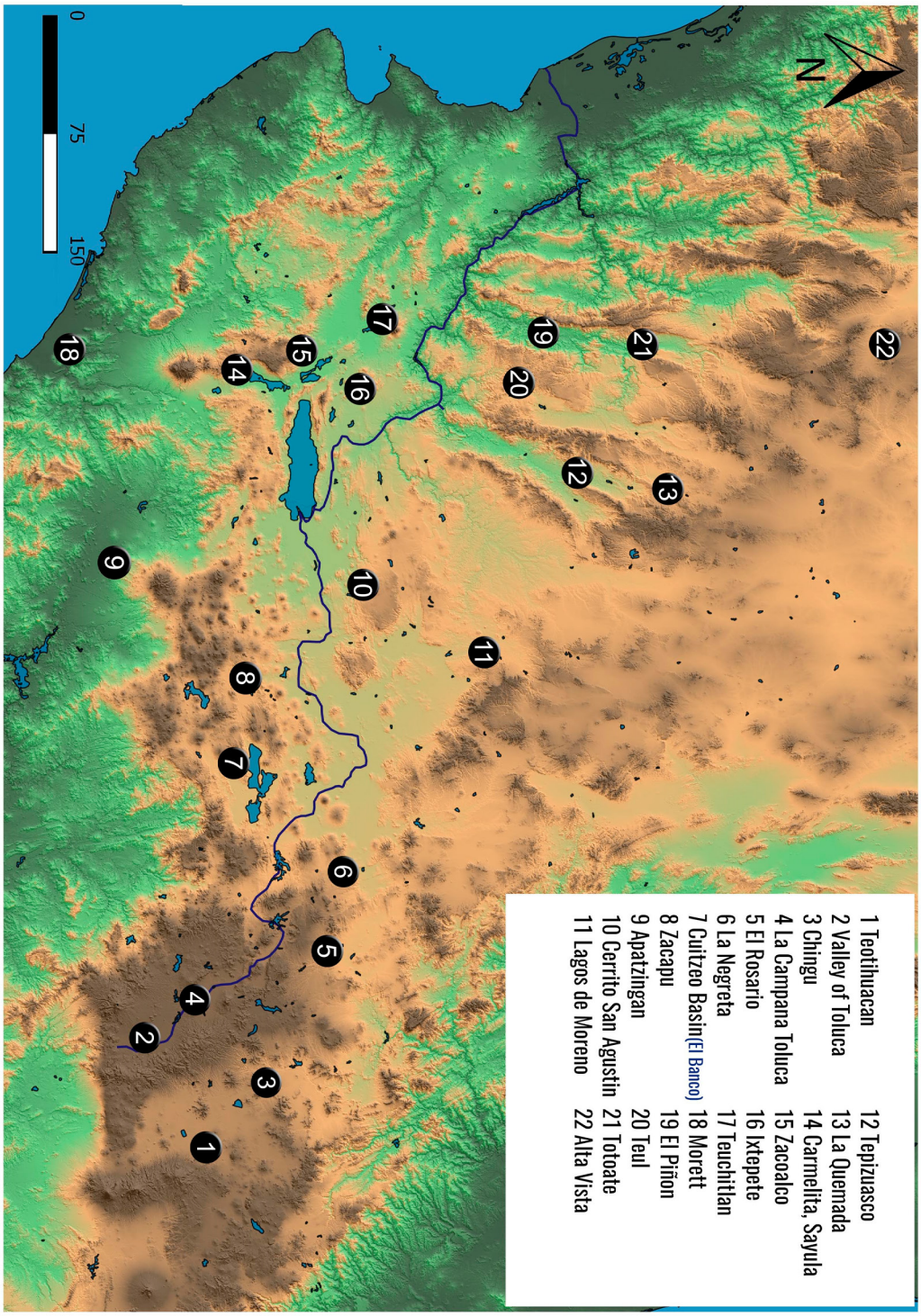


Figure 4.7. *Black excised polychrome inlaid bowls. Note the feather-like motif or "glyph" present in the upper samples. A) Vessel recovered from El Piñón at Bolaños Valley (after Cabrero 2007: Fig. 24). B) Vessel recovered at Teotihuacan (after Gómez Chávez and Gazzola 2007: 123–125; also shown in Figure 4.4). C) Sherds of the same type recovered in Loma Alta (after Carot 2005: Fig. 2).*

Figure 4.8. *(overleaf) Sites mentioned in Chapter 4.*


N
0
75
150
1 Teotihuacan
2 Valley of Toluca
3 Chingu
4 La Campana Toluca
5 El Rosario
6 La Negreta
7 Cuitzeo Basin(El Bancoj
8 Zacapu
9 Apatzingan
10 Cerrito San Agustin
11 Lagos de Moreno
12 Tepizuasco
13 La Quemada
14 Carmelita, Sayula
15 Zacoalco
16 Ixtepete
17 Teuchitlan
18 Morett
19 El Piñon
20 Teul
21 Totoate
22 Alta Vista

The Intensification of Prestige Goods Networks (450–550 CE)

The prestige goods networks that extended into West Mexico at this time are evidenced by the presence of diagnostic intrusive materials such as Thin Orange ceramics, modeled clay earspools, and green obsidian blades from Pachuca, Hidalgo. The area contemplated for these networks is one of the least known in West Mexico for the Early Classic period, however the emerging patterns described correlate with previously defined isolated material evidence that when seen in conjunction highlight the intensification of this pulsation at 450–500 CE. In the Bajío region proper, we are hampered by the fact that extremely little work has been done on Early Classic period sites and contexts. North of the Bajío, Thin Orange ceramics have been identified among the materials from a survey from the site of Cerritos near Lagos de Moreno, Jalisco (Porcayo 2002:43). Beyond the southeastern Bajío and the lake district of northern Michoacán, Thin Orange ceramics have been identified in the Sayula Basin of central Jalisco in the site of Carmelita (Liot et al. 2007:179). Currently this site has produced the highest concentration in the Sayula Basin of green obsidian prismatic blades from Cerro de las Navajas, Hidalgo, together with evidence of a shell workshop area. Carmelita is considered to have begun at around 350/400 CE (Susana Ramírez, pers. com. 2015), which coincides with the inception of the Sayula phase (Reveles et al. 2014; Ramírez 2016). The western-most presence of Thin Orange ceramics to date comes from the Teuchitlán region, west of Lake Chapala, in central Jalisco, which will be examined below.

The site of El Piñón, Bolaños, which produced the black excised polychrome inlaid bowl (referred to in the preceding section), again comes to the fore. Excavations in El Piñón produced three clay earspools, one of which bears a representation of Tláloc, the well-known Storm God of Teotihuacan's pantheon of principal deities (Cabrero 2015; Von Winning 1987) (Figure 4.9).

To the east, earspools of this type (i.e. showing Teotihuacan style motifs) have been located in southern Zacatecas at the site of Cerro del Teul and at Cerro Tepizuasco, in the Juchipila Valley.

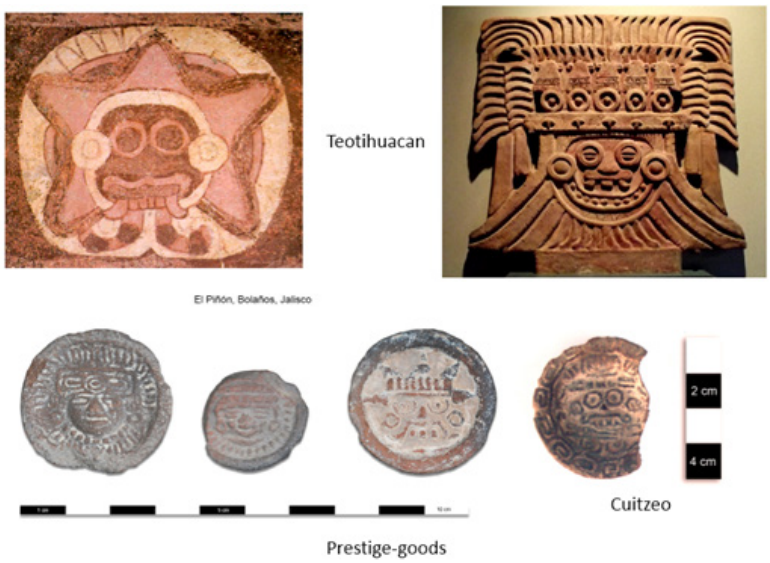


Figure 4.9. *Above: Images of Tláloc, the Teotihuacan Storm God. Below: Earspools recovered from El Piñón (after Cabrero 2015: Figs 2, 3, and 5) and from Cuitzeo (courtesy of Agapi Filini 2016, used with permission).*

In Tepizuasco, 19 earspools were found associated with a burial detected inside the fill of a round structure. Additional offerings from the Tepizuasco burial included a mold-made articulated "puppet figurine" (another diagnostic of Teotihuacan ceramic complex) (Figure 4.10) fabricated from a non-local, nor a clay source from the Valley of Mexico; remains from two Thin Orange ceramic vessels, and a green obsidian blade from Pachuca, Hidalgo (Lelgemann 2010). This context has a radiocarbon date of 520 CE (Achim Lelgemann, pers. com. 2015).

The earspools in question are relatively unknown in the literature on Mesoamerica, probably owing much to their minuscule dimension. The catalogue produced for the exhibition *Teotihuacan: City of the Gods* in 1993 by the Fine Arts Museums of San Francisco shows a pair of these on the penultimate page (Figure 4.11). Esther Pasztory's description focuses on "The figures inside these clay earspools with their wide-frame headdresses, finely modeled masklike faces, and big earspools [that] evoke all

Figure 4.10. *Articulated figurines. Right: From Teotihuacan (after Berrin and Pasztory 1994). Left: Lrom Cerro Tepizuasco (image courtesy of Achim Lelgemann 2016, used with permission).*

the hallmarks of Teotihuacan style (Berrin and Pasztory 1993:276). The provenance of these pieces is unknown, though specifying that none have been found in Teotihuacan or in Guatemala. She dates them as probably Xolalpan-Metepec. The dates from Cerro Tepizuasco allow us to narrow this down to the Late Xolalpan-Metepec phases (450–550/600 CE).

The image of the Storm God wearing a knotted headdress on the earspool from the site of El Banco, from Álvaro Obregón, Cuitzeo, Michoacán bears a similarity to the image found on the medallion on the bottom of the mold made vessel discovered by Linné during excavations at Las Colinas, Calpulalpan, Tlaxcala (Figure 4.11) dated to the Metepec phase (Rattray 2001:295, Fig. 189). At present, the distribution of this type of earspools extends

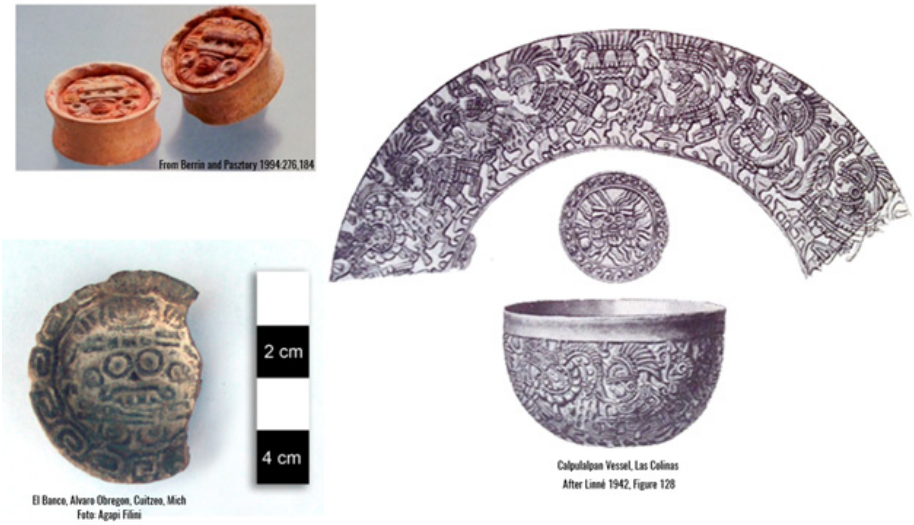
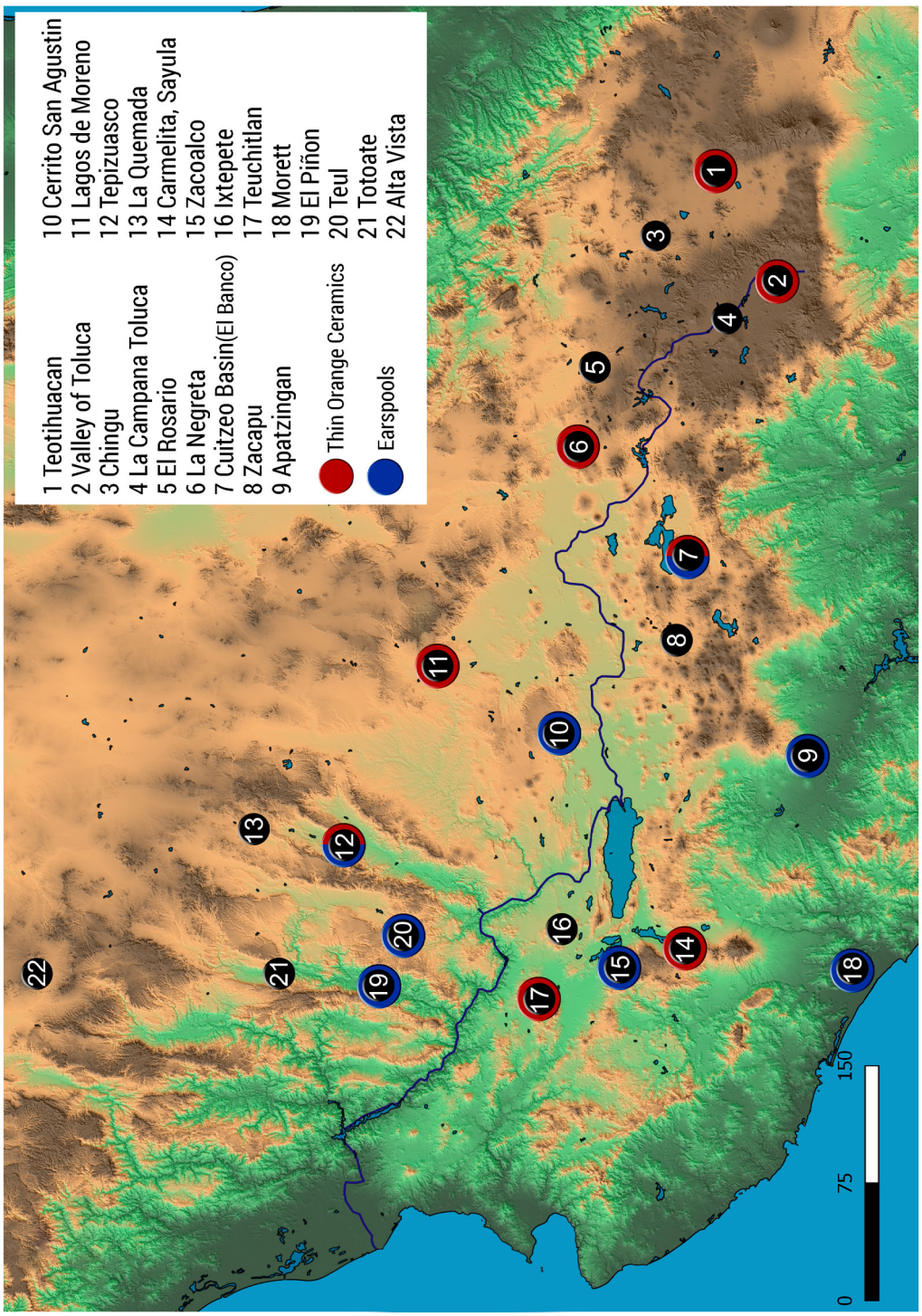


Figure 4.11. *Earspools reproducing Teotihuacan style motifs. Above left: Provenance unknown (after Berrin and Pasztory 1994: Fig. 184). Below left: El Banco, Cuitzeo, Michoacán (courtesy of Agapi Filini 2016, reproduced with permission). Right: Vessel from Calpulalpan, Tlaxcala found by Sigvald Linné (after Von Winning and Gutiérrez 1996: Fig. II.1). Note the similarities between the Storm God representation in the vessel's base and the El Banco earspool.*

throughout a number of polities within West Mexico (Figure 4.12), from Colima (Morett), central (Zacualco) and northern (Piñón) Jalisco, southern Zacatecas (Cerro del Teul and Tepizuasco), the Altos de Jalisco (Cerrito de San Agustin, Jesus María), to Apatzingán and Cuitzeo (El Banco), Michoacán.

The earspools, Thin Orange ceramics, green obsidian from Pachuca, Hidalgo, and "Teotihuacanoid" exotics can be proposed as the material correlates of an emerging pattern that defines the spatial extent of the prestige goods networks in West Mexico. The presence of these in northern Jalisco and southern Zacatecas are seen here as evidence reflecting an increase in the intensity of interaction within the prestige goods networks, as well as the increase in the geographical extension of these networks. These mark the peak of the intensity of the pulsation. In this case, they are evidence that prestige goods networks are extending beyond

Figure 4.12. *(overleaf) Distribution of Thin Orange ceramics and earspools within West Mexico.*


1 Teotihuacan
2 Valley of Toluca
3 Chingu
4 La Campana Toluca
5 El Rosario
6 La Negreta
7 Cuitzeo Basin(El Banco)
8 Zacapu
9 Apatzingan
10 Cerrito San Agustin
11 Lagos de Moreno
12 Tepizuasco
13 La Quemada
14 Carmelita, Sayula
15 Zacoalco
16 Ixtepete
17 Teuchitlan
18 Morett
19 El Piñon
20 Teul
21 Totoate
22 Alta Vista
Thin Orange Ceramics
Earspools
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the Santiago River, encroaching the regions generally referred to as Mesoamerica's northern frontier in the Classic period. These networks crosscut the territory of regional cultural realms of the Shaft-Tomb tradition of West Mexico, and the Teuchitlán culture of central Jalisco (Beekman 2010). Both pertain to cultural developments distinct from the cultural milieu of the lake district of northern Michoacán and the political networks examined above.

Information Networks

As mentioned earlier, since the early 1980s the main evidence seen as a Teotihuacan presence in Alta Vista, Chalchihuites has been the identification of the two large pecked cross-circle petroglyphs on nearby Cerro Chapín (Figure 4.13), closely identical to those found in Teotihuacan and elsewhere in Mesoamerica where they have been associated with specialized priests from the great metropolis' venturing into the northern and southern peripheries of Mesoamerica in search of the limits of the sun's movement on the summer and winter solstices (Aveni 2001:223–234; Aveni et al.1982; Coggins 1980; Kelley 1971:787, 1983b:15–17; Kelley and Abbott Kelley 2000; Malmström 1996:155–166). The pecked-crosses on Cerro Chapín where the summer solstice sunrise aligns at dawn on June 21st (on to the Tropic of Cancer) constitute a unique Teotihuacan fingerprint associated to an important date and place as "the place where the sun returns" (Aveni et al. 1982). For it is on that day that Alta Vista has its only zenith passage due to its location very near the Tropic of Cancer. The two large pecked crosses on the mesa top of Cerro Chapín, south of Alta Vista, are considered the best examples of this diagnostic petroglyph as being used as a "bench-mark" for a sun-watch station for astronomical-calendrical observation procedures. In this specific case, to register the sunrise of the summer solstice and used to triangulate the exact placement for the site of Alta Vista and its observatory (Aveni 2001:231; Kelley and Abbott Kelley 2000).

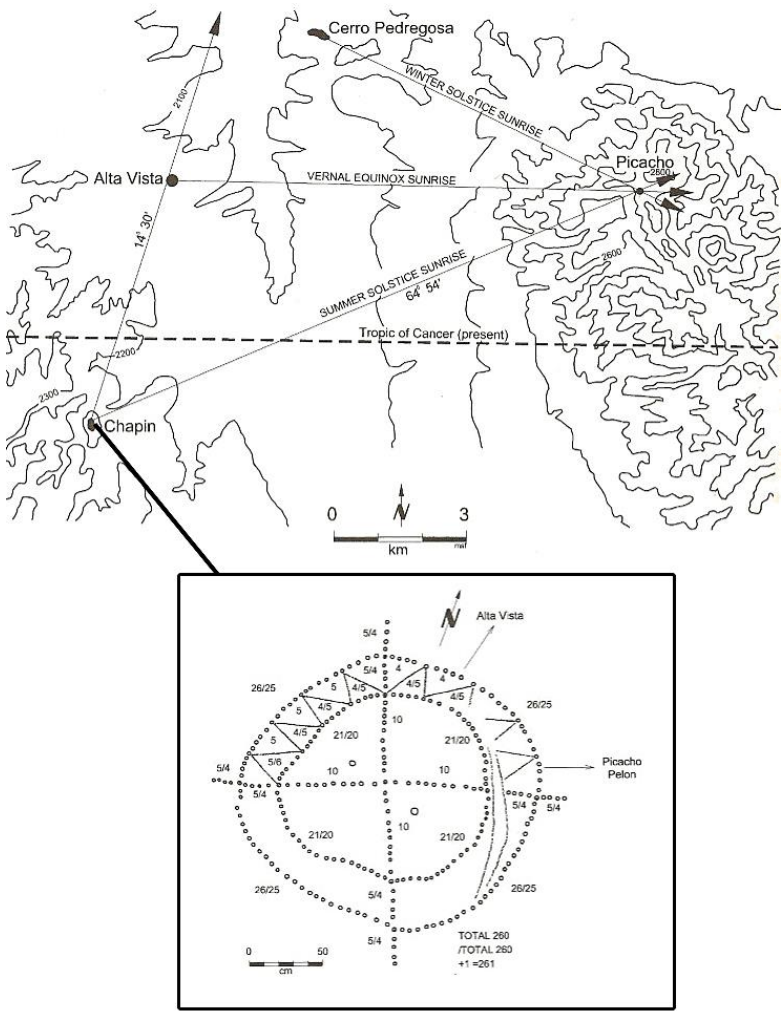


Figure 4.13. *Above: The Chalchihuites astronomical array. Below: The Chapín I pecked cross (after Kelley and Abbott Kelly 2000:Figs 11.3 and 11.5).*

Having been constructed over an earlier and small village at sometime around 450–480 CE, the ceremonial center of Alta Vista was used, remodeled, and expanded throughout the next four centuries (Kelley 1983b).

Upon considering the possible significance of the pecked cross petroglyphs found beyond the metropolis, into the distant realms of Mesoamerica, Coggins proposes that Teotihuacan's motive, in its role as the primordial *Tollan* "Toltec":

> I suggest such a concern with astronomical and calendric precision took Teotihuacanos, who would encompass their "world" north to the Tropic of Cancer (23.5 degrees north latitude), and south to Copán, Honduras (close to 15 degrees north latitude), late in the fourth century A.D. […] This involved an expansion, even an imposition, of their understanding of Toltec time and space. All Mesoamerican peoples already used the same calendar, marked the zeniths (as determined by their latitudes), and the universal stations of the solar years. But only in Teotihuacan was the sun created and did its eternal journey, thus starting time, and the calendar […] The principal Teotihuacan cultural traits taken abroad included the Toltec understanding of time and space, as measured by solar observations and fifty-two-year Calendar Round cycles with their requisite drilling of New Fire (Coggins 2002:53–54).

On the Tropic of Cancer, besides the aforementioned pecked crosses, a strong case can be made for the presence of an Early Classic Teotihuacan worldview manifested in sites of the Chalchihuites culture during the fifth century (Foster 1995: Table 3). Taking the iconographical traits of *Xiutecutli*, the revered Fire God in Teotihuacan, as seen on sculptured braziers he bears a headdress consisting of a band with a rhomboid motif and center circle, a symbol for which the deity has been considered as the god of the center and the four cardinal directions (Limon 2001; Von Winning 1987). It is worth noting that this symbolism may have been replicated in the ritual landscape of Cerro Moctehuma, Chalchihuites, where Kelley detected a distinctive square plaza layout with the corners of the plaza corresponding to the cardinal points. At this same site, Kelley's excavations in the central altar recovered a unique sculpture of what has been identified as the Fire God (Kelley 1963). A radiocarbon date from the central altar in Cerro Moctehuma places its construction between 487–550 CE (Kelley 1971:787, pers. com. 1995). Likewise, it should be recalled that the neighboring ceremonial center of Alta Vista is at this time going through its earliest construction episodes (Kelley 1983b), and, as in the case of Cerro Moctehuma, presents square plaza

architecture with its corners orientated to the cardinal directions. The excavations in the Suchil branch of Chalchihuites in the 1960s provided evidence of village sites that present a common pattern of site orientation with the sides of the plazas orientated to cardinal points. Alta Vista and Cerro Moctehuma mark a very distinctive departure from the Canutillo village site characteristic of the region up to that time.

Architecture at the site of Alta Vista has been seen by researchers to contain elements that can be associated to the great metropolis 600 km to the southeast. The measurement unit of 82 cm used in the layout of Alta Vista corresponds with that used in Teotihuacan (Lelgemann 1997; Sugiyama 2010). Stepped merlons (*almenas*)—a roof ornament that crowned many of the buildings at Alta Vista—are an architectural element unknown from surrounding ceremonial centers in northwest Mesoamerica. These have been described for the aforementioned site of El Rosario in Querétaro, where murals linked to Teotihuacan have been recovered (Saint-Charles et al. 2010:110). The merlons of Alta Vista emulate the form of the Type II *almena* described for Teotihucan, though neither the size nor workmanship found on those in the distant city (Smith and Bautista 2015: Fig. 1). The stepped merlons of Alta Vista are simpler, reduced-scaled copies made of adobe with lime plaster.

In the early 1990s excavations in areas alongside the site's unique Observatory defined an architectural complex now known as the Palace of the Astronomers (Kelley and García 1993; García 1992) in which very distinct architectural construction techniques and elements were detected with a specific correlation seen in the Teotihuacan building complex of Atetelco (Margain 1966). Thus, as Coggins argues above (Coggins 2002:53-54), and many other researchers likewise posit (e.g., Aveni 2000; Aveni et al. 1982; Coggins 1980; Kelley 1971:787, 1983b:15–17; 1990b:12; Kelley and Abbott Kelley 2000; Malmström 1996:155–166), there is evidence that could hypothetically support the idea of a visit from Teotihuacan at some time between 400/500 CE by a highly specialized group involved in astronomical observations and surveying. However, the lack of material evidence from Teotihuacan is problematic.

As to a possible route for a proposed visit from a highly specialized group from Teotihuacan, recent research into the distribution of pecked crosses across West Mexico (Cárdenas and Retiz in press) present a distribution from Teotihuacan, through the Valley of Toluca, and Michoacán to the Pacific Coast. From this axis, a second northward extension crossing central Jalisco to the Tropic of Cancer is identified (Figure 4.14). Despite this distribution and the association with Teotihuacan, an event so specific as what has been proposed for the presence of pecked crosses on Cerro Chapín can only remain hypothetical. In such case, it would correspond to the model of single-event "for interaction with a distant foreign power" (Marcus 2003:348). However, the distribution pattern of pecked crosses defined by Cardenas and Retiz presents a high density in Michoacán and segments of Jalisco correlated with the prestige goods networks above. Hence, together with the additional core-like aspects (i.e. measurement unit, architectural features) mentioned above from Alta Vista, these can likewise be seen as evidence indicative of transmission of core elements that were emulated in a number of settings throughout West Mexico by way of information networks of the Early Classic period. Future research in

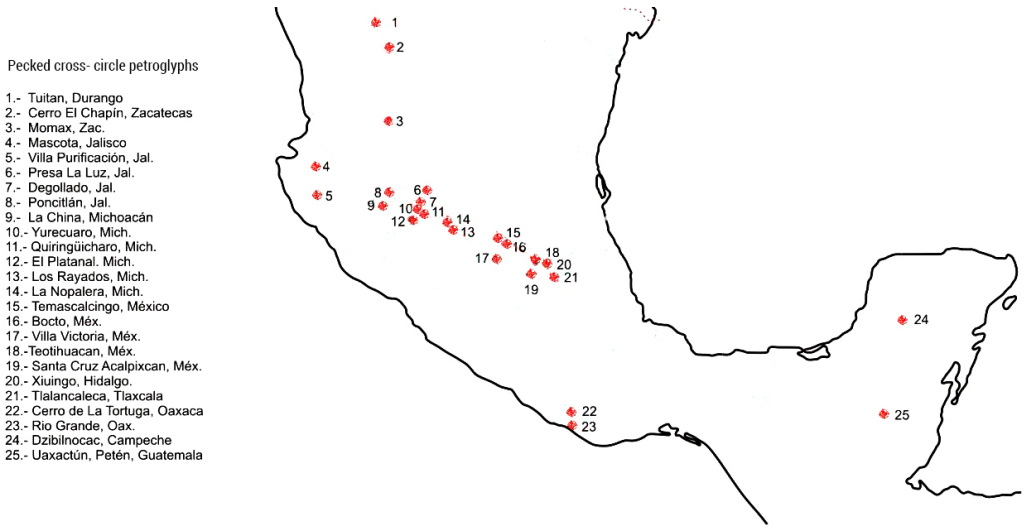


Figure 4.14. *Distribution of pecked crosses (Cárdenas and Retiz in press, used with permission).*

sites belonging to the political networks in northern Michoacán and southeastern Bajío will provide a better starting point from which to measure emulation and transmission of information already present in the iconography of the earspools of prestige goods networks.

Dynamics of Cultural Change: The Pulsation of the Early Classic Period World-System into West Mexico and the Transformation of Late Formative Regional Systems

From the empirical evidence presented above for four nested networks, a number of observations come into focus that are pertinent to the understanding of the spread effects and the systemic transformations that occurred throughout the regions in question. Of initial concern is the chronology for the expansion and retraction of the interaction networks into Western Mesoamerica. The analysis of the ceramic assemblage associated with the contexts of burials that contain the elaborate northern Michoacán ceramics and figurines in Structure N1W5:E19 from Teotihuacan pertain to the late Tlamimilopa, Xolalpan, and Metepec phases 350–600 CE (Begun 2013:116), dates that serve for the time frame for the pulsation of prestige goods networks into West Mexico. The NIW5:E19 dates correlate with the chronology in Michoacán for the black excised polychrome inlaid bowls, proposed here as evidence for the beginning of the pulsation for prestige goods networks at around 350/400 (Carot 2005: 107–108), and the chronology from southern Zacatecas (Lelgemann 2012) for the ear spools, Thin Orange ceramics, and green obsidian proposed as material evidence for the intensification of interregional interaction of this pulsation occurring at 450–550 CE.

At 350/400 CE regional elites from the lake district of northern Michoacán were incorporated into the Teotihuacan system, while migrants from Michoacán established residence in the urban core. The site of Loma Santa María, Michoacán, is to date the best indicator for a political network that sustained interaction with Teotihuacan for two centuries. Black excised polychrome inlaid

bowls like those found in Loma Sta. María, northern Michoacán, Structure N1W5:E19 of Teotihuacan, and El Piñón, Bolaños, are material evidence suggesting initial networks linking these regions at 350/400 CE. The timing for this initial interaction suggests that the impacts of the pulsation of prestige goods networks across central West Mexico may have been considerable.

From the territory of the Cuitzeo-Zacapu-Pátzcuaro Loma Alta culture aggregate, the initial pulsation of prestige goods extended into the region of Jiquilpan, through the Chapala Basin into central Jalisco, which can be seen with the inception of the Sayula phase in the Sayula Basin, and the El Grillo phase in the Atemajac Valley (López Mestas 2011; Ramírez 2016; Reveles et al. 2014), both dated at 400 CE. Both phases constitute a major cultural disjunction and reorientation manifested by the end of the long tradition of shaft-tombs of West Mexico. The entrance of this pulsation into central Jalisco elucidates the conclusions Aronson observed for the mortuary practices of the Atemajac Valley for the El Grillo phase:

> First, this dissertation has argued that there is a discontinuous change in the way burial was experienced in the Valley of Atemajac between the Late Formative/Preclassic and the Classic period. It is argued that these changes (miniatures, flexed burials facing the North wall) were similar to changes seen in Teotihuacan during the Tlamimilopa phase. This is not to say that this is the only way that Teotihuacanos were buried, nor is it to say that Teotihuacanos were settling in the Valley of Atemajac. Rather, as with the architecture, these changes are derived from patterns voiced in Teotihuacan and most likely were interpreted by other groups between Teotihuacan and the Valley of Atemajac. These changes reflect the introduction of new ideas about social organization and ideation. One likely pathway of change is via the Lerma River, across the Bajío of Guanajuato, into Los Altos and finally the Valley of Atemajac (Aronson 1993:358).

Further to the west, there is evidence of prestige goods networks within the area of the Teuchitlán culture, the monumental

hallmark of sociopolitical complexity in West Mexico up till this time (Weigand 1986; Trujillo 2015). Reflecting on the evidence of Thin Orange ceramics detected in contexts from sites of Teuchitlán, Weigand concluded,

> Thus, there exists this very real possibility, in scenario, Teotihuacan's expansive pressure, as the major metropolitan component of an evolving world economy and trade structure (á la Braudel 1972, 1982), placed pressure upon the less complex societies of Western Mesoamerica. That pressure, whether direct or indirect, whether political or economical (or both), cannot be assessed yet, but most assuredly came by way of Ixteptete, El Grillo, and Coyutla, […]. Continuing the scenario: Teotihuacan's pressure was real, though we cannot know it was economical, cultural, political or in combination (Weigand 1992:229).

Weigand went on to interpret the Teuchitlán I phase (400–700 CE) as a vigorous regional response to an encroaching Teotihuacan world economy, which propitiated a reiteration of regional identity and resistance, which gave way to the apogee of the Teuchitlán culture (Weigand 1992, 2000). In an ensuing review of the relationship between the Teuchitlán core and the Atemajac Valley concerning the encroachment of El Grillo in Atemajac, Weigand perceived the possible construction of "core-fortified sites" between these two neighboring zones to buffer Teuchitlán from the changes occurring in the neighboring Atemajac Valley.

> This may have been the case for the Atemajac Valley, where the transition from the Tabachines to Ixtépete phase was abrupt (about A.D. 300-400), the latter representing an entirely alien element in burial ceremonialism, architecture, and ceramic production (Aronson 1993; Galván 1991). Although these same trends are visible within the core during the Teuchitlán I and II phases, they appear to be far more gradual than the abrupt and earlier transition in the Atemajac area […] the transition in the Atemajac Valley is of a different order and seems to represent the middle Classic

> arrival of peoples influenced from central Mexico and/or the Bajío long before the same process was initiated in the Teuchitlán zone. The inclusion of the Atemajac Valley in the interaction sphere postulated by Jiménez (1992a) would date from this time period because in prior times it [the Atemajac Valley] was a periphery to the lake basins just to its west (Weigand 2000:51–52).

At present, with the advantage of a significant correction of the chronology in process for Teuchitlán (Beekman and Weigand 2010) and a series of radiocarbon dates for the El Grillo complex (López Mestas 2011; López Mestas and Montejano 2003; Montejano 2007) we can now perceive that the incoming pulsation of interregional interaction from the lake district of Michoacán coincided with the end of both the Teuchitlán culture and the Tabachines Shaft Tomb complex, and the inception of the new cultural complex of El Grillo dating from 400 CE, a change which extended through the Atemajac Valley into the Magdalena Basin further west triggering an abrupt change and demise of Teuchitlán culture (López Mestas 2011; López Mestas and Montejano 2003). In the same manner that Aronson's observations on the Atemajac Valley can now be contextualized, so too can the pulsation explicate observations made from the core of Teuchitlán itself within a more precise chronology. The radiocarbon dates for El Grillo's inception are placed at 400 CE based on the excavations in La Higuerita, Tala, in the central portion of the Teuchitlán sphere where talud-tablero architecture, "associated with that of Central Mexico" has been defined (López Mestas 2011, translation by the author; also Lorenza López Mestas, pers. com. 2015). With this in mind it is pertinent to point out that the pulsation from the lake district of northern Michoacán was synchronous with the considerable change observed in central Jalisco indicating that the pace of interaction from this pulsation was fairly rapid.

At the time of the heyday of the Teuchitlán culture (100 BCE – 300 CE) the most continuous extension of the circular patio complex of the Teuchitlán culture north of the Magdalena basin spread through the Bolaños Valley to the Valparaiso district in

central Zacatecas (Cabrero 1989; Weigand 1985). Therefore, the presence in El Piñón, Bolaños, of the elaborate black inlaid polychrome ware from northern Michoacán, indicate that prestige goods networks from the east were present in the valleys of central Jalisco including the Teuchitlán core, consequently headed northwards through Bolaños at around 350/400 CE. As change is underway, stemming from initial pulsation, interaction intensifies at around 450/500 CE, seen through the distribution of the earspools, Thin Orange, and green Pachuca obsidian in the prestige goods networks. This is observed in the Tepizuasco context of Thin Orange ceramics, earspools, Pachuca green obsidian blades, and Teotihuacanoid puppet figurine that was found in the fill of the *Guachimontón* circular patio complex and dated to 520 CE. Hence, at 400–500 CE change in West Mexico is pervasive. One of the most illustrative expressions of this pulsation is the generalized disuse around the same time of circular architecture and a new preference for orthogonal architecture patterns in southern Zacatecas, and northern and central Jalisco (e.g., Jimenez and Darling 2000: 171–174; Kelley 1971:770–774; see below).

This brings us to the question of the impact of incorporation on the Teuchitlán culture per se. Specifically, are we observing the collapse of the preexisting Teuchitlán regional system as a result of contact with the eastern networks, or a profound large-scale acculturation in West Mexico brought about through the contact, acceptance, and local manipulation of the Early Classic period cultural, ideological, and economical systems from information and prestige goods networks from the east? At present I would argue for the latter of these scenarios. As mentioned, Weigand (1992:229) considered the possibility of "pressure" stemming from Teotihuacan from his identification of Thin Orange ceramics from isolated contexts detected in the core area. However, the presence of these ceramics indicate that prestige goods networks from the east were integrating regional elites of the Teuchitlán core: contact had been made and interaction sustained, suggesting the incorporation process was underway and extending northwards as both the El Piñón, Bolaños, and Tepizuasco materials indicate. Thus, this

indicates that the Teuchitlán culture entered into networks of interaction from the east, and during what appears to be a very short time, underwent a process of acculturation, leaving behind the distinctive provincial cultural traditions that had been their main ideational template up till then (e.g., shaft tombs, shaft tomb paraphernalia, and circular architecture). The Teuchitlán culture (or at least an important faction of its regional elites) does not appear to have broken down, but rather entered into the cultural and ideological realm of the Early Classic world-system through the interregional interactions with information and prestige goods networks from the lake district of Michoacán.

North of the Teuchitlán core, between 450–500 CE the site of Totoate in the Middle Bolaños manifests a new architectural layout of square plazas (Kelley 1963, 1971) overlying the earlier architecture that had derived from the circular architecture of the Teuchitlán core to the south. The northwestern extension of this pulsation process can be seen in the construction of the ceremonial centers of Alta Vista, Chalchihuites, on the Tropic of Cancer, likewise dated to this time 450–480 CE (Kelley 1983b, 1985), while to the east, construction has begun on the ceremonial center of La Quemada at 500 CE (Nelson 1997), both located on the northern frontier of Classic period Mesoamerica. Geographically, Tepizuasco is located 85 km south of La Quemada. Thus, the correlation in the dating of the evidence for prestige goods context in the former (i.e. 520 CE) and the construction of Alta Vista and La Quemada underscore the impact the process of incorporation of the Early Classic Period World-System had in the northern frontier settings of Mesoamerica at 450–500 CE. The interactions between prestige goods and information networks resulted in the transformation of sociopolitical complexity in the peripheral frontier areas (Suchil-Chalchihuites and Malpaso Valley). This is evidenced with the advent of ranked society materialized in the appearance of ceremonial centers over a landscape of previous simple sedentary Mesoamerican villages, the "belated Pre-Classic" village cultural characteristic of the Canutillo-Malpaso horizon (Kelley 1989, 1990b). The above change underscores the relevance of world-

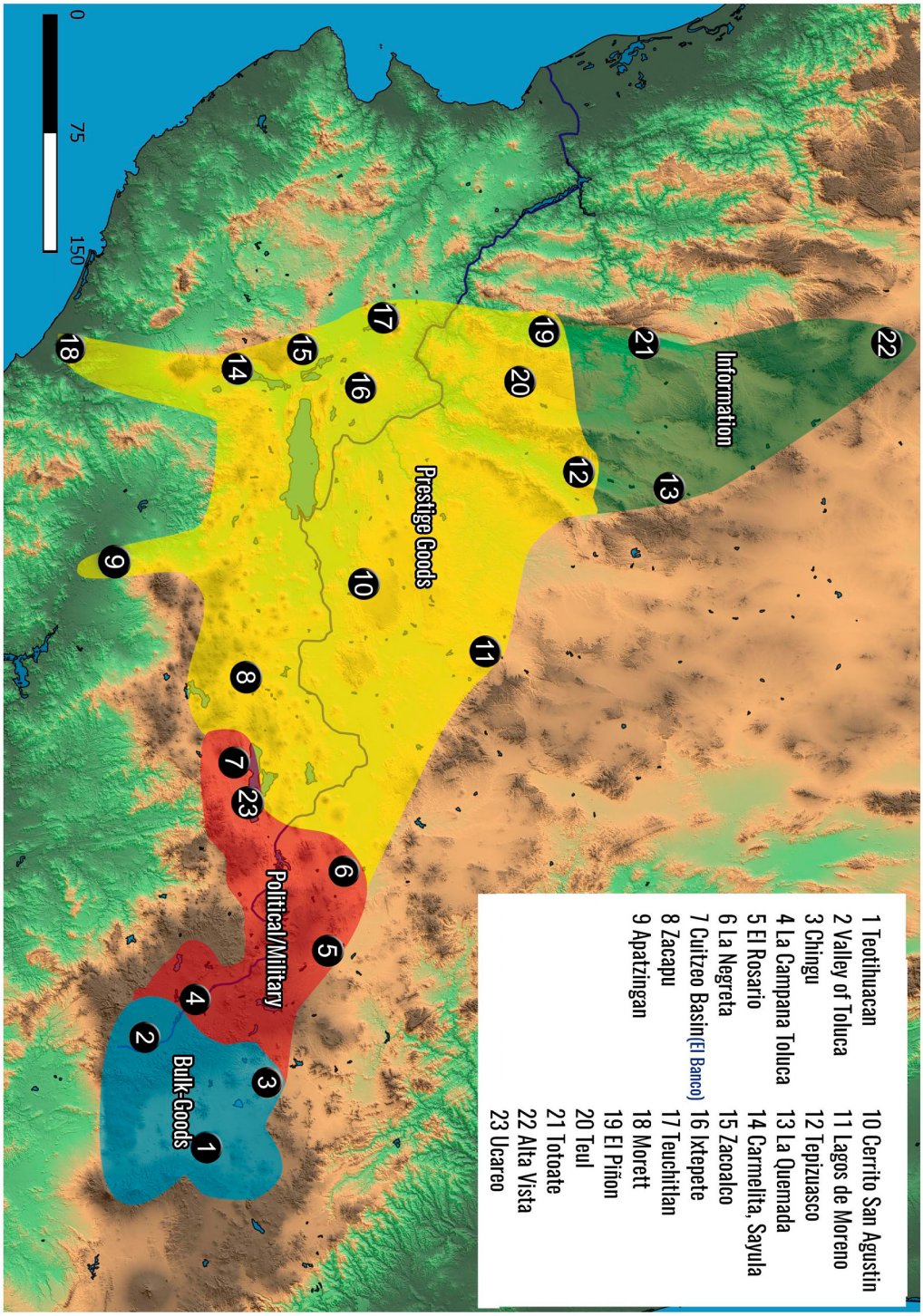
systemic process of incorporation as a process that transforms frontiers (Chase-Dunn and Hall 1997:70).

Changing focus from the local scale of analysis of the northern frontier to the broad scale of interaction between the Basin of Mexico and West Mexico, the incorporation process surges at 200 CE with the consolidation of the outer periphery of Teotihuacan's bulk-goods networks with the integration of the Valley of Toluca. At 300–350 CE the early phase of pulsation stimulated, around the lake district of northern Michoacán, and the southern Bajío, the transition out of the Post-Chupícuaro cultures and stimulated a social complexity previously unknown with the appearance of political centers and networks in the area. From northern Michoacán, as prestige goods networks extended west, the intensity of interaction within these networks instigated substantial cultural change in the realms of the Shaft Tomb tradition, and Teuchitlán culture, resulting in the transition out of the Late Formative world as they integrated into the Early Classic world-system at 400 CE. The furthest observable extension of the pulsation of networks into the northern frontier realm of much more simply organized and "younger" societies marks the transition out of the agricultural village horizon and into the early phase of ranked societies between 450–500 CE. The above describes the pulsation effects of the nested networks incorporating Western Mesoamerica into an Early Classic Period World-System (Figure 4.15).

The intensification of pulsation in West Mexico dated between 450–500 CE (Figure 4.16), correlates with the Late Xolalpan-Early Metepec phases of Teotihuacan.

A comparison between the beginning and peak phases of the West Mexican pulsation with the pulses of interaction observed between Teotihuacan and the Mayan realm (Braswell 2003a:35–38) is pertinent to this study. An early pulse dated to the Terminal Preclassic/Early Classic transition, which in Teotihuacan's chronology corresponds to the Tlamimilopa phase (170–350 CE), indicates that interaction "during this early pulse is best depicted as between equal (or near equal) partners. There is no evidence

Figure 4.15. *(overleaf) The spatial dimensions of the four nested networks during the Early Classic period.*


Information
Prestige Goods
Political/Military
Bulk-Goods
0
75
150
1 Teotihuacan
2 Valley of Toluca
3 Chingu
4 La Campana Toluca
5 El Rosario
6 La Negreta
7 Cuitzeo Basin (El Banco)
8 Zacapu
9 Apatzingan
10 Cerrito San Agustin
11 Lagos de Moreno
12 Tepizuasco
13 La Quemada
14 Carmelita, Sayula
15 Zacoalco
16 Ixtepete
17 Teuchitlan
18 Morett
19 El Piñon
20 Teul
21 Totoate
22 Alta Vista
23 Ucareo

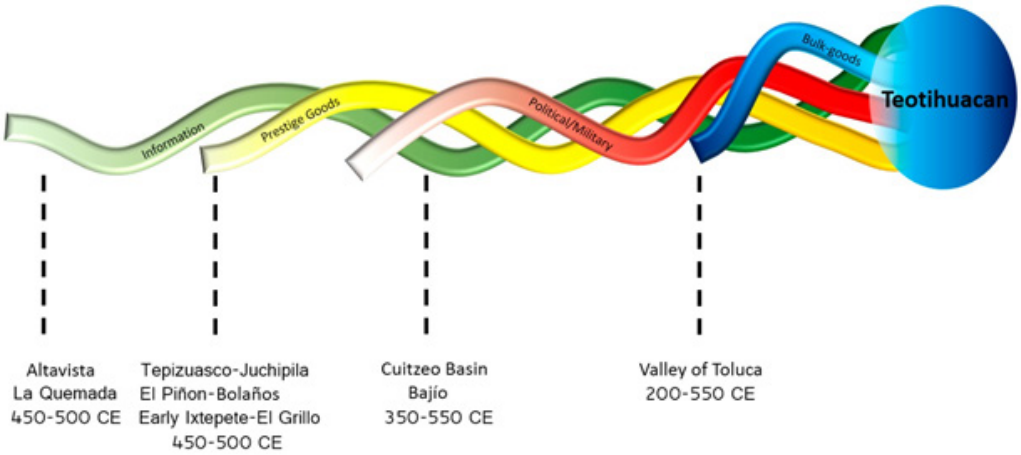


Figure 4.16. *Schematic profile of the temporal-spatial expansion of the process of incorporation of West Mexico into the Early Classic Period World-System.*

for asymmetrical relations, let alone for economic or political hegemony" (Braswell 2003a:36). The late pulse of interaction between Teotihuacan and the Maya, dated to the Early Xolalpan phase (350–450 CE) can be seen as the most intense time of interaction:

> Although Maya sites undoubtedly maintained contacts with Teotihuacan and other regions northwest of the Isthmus of Tehuantepec throughout the first half of the Early Classic period, interactions changed in several important aspects during the late fourth and early fifth centuries. *First, both imports and copies of Central Mexican objects appeared in greater numbers and at more sites than in earlier periods. Second, most of these items are locally produced homologies, suggesting either elite emulation* […] The late pulse seen at Oxkintok corresponds with the end of the Late Xolalpan and Metepec phases, or the last gasps of Teotihuacan as a major highland power. *In this case, the impact of relations is so diffuse and rarified that interaction with Teotihuacan seems more abstract than real* (Braswell 2003a:37–38, emphasis added).

On the whole, from the perspective of meridian Mesoamerica just described we can define three distinct phases of pulsation, the early

Figure 4.17. *Material correlates for the two phases of pulsation. Left: Vessel recovered from El Piñón at Bolaños Valley (after Cabrero 2007: Fig. 24). Above right: Earspools recovered from El Piñón (after Cabrero 2015: Figs 2, 3, and 5). Below right: Earspools recovered from Cuitzeo (courtesy of Agapi Filini 2016, used with permission).*

pulse (170–350 CE) which is seen as interaction between distant regions as peers, has a correspondence in West Mexico to the Mixtlán phase of the Bajío, a subject examined in greater detail in the following section. Braswell's second pulse in the Maya region (350–450 CE) corresponds with the initial phase of the pulsation seen here into West Mexico. The late pulse distinguished from Oxkintok, Yucatán during the Late Xolalpan and Metepec phases (450–650 CE) correlates to the timing of the intensification of the pulsation in West Mexico at 450–500 CE. This suggests that West Mexico was in tandem with processes of interaction that Teotihuacan directed towards the southern realms of Mesoamerica (Figure 4.17).

Timing the Discrete

On slowing this pulsation down as much as possible concerning dating, observing, and defining the process of integration into West Mexico, it is important to recall Kristiansen's observations on the problem faced in contextualizing change in chronologies and regions:

> To be understood they demand to be traced, both in time and in space, beyond cultural and chronological borders. It is exactly what happens between archaeological periods that have to be explained […] The problem is, however, that *we can only perceive changes when they have taken place* […] The explanation of change, as defined by archaeological periods and cultures, is also confronted by a theoretical and interpretative problem of a different nature. *Social and culture changes cannot be fully observed until they have actually taken place and materialised*. Their genesis in a preceding period is, however, difficult to observe. There is often little in the earlier period to suggest that a major change was under way […] It is therefore necessary to focus on *settlement and economic evidence* if one wishes to trace the genesis of change in the preceding period, as they will often show that things are not as they used to be, and that changes are already under way (Kristiansen 1998:25–26, emphasis added).

As in the case of the transition from the Chupícuaro tradition in the late Pre-Classic period of the Bajío into the Early Classic period, on what is commonly known as the Mixtlán phase. The fine-grained study in the Acámbaro Valley, Michoacán, has greatly enhanced the chronology of this phase (Darras and Faugère 2010). During the Mixtlán 1 phase (0–250 CE), a new series of ceramic complexes (Morales, Loma Alta and Queréndaro) develop in the area, which correspond in area roughly with the previous Chupícuaro tradition. Pertaining to the transition from Mixtlán 2 phase (250–420 CE) into the Classic they conclude:

> It is very interesting to note that in sites from the states of Southern Guanajuato and Northern Michoacán, like Queréndaro, Loma Alta, Cuitzeo or Loma Santa María, this new occupation is followed into the Classic by traits which permit to identify a Teotihuacan presence or influence (Thin Orange, obsidian masks, iconography, etc.). *In fact, the map of the presence of materials truly Teotihuacanos in the central-north coincides very closely with post-Chupicuaro sites affiliated with the Mixtlán and Queréndaro Traditions. Thus, it appears that Teotihuacan influence was exercised through the network of post-Chupicuaro settlements, certainly through the intermediation of local elites.* This observation again highlights the importance of events from the center of Mexico in the history of the Bajío (Darras and Faugére 2010:317; emphasis added, translation by the author).

Of interest here is the site of JR 46, in the Valley of Acámbaro, where "a very discrete presence" (Darras and Faugére 2010:309) of prismatic blades from Cerro de las Navajas, Hidalgo, and Ucareo-Zinapécuaro, Michoacán, was identified and dated to 50–320 CE (Darras and Faugére 2010:296). This can be seen as an indication that prior to the manifestations mentioned above for the Teotihuacan networks into Michoacán and Guanajuato in the Early Classic period (350/400 CE), exchange was underway during the previous Mixtlán phase, very probably as early as Mixtlán 1 (0–250 CE). This underscores that the tracing of "economic evidence" as Kristiansen observes above, in the dimension of discrete economic exchanges, which themselves constitute the earliest stage of the incorporation process (Carlson 2001, 2012), are indicative of changes underway during the Mixtlán phase. Hence, from Darras and Faugére's observations above, the idea that "Teotihuacan merchants created and administered long-distance trade between the Basin of Mexico and the West *just as societies in the southern Bajío were undergoing sociopolitical change*" (Hernández 2016:233; emphasis added), would be more precisely posited as a systemic process of change caused by the expanding political networks of the Early Classic Period World-System.

Teotihuacan's expanding networks beyond its bulk-goods networks constituted the stimulus for a continuous process of changes in the sociopolitical realms of the southern Bajío and the lake district of Northern Michoacán. These events did not happen by coincidence, they were part of a larger systemic process. These changes, in part, were seen regionally in the reorganization and definition of sociopolitical systems with regional elite formation and network integration, the latter establishing contacts, rather quickly, with a larger neighboring system to the east (Teotihuacan). Seen from this perspective, an emphasis is placed on inter-elite interaction across boundaries for which material evidence would correlate, instead of invoking merchants from the core for which no material evidence has been identified. Hence, by 300/350 CE the process of incorporation had augmented and intensified, having integrated the elites of northern Michoacán and the Bajío into political networks. With the consolidation of the core state of Teotihuacan, the regions to the west and northwest of the Basin of Mexico were soon integrating into the Teotihuacan system. The interpolity interaction described above between Teotihuacan, the lake district of northern Michoacán and southern Guanajuato correlate with the manner Kristiansen and Larson detail:

> We may distinguish between two types of processes. An initial process of interaction involving the flow of people, goods, and knowledge is explorative, often defining the opening of new lines of exchange between formerly autonomous polities or regional groups. At this stage, new ideas, goods and value systems are introduced. It can be followed by a process of acculturation where the new ideas and practices gain acceptance and can be recontextualised locally and regionally, and a fast process of transformation and institutionalisation follows (Kristiansen and Larson 2005:28).

Another aspect that deserves attention is the pulsation's expansion across Michoacán and into the central valleys of Jalisco. As mentioned above, at 400 CE a structural change is manifested in

both the Sayula and El Grillo phases. Again considering Kristiansen's observation on the time lapse seen till the materialization of change, it can be posited that between 350–400 CE interaction through the prestige goods network was in process through networks from the east. Future detailed chronological work in Teuchitlán region, the Atemajac Valley, the Sayula Basin, as well as the yet largely unknown Lake Chapala Basin (Bond 1971), may be able to clarify this as in the case of the work mentioned above for the Acámbaro Valley. At present with the data at hand, it seems that the pulsation into this portion of West Mexico was a rapid continuing process, probably owing much to the regional networks already in place from the Late Formative setting. In essence, one can consider a rather rapid coalescence of regional elites deciding it was in their best interest to reiterate relations, or establish new relations, of interaction with the neighboring elites (to the east) who had just integrated into encroaching networks from the Basin of Mexico. It would appear then, that as the networks from Teotihuacan extended westwards into northern Michoacán, the same pulse of interaction extended westwards interacting through the concatenation of regional networks into central Jalisco as a ripple effect extending across an existing web of intermeshed regional networks, thus the apparent alacrity for the expansion of the pulsation.

Upon considering the northwestward expansion of the pulsation into the regions of Chalchihuites and the Malpaso Valley on the northern frontier of the Classic period, this coincides with the transition from a sedentary village setting of the Canutillo-Malpaso horizon, to a ranked hierarchy with ceremonial centers at 450/500 CE. This involved the process of incorporation as a process of social change that occurred within the realms of political, economical, and ideological complexity; as the groundwork and crescendo of internal social dynamics that would have had to occur during this transition (Earle 1997). This complex accretion as a local response to interregional processes, and all that this ensued internally up to the time of the construction of these centers suggests the complexity of change stimulated by and entailed within the process of pulsation. The construction of La Quemada and Alta Vista corresponds to the

materialization of this process between 450 and 500 CE. With this in mind, it is proposed here that the initial phase of pulsation from northern Michoacán to the northern frontier at around 350–400 CE was stimulating the northern frontier to internal sociopolitical change. As interaction was intensified at 400–450 CE, this resulted in that by 450–500 CE all regions involved from central Jalisco to Zacatecas presented manifestations of having undergone the changes mentioned above. Hence the span from 400–450 CE corresponds to the process of "broadening and deepening" (Carlson 2001) of the sociopolitical structures and marked extension of both prestige goods and information networks across the region. And the span from 450–500 CE would correspond to the materialization of this systemic change.

Here it should be underscored that the synchronization in changes in regional chronologies across the expanse of West Mexico is posited as indicative of the entrance of the pulsation from the Northern Michoacán into this area: 400/450 CE marks an extensive and profound cultural change observed from the Chapala Basin with the onset of the Sayula phase and to the north in central Jalisco with the inception of the Grillo phase, which saw the demise of the monumental circular *Guachimontón* culture. Into the Bolaños salient, we likewise witness the end of circular architecture and the commencement of square closed plaza architecture. Further to the north this results in the construction of the site of Alta Vista, and to the east, La Quemada. This process of wide areal chronological change "in sync" (Frank 1998:334-345); Turchin and Hall 2003), or concordant change (Kowalewski 1995, 1996, 2004), constitutes a pristine example of the transformation that one would expect to observe throughout an area as regions came into contact with and began integration into the expanding interregional interaction networks stemming from the east as the world-system pulsated.

The Integration of Core Worldview into West Mexico

Pertaining to some of the underlying processes of interaction and acculturation operating within this vast interregional system, the example of the elaborate technique and fine ceramics of the post-fired stuccoed wares of Michoacán and southern Guanajuato ("Cheran stripped investment;" Holien 1977) and champlevé ceramics, of which the pseudo-cloisonné wares are the best known, appear to tell us much of the overall dynamics operating within this incoming pulsation. Further to the west, antecedents for the decorated ceramics were found in the excavations in the shaft-tomb of Huitzilapa, located in the Teuchitlán core zone, with the application of fine pigments over stone and shell artifacts as part of elaborate offerings (Ramos de la Vega and López Mestas 1996). To the east, in the lake district of Zacapu, Michoacán, Carot (2005:107) describes an elaborate polychrome ceramic vessel decorated with the inlaid paint technique from the Loma Alta 3 phase (350–550 CE). The vessel fragment shows a scene in pure Teotihuacan style, reflecting the metropolis' renowned "al fresco" style, but produced in a regional idiom of West Mexico (Figure 4.5). This is an example of the acculturation process that went on throughout much of West Mexico in regions where the systems information and prestige goods networks had integrated. In this case, the regional style shows a process of manipulation and transformation by local elites for use in their ritual realms. This is reflecting the transmission of the Early Classic period core cosmological system into the semiperiphery. It should be recalled that in the territory of Chalchihuites, on the northern frontier at this time, remains of an intensive mining industry have been documented and dated from 300 CE (Wigand 1968, 1982), and as just pointed out above, at around 450/500 CE is manifesting elaborately built ceremonial centers for the first time (Kelley 1983b, 1985). Future analysis on the pigments from the stuccoed wares of Michoacán and southwestern Zacatecas should clarify if Chalchihuites had managed to introduce mineral pigments into the Early Classic Period World-System. The Loma Alta vessel described by Carot (2005:107) pertains to the early

regional generation of this ceramic type, which was to become ever more frequent and the hallmark of elaborate ritual ceramics in the later Epiclassic period of West and Northwest Mesoamerica (Holien 1977).

The Loma Alta vessel as an example of regional modification of a core ideology seems part of what appears as an emerging pattern of regional variation on the Thin Orange ceramic ware whose distribution was controlled by Teotihuacan (Carballo 2013; Rattray 2001). For some time now, research in Michoacán has brought to light the presence of ceramics that at first sight resemble those from Teotihuacan, but which invariably bare differences that make them noticeably distinct, resulting in the categorically denominated "Teotihuacanoid" (Filini 2004; Filini and Cárdenas 2007:144; Macías 1990, 1997). This strongly suggests that the elites of the lake district of northern Michoacán may well have instigated the fabrication and distribution of local variations, or copies of fine ceramics based on the templates of original Thin Orange vessels from the core for distribution into the prestige goods networks that extended to the west. This would be indicative of a strategy employed by the elites of the semiperipheral region of northern Michoacán to supply prestige goods networks.

The presence of extremely elaborate clay earspools in sites from the Cuitzeo Basin in northern Michoacán (Alvaro Obregon) and southern Zacatecas (Cerro del Teul and Cerro Tepisuazco) and northern Jalisco (El Piñón), especially those bearing Tláloc representations, can be seen in a number of ways. Tláloc, or the Storm God (of rain and fertility), has been identified as one of the major state cults of Teotihuacan (Blanton et al. 1996:10; Manzanilla López 1996:240–242; Pasztory 1997). However, as of yet, the earspools have not appeared in excavations within Teotihuacan proper (George Cowgill, pers. com. 2015). To date, the only reported sites and contexts where they have been found are those mentioned above in Michoacán and southern Zacatecas/northern Jalisco. Those presented in Princeton's Art Museum were looted with unknown provenience (Berrin and Pasztory 1993). What can be said of these unique ornaments is that the artisan who made

them had contact with Teotihuacan figurines and iconography while at the same time possessed the knowledge of mold making from which the faces were pressed into clay (George Cowgill, pers. com. 2015). This again seems not out of place for the artisans under the auspices of the elites of the northern Michoacán lake districts as mentioned above. The significance of these earspools is exceedingly compelling. They are manifestations of the "transmission, transformation and integration" (Kristiansen and Larson 2005) of a core state ideology into distant regional settings within the semiperiphery and periphery. They manifest a change that has occurred within these polities in the realm of cosmology and ritual, distinguishable from the previous ideological systems of the Late Formative period in these localities. Local elites have integrated a new cosmological worldview of a core center through interaction with political, prestige goods, and information networks.

The earspools can be seen within Helms' three enmeshed perspectives:

> first, as metaphors for the belief (common in native cosmologies) in a distinctive cultured, or "civilized", socially ordered, or "moral" state of the human society that separates man from the natural (animal) world and that in rank societies further elevates some men (the elite) above their brethren as superior representatives of this human uniqueness. Second […] may stand as indicators of social rank and status. Third, they may also be regarded as symbolic of the elite's "activated status," or sacred-secular economic-political power (Helms 1979:80).

The earspools can be considered "active expressions" of rank and power (Helms 1979), imbuing a unique symbolic connotation since "the geographically distant and the supernaturally distant were closely related and that this association was succinctly stated by the acquisition from distant geographical regions of elite prestige items with sacred significance" (Helms 1979:107–108).

A mundane explanation for earspools would be as "souvenirs" brought back from Teotihuacan from a visit to the great metropolis

(Joseph Mountjoy, pers. com. 2014). But as mentioned, these have yet to be uncovered in Teotihuacan proper. However, we cannot rule out the possibility of the persons buried with these may have visited one of the political networks sites at some time, possibly having participated in a pilgrimage of ritual legitimization in the semiperipheral setting, or even to the core city itself. In the aforementioned case, this would correspond with Braswell's (2003b:140) idea pertaining to the Mayan realm, where "in special circumstances, local elites might have traveled to the great central Mexican metropolis for rites of legitimization." Likewise, on the subject of Early Classic interaction between Teotihuacan and Guatemala, Braswell goes on to propose that local elites from Kaminaljuyú may have participated "in a pan-Mesoamerican cult" (2003b:139). As such he mentions components within this cult such as the "goggle-eyed storm god," which are identified here in West Mexico on the earspools. He proposes that participation in such a cult would have infused its "priests with the *mana* of rulership" and that "participation in a world cult may have entailed occasional pilgrimages to or training in Teotihuacan, which perhaps was its most powerful and important center" (2003b:139). For the present case of the earspools, Braswell's ideas seem pertinent, although with the additional evidence at hand in El Piñón and Tepizuasco (champlevé and local version articulated figurine), local elites from southern Zacatecas and northern Jalisco would appear to have been drawn into legitimization at some site in northern Michoacán, again suggesting an interesting role within the semiperipheral domain.

Teotihuacan's Relations with Michoacán and the Role of the Semiperiphery

The recent study by Carballo (2013) on interregional exchange "least-cost paths" for the portage of diverse resources and prestige goods into the Valley of Mexico to the ethnically diverse city of Teotihuacan coincides with the entrance into West Mexico on

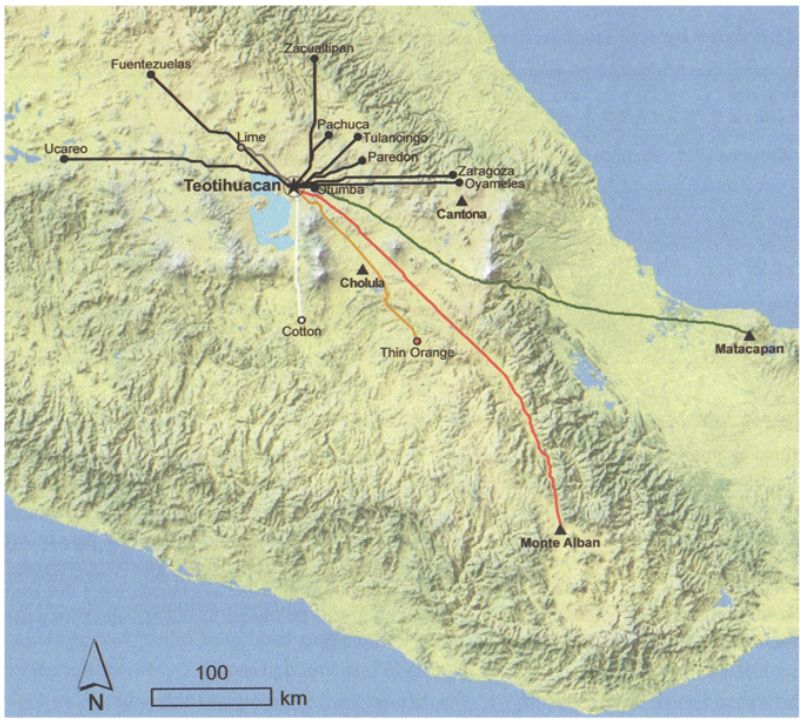


Figure 4.18. *Least-cost paths (after Carballo 2013: Fig. 5.8).*

the eastern extreme of the Cuitzeo Basin (Figure 4.18). Carballo (2013:120) states that it "should be emphasized that cost-path analysis provides a measure of estimated optimal routes in energetic terms that must then be matched with archaeological indices of cultural interaction to be of analytical value."

As seen above, the empirical evidence supports the Cuitzeo Basin as a prime candidate for political networks alliance with Teotihuacan. The evidence from Structure NIW5:E19 in Teotihuacan substantiates the existence of a Michoacán ethnic population in the city. At present, the evidence at hand strongly suggests that the lake district of northern Michoacán played a rather unique semiperipheral role. As Chase-Dunn and Hall (1997:249) argue, semiperipheral "development linked core/periphery structures to institutional innovations that expanded

and transformed social networks". The semiperiphery, in this case, manipulated and emulated the ideology and symbol set (Filini 2004; Hernández 2016) from Teotihuacan to the regional elites advantage for legitimization (Cowgill 1997) in their respective realm. At the same time semiperipheral elites manipulated and modified the materialization of this ideology for transmission (i.e. earspools, Teotihuacanoid Thin Orange variants, and stuccoed wares) beyond Michoacán through prestige and information networks that extended well into West Mexico. Thus, from the scrutiny of the geographical extension of networks through this region, together with the presence of a highly diagnostic symbol such as the Storm God, one can now objectively conceive the likelihood that what has previously been described, as a "Teotihuacan influence" was the manifestation of the semiperiphery's revamping of portions of core worldview.

The emerging pattern of distribution of the earspools and Thin Orange wares across a considerable portion of West Mexico suggests the importance of the network of polities that the semiperiphery integrated through the prestige good networks. This underscores the role played by the political networks in semiperipheral settings on two fronts: in its dealings with the core and the relationship it negotiates that links it to the core state, and in the relations it establishes through prestige goods networks to polities beyond the semiperiphery. When considering the spatial dimension of the Early Classic Period World-System in West Mexico (Figure 4.15), the continuous areas integrated from the territory of the political networks to the furthest boundary of prestige goods networks underscores the vital role and overall dynamics of the semiperiphery within this world-system. However, to extend analysis into this issue we confront a limitation in the present study owing to the scarcity of empirical data from excavations in sites of this period within West Mexico (Filini 2004). At present the material analysis of three aforementioned sites El Rosario, Tepizuasco, and El Teul, are in process. The results will permit inquiries into possible correlates of change reflected in categories of material remains beyond the empirical pattering discerned in the present chapter.

Summary

The objective of the present chapter, to undertake an areal analysis for the Early Classic period of empirical data from the Basin of Mexico and West Mexico, in the application of the nested network model of Chase-Dunn and Hall (1997) has shown material evidence for the following:

1. The existence of material correlates for empirical patterning of four interaction networks tied to the Early Classic Period World-System, and the core state of Teotihuacan in particular, that extend well beyond the previously perceived zones of Teotihuacan presence in the southeastern Bajío and lake district of northern Michoacán.
2. Change throughout West Mexico between 350–450 CE is pervasive. This change is linked to the broad scale pulsation of interaction networks, which incorporated many areas of West Mexico into a world-system of core/periphery relations. Teotihuacan did not dominate West Mexico, rather their control extended to the boundaries of their bulk-goods networks. Instead of a core state hegemony, Teotihuacan allied with the elites of southeastern Bajío and northern Michoacán.
3. Elites in political networks, prestige goods networks, and information networks utilize and manipulate core state ideology, symbols, prestige goods, and world-view to enhance their positions of power among their local realms.
4. Core/periphery relations between the Basin of Mexico and West Mexico transformed the northern frontier of Classic period Mesoamerica. The change is seen from the transition of frontier setting out of a horizon of dispersed sedentary village occupation to ranked societies materialized with the construction of ceremonial centers.

5. The synchrony in chronological change between 400–450 CE in most areas of the eastern and central portions of West Mexico is a proxy for the temporal-spatial process of incorporation.
6. The role of political/military networks is of considerable relevance in analyzing broad scale interaction networks of the Early Classic Period World-System in West Mexico. The semiperipheral setting of the northern lake district of Michoacán seems to have played a key role in expanding prestige goods networks across a number of cultural zones of West Mexico. This is seen in the extension of prestige goods networks.

This chapter has examined the archaeological record to discern material evidence that correlate with networks of interregional interaction between West Mexico and the Basin of Mexico during the span of 250–550 CE. The core/periphery relations of broad scale interpolity interaction peaked in West Mexico between 350–450 CE. However, at around 550 CE, the networks that bound these regions are subject to substantial change due to the disintegration of Teotihuacan. The networks that developed in West Mexico during the succeeding period 600–900 CE are the focus of the following chapter.

Chapter Five

World-System Transformation: Networks of Epiclassic Period West Mexico 600–900 CE

The Transition between the Early Classic and Epiclassic Periods

In the previous chapter material evidence for the boundaries of four nested networks that extended into West Mexico during the Early Classic period was examined. The analysis underscored the relevant prestige goods and information networks extending through the northern lake district of Michoacán across the central portion of West Mexico, which played a significant role in sociopolitical change at 350–450 CE. The changes brought on by these interaction networks at this time are best seen in central Jalisco with the change in ceremonial architectural pattern from the circular patio complex of the Teuchitlán culture to the orthogonal closed patio-pyramid complex (Kelley 1971:771–772; López Mestas 2011:85–86). Likewise, this change has been posited as one of the most conspicuous characteristics of the Classic period cultural patterns observed in the northern frontier in the form of the closed patio complex that highlights the architecture of Alta Vista (Jimenez 1992; Kelley 1983b) and southern Zacatecas, as well as central and northern Jalisco (Jimenez and Darling 2000; Kelley 1971).

As mentioned in Chapter 4, in order to better contextualize both prestige goods and information networks of the Early Classic Period World-System, excavations in ceremonial centers with closed patios are needed in the semiperipheral zone of northern Michoacán. As reviewed, limited salvage excavations in the site of Loma Santa María, in the Cuitzeo Basin, recovered talud-tablero architecture

(Manzanilla López 1984, 1988, 1996; see citations of Filini and Hernández in Chapter 3). From the perspective of the nested network analysis undertaken above, the presence of talud-tablero in Loma Santa María can be seen as emulation on the part of semiperipheral elites of Teotihuacan core culture. However, future excavations at prestige goods and information networks sites will permit a better determination on the spatial distribution and patterning of this specific aspect of political networks of the semiperipheral realm. More specifically, this will enable researchers to better distinguish if elites in the territory of information and prestige goods networks are emulating Michoacán modifications of core behavior, reflecting core culture modified through a chain of emulations extending through both semiperipheral and peripheral areas.

When considered within the entire chronological duration for the Early Classic Period World-System, 350/400–500/550 CE, West Mexico is enmeshed in networks of core/periphery relations with potentially diverse manifestations as local elites across the region integrated distinct aspects from information and prestige goods networks to their local realms. Between 500/550 and 550/600 CE this system of interregional interconnectedness undergoes transformation as the core state of Teotihuacan is subject to considerable sociopolitical change with the population of the city declining to around 20,000 inhabitants (Cowgill 2015:233–244; Crider et al. 2007:126).

The temporal span of 600–900 CE corresponds to what is commonly referred to in highland Mesoamerica as the Epiclassic period, the span between the abrupt contraction of the city of Teotihuacan and the prominence of Tula, Hidalgo, in Central Mexico (Jimenez Moreno 1966:49). It is a period of widespread change as the ramifications of political decentralization and fragmentation of Teotihuacan reverberated throughout Mesoamerica (e.g., Crider et al. 2007; Diehl and Berlo 1989). As Millon argues, "When it was at its apogee, Teotihuacan influenced the entire civilized world of Mesoamerica. When the city fell, the repercussions of its fall were so great for most of Mesoamerica that we can say that Teotihuacan was as influential in its death as it had been during its life" (Millon

1972:336, translation by the author). The political fragmentation of Teotihuacan had implications on the long-distance interaction networks that were formed during the Early Classic period. These networks would undergo substantial modifications in the absence of the core state in Central Mexico (Diehl 1989; Diehl and Berlo 1989:4; Price 1977:210). To conceptualize the process unfolding at 550–600 CE between Teotihuacan and those regions integrated into broad-scaled networks, it is relevant to return to the phenomena of pulsation.

Above, in Chapter 3, pulsation was referred to in relation to the process of incorporation of new territory into the Early Classic Period World-System in West Mexico between 350–500 CE. In describing both facets of pulsation Chase-Dunn and Hall observe, "During the enlarging phase, trade networks grow in territorial size and become more dense in terms of frequency of transactions. During the declining phase, trade slackens and local areas become less connected and reorganize around self-sufficiency. Local identities and the cultural distinctions between local groups and outsiders are emphasized" (Chase-Dunn and Hall 1997:204).

It is proposed that the loosening and subsequent unraveling of core/periphery interregional networks propitiated modifications that restructured the character of relations and interactions with adjacent neighboring polities. This change resulted in new networks of interpolity interaction in spatial realms of reduced scale in relation to the preceding period of the system. These characteristics of world-system change correlate with the transformations occurring in the transition from the Early Classic to Epiclassic periods in highland Mesoamerica.

The objective of this chapter is to review proposed evidence for networks of the central segment of West Mexico during the Epiclassic period. This chapter will outline emerging patterns of material culture that shed light of the new connections that developed between 600–900 CE. Likewise, this outline will present the spatial dimension of the inland northern frontier of West Mexico during the period of its maximum northern expansion (Armillas 1969; Braniff 1974; Kelley 1971). The spatial realm of

this frontier zone at its maximum extension as of a mosaic of local cultural spheres (i.e. archaeological cultures, Vander Linden 2011) has only been partially described in areal dimension (Jimenez 2013; Jimenez and Darling 2000). The acquisition of new data in the last half-decade impels an integrated overview of the spatial scale of local cultural spheres of central West Mexico. The synopsis of the regional configuration will permit to focus on material evidence for the definition of interaction networks that integrate West Mexico from 600–900 CE, the objective of the present chapter.

During this period, West Mexico does not present evidence of core/periphery relations, a situation analogous to all regions of Mesoamerica during the same period, in absence of a core state stimulating a centralized world-system. This process of decentralization was perceived by Chase-Dunn and Hall (1997) as a basic pattern of world-systems, which frequently oscillate from centric to multicentric systems.

The networks that articulate the central portion of West Mexico will come to the fore in chapter 6 as Central Mexico again enters a period of core/periphery relations in the Early Postclassic period.

Overview of the Regional Configuration of Inland West Mexico and the Evidence of Networks

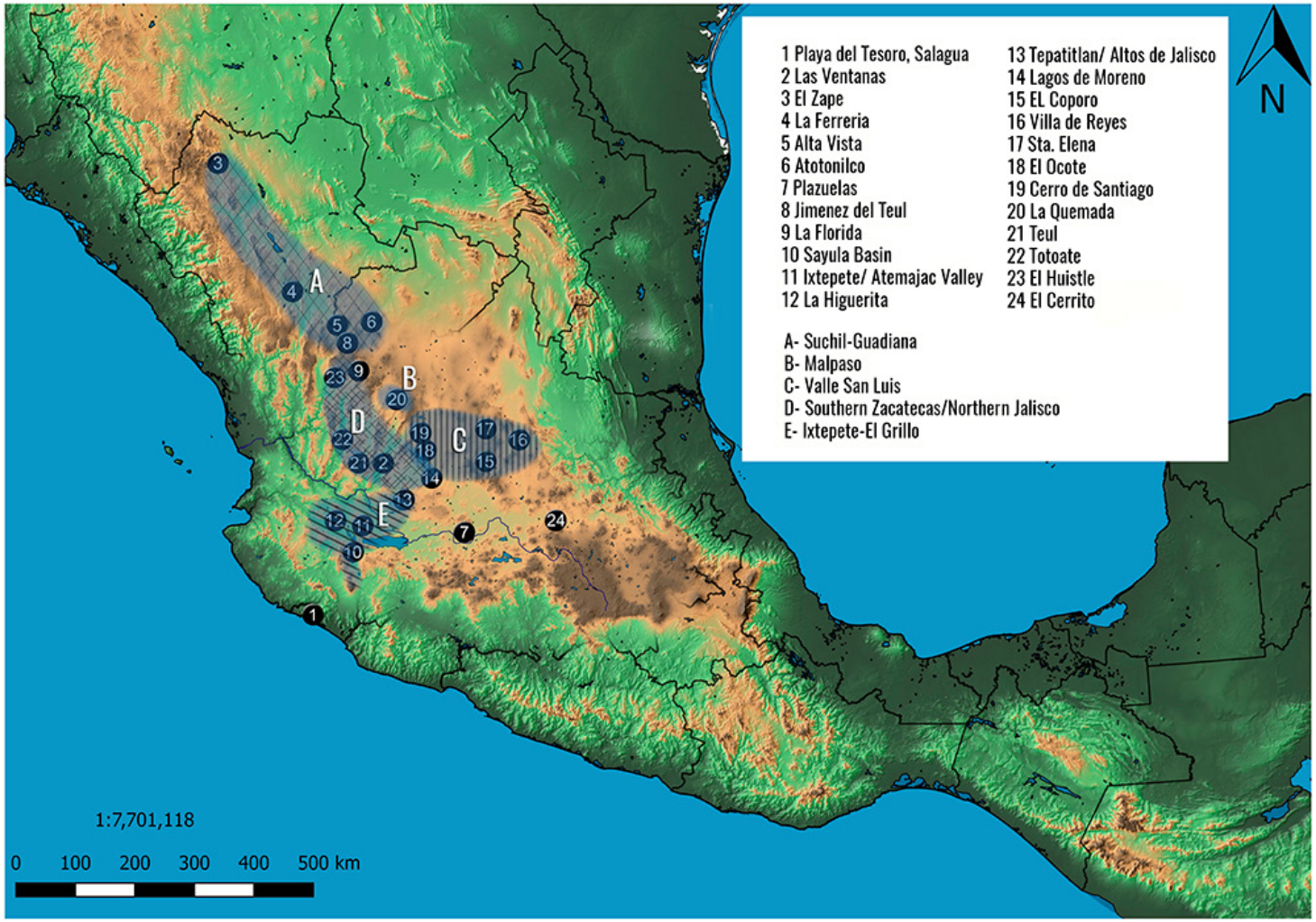
The antecedent of this chapter is found in the interaction sphere defined by Kelley (1974:23; Holien 1977) to explain the continuous distribution of pseudo-cloisonné ceramics, the elaborate inlaid polychrome ceramics found in sites among a number of regions of central West Mexico (Figure 5.1). Regarding the sphere Kelley states,

> As used here, the term "interaction sphere" refers to a geographic cluster of several diverse cultures participating as a group in one of more activities that give them a degree of unity not shared with other cultures. Thus, a series of more of less contiguous local archaeological cultures united by the shared presence of one or more "horizon styles" may be said to form an "interaction sphere"

Figure 5.1. *Distribution of paint cloisonné ceramics in Northwestern Mesoamerica (after Kelley 1974: Fig. 2). Ceramic vessel from Alta Vista, Chalchihuites.*

> in terms of the shared styles, the sharing of which implies some degree of cultural interaction (Kelley 1974:33).

Kelley's proposal clustered a number of local cultural developments across West Mexico at a scale that had not previously been discerned for the region. The emphasis on interaction came at a time when many geographical voids still existed in zones within the sphere. In essence Kelley defined a spatial scale of inquiry requiring decades to integrate.


1 Playa del Tesoro, Salagua
2 Las Ventanas
3 El Zape
4 La Ferreria
5 Alta Vista
6 Atotonilco
7 Plazuelas
8 Jimenez del Teul
9 La Florida
10 Sayula Basin
11 Ixtepete/ Atemajac Valley
12 La Higuerita
13 Tepatitlan/ Altos de Jalisco
14 Lagos de Moreno
15 EL Coporo
16 Villa de Reyes
17 Sta. Elena
18 El Ocote
19 Cerro de Santiago
20 La Quemada
21 Teul
22 Totoate
23 El Huistle
24 El Cerrito
A- Suchil-Guadiana
B- Malpaso
C- Valle San Luis
D- Southern Zacatecas/Northern Jalisco
E- Ixtepete-El Grillo
N
1:7,701,118
0 100 200 300 400 500 km

The elaboration of the present overview of five local cultural spheres (Figure 5.2) represents a generational advance in local studies undertaken during the last three decades in the areas that were encompassed within Kelley's proposed interaction sphere: A) Suchil-Guadiana, B) Malpaso, C) Valle San Luis, D) Southern Zacatecas/Northern Jalisco, and E) Ixtepete-El Grillo.

In this sense, the overview is a work-in-progress since the spheres in question are in process of further definition. Fortunately however, the recent trend of studies throughout the zones south of Chalchihuites has focused on sites producing a larger proportion of information pertaining to this period than to both the preceding Early Classic and later Early Postclassic periods.

Suchil-Guadiana Sphere

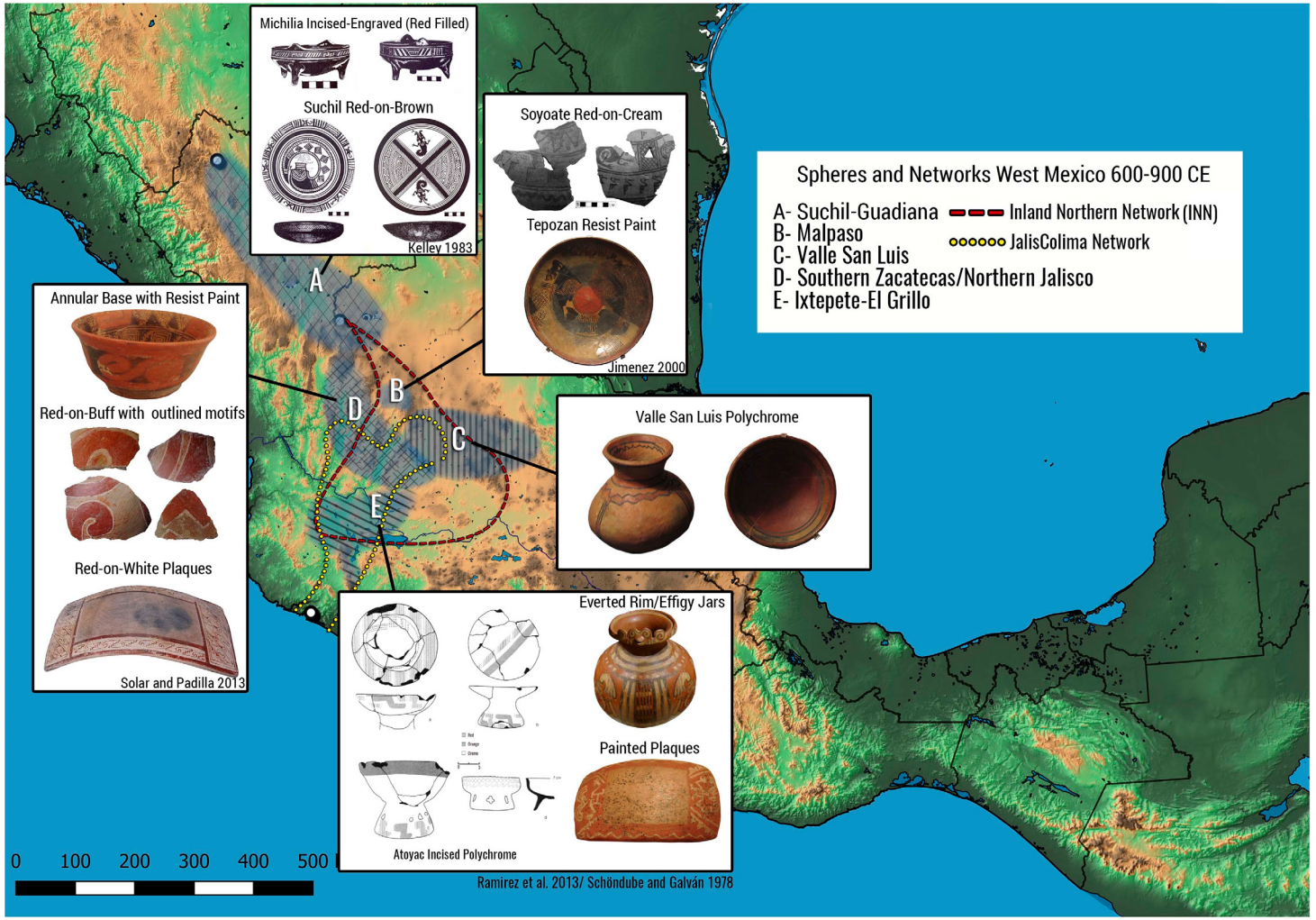
It is during the Alta Vista phase (600–850/900 CE) of the Suchil zone in northwest Zacatecas that intense sedentary occupation gets underway in territory of the central valleys of present day Durango. With this geographical expansion of settlements, the existing ceremonial centers of Cruz de la Boca, Cerro Moctehuma, and Alta Vista of the Suchil area become a localized southern cluster as new ceremonial centers to the north are constructed, highlighted by the site of La Ferrería in the Guadiana Valley. This expansion of sedentary occupation constitutes the cultural base out of which this territory develops, locally known as the Ayala phase (Foster 1995; Hers 2013:167; Kelley 1971; Punzo 2013:197). The Alta Vista/Ayala phase occupation from northwest Zacatecas to central Durango covered an extensive area, highlighted in the southern Suchil zone by large-scale evidence of specialized economic activity. The identification of over 800 mines dating from 350/400–900 CE underscores the scale of labor invested in this activity (Fenoglio 2011:55; Melgar Tisoc 2014:31; Schiavitti 1995; Weigand 1968:46–47, 1982). Schiavitti (1995) has defined two periods of mining activity: 400–650 CE and 650–900 CE, the latter representing the peak period of their exploitation. Limited samples taken from

Figure 5.2. *(previous) Sites and culture spheres mentioned in Chapter 5.*

the mines indicate they were sources for weathered chert, quartz, limonite, hematite, and diorite, which have been proposed as part of the prestige goods produced in the area (Fenoglio 2011). The ceremonial center of Alta Vista likewise contained evidence of having been a production center of blue-green stone beads and pendants (Melgar Tisoc 2014:89–92).

The ceramic types that distinguish the Suchil-Guadiana sphere during this time are Michilia incised-engraved and Suchil Red-on-Brown (Kelley and Kelley 1971). These are proxies for the geographical extension of this sphere (Figure 5.3). The northern segment of this sphere extends to the area of El Zape (Brand 1935). The eastern extension of the sphere is known from the Atotonilco site excavations undertaken by Walter Taylor in the early 1960s (Kelley, pers. com. 1993; Joe Mountjoy, pers. com. 1993). Obsidian studies from the Suchil-Guadiana sphere indicate use from sources in a radius that involves the Chapalagana Canyon to the south and Bolaños Canyon to the southeast (Darling 1998:362, Fig. 6.7, 372–373). The Llano Grande source in central Durango appears to have supplied the northern segment of this sphere. At present, the identification of the Type I figurine (see below), the distribution of which is constant throughout areas to the south and southeast, is known for this sphere only from the site of Alta Vista (Jimenez 1989; 1992; Kelley, pers. com. 1987). This suggests the use of this figurine may have been restricted to this particular site on the southern fringe of the Suchil-Guadiana sphere. Conspicuously absent from this sphere is the Red-on-White painted ceramic plaques present in spheres to the south and southeast (Solar and Padilla 2013). Moreover, the paucity of intrusive ceramics reported from sites of this sphere is characteristic (Kelley, pers. com. 1993).

Figure 5.3. *(overleaf) Ceramic markers of the cultural spheres mentioned in Chapter 5.*


Michilia Incised-Engraved (Red Filled)
Suchil Red-on-Brown
Kelley 1983
Soyoate Red-on-Cream
Tepozan Resist Paint
Jimenez 2000
Spheres and Networks West Mexico 600-900 CE
A- Suchil-Guadiana
B- Malpaso
C- Valle San Luis
D- Southern Zacatecas/Northern Jalisco
E- Ixtepete-El Grillo
Inland Northern Network (INN)
JalisColima Network
A
B
C
D
E
Annular Base with Resist Paint
Red-on-Buff with outlined motifs
Red-on-White Plaques
Solar and Padilla 2013
Valle San Luis Polychrome
Everted Rim/Effigy Jars
Painted Plaques
Atoyac Incised Polychrome
0 100 200 300 400 500
Ramirez et al. 2013/ Schöndube and Galván 1978

Malpaso Sphere

The Malpaso Valley is known for the large ceremonial center of La Quemada as well as the unique stone paved causeway system of over 175 km that webs throughout a considerable portion of the valley linking sectors south of La Quemada, where survey has shown evidence of 220 hamlet and village sites (Trombold 1976). The Epiclassic period marks the peak of settlement within the valley, as well as construction in the site of La Quemada itself (Jimenez 1989, 1996; Jimenez and Darling 2000; Kelley 1971; Nelson 1997; Trombold 1985, 1990). A close relationship with the Suchil zone is evidenced in the early phase of both areas seen in the close similarities between the Canutillo incised-engraved type of Suchil and the Malpaso types (Jimenez 1988; Jimenez and Darling 2000; Kelley 1963; Trombold 1985).

As mentioned in Chapter 3, the Canutillo-Malpaso horizon (Kelley 1989; Jimenez and Darling 2000) suggests a common origin for the early village horizon throughout much of the area between the Suchil zone and the Malpaso Valley, previous to the construction of ceremonial centers. During the Epiclassic period the relationship between these spheres continues as Malpaso Valley artisans produce incised-engraved ceramics that parallel the much finer Michilia and Vesuvius types of the Suchil area (Jimenez and Darling 2000). However, it is during the Epiclassic period when the Malpaso sphere manifests the use of elaborate negative painted ceramics (Jimenez and Darling 2000), absent in the Suchil-Guadiana sphere. The resist painted wares highlight the ceramic tradition of the Malpaso sphere (Jimenez and Darling 2000) and its ties to West Mexico, where resist paint persist from the Late Formative period. To date, the Tepozan resist painted wares, outstanding in its complex designs and elaboration technique, have not been identified outside of the Malpaso Valley. Obsidian artifacts recovered from La Quemada (Figure 5.2) suggest exchange networks linked to central Jalisco, southern Zacatecas, eastern Michoacán, and central Mexico (Darling 1998: Fig.6.9; Jimenez and Darling 2000:175–177). The size of La Quemada, one of the

largest sites in all of West Mexico, contrasts with the modest scale of its ceramic sphere. In contrast with the Suchil-Guadiana sphere, conspicuously absent from La Quemada and the Malpaso Valley is evidence for highly specialized economic activities.

Valle San Luis Sphere

Survey and excavations in the territory east of the Malpaso Valley undertaken by the pioneer studies of Braniff and Crespo defined the diagnostic ceramic type known as Valle San Luis Polychrome that has served as the initial diagnostic in the definition of this sphere (Braniff 1972, 1974, 1992, 2000; Crespo 1976; Jimenez and Darling 2000) (Figure 5.3). However, the definition of this sphere is still in a preliminary stage. Only recently have data sets from a number of sites been acquired, thus additional components of this sphere will be defined in the near future as analysis progresses (Dueñas 2017). Likewise, the spatial dimension of the sphere in the eastern and southeastern segment is still in process of definition.

At present a factor that underscores the size and relations of the sites on the northern frontier is seen from the identification of Valle San Luis Polychrome as an intrusive in La Quemada (Jimenez 2013; Jimenez and Darling 2000), and likewise in the site of El Cerrito, in the state of Querétaro (Crespo 1991), 375 km southeast of La Quemada. Within this area, excavations in the sites of El Cóporo, Guanajuato, and El Cuarenta, Jalisco (Torreblanca et al. 2013; Piña Chán and Taylor 1976), identified a number of monochrome, and Red-on-Buff types that predominate, with Valle San Luis Polychrome in El Cóporo representing 2.82% of the total ceramic assemblage (Torreblanca et al. 2013:151). From the El Cóporo site the sphere extends to the neighboring regions of Buena Vista, Ojocaliente in eastern Zacatecas (Pérez 2007), El Cerrito, Zacatecas (Braniff 1974; 2000), Cerro Santiago and El Ocote, Aguascalientes (Dueñas 2017), Lagos de Moreno, Jalisco (Araiza 2013), and Cerro Silva, Peñasco, and Electra in San Luis Potosi (Braniff 2000:379). To the south it is found in the sites of Santa

Catarina, San Bartolo, and Jaral de Berrio in Guanajuato (Braniff 2000). The above define what is known regarding the geographic extension of this sphere. The Valle San Luis sphere overlaps with the Southern Zacatecas/Northern Jalisco sphere in the area of the Altos of Jalisco (Araiza 2013; Dueñas 2017). Recent analysis from the sites of Cerro Santiago and El Ocote, Aguascalientes, has shown the presence of Pacific Coast shell (Dueñas 2017:130–131). The presence of Cerro de Garcia figurines (more below) and ceramic plaques indicates this portion of the Valle San Luis sphere was articulated with the Ixtépete-El Grillo and Southern Zacatecas/Northern Jalisco spheres (Dueñas 2017:127–129), the former being the sphere through which shell would have circulated (Mas 2015).

Southern Zacatecas/Northern Jalisco Sphere

This sphere was initially proposed as the "Altos-Juchipila subsphere" based on the density of annular base resist paint bowls which distinguish the material culture of this area in the Epiclassic period (Jimenez 1992; Jimenez and Darling 2000:168). Recent excavations in the site of El Teul in the southern portion of the Tlaltenango Valley have filled a geographical void permitting a better understanding of the temporal and spatial characteristics of southern Zacatecas and northern Jalisco. This sphere encompasses from west to east the contiguous areas from the Bolaños Valley (Cabrero 1989, 2005, 2010), the southern Tlaltenango Valley (Solar and Padilla 2013), the Juchipila Valley (Jimenez and Darling 2000:170), and the Altos de Jalisco (López Mestas and Ramos de la Vega 1992; López et al. 1994). At present the material correlates defined as markers of this sphere include annular base negative painted bowls, Red-on-Buff with outlined motif vessels, and Red-on-White Plaques (Solar and Padilla 2013) (Figure 5.3).

North of this sphere, Red-on-Buff outlined motifs jars and Red-on-White plaques have been identified in small quantities in the Malpaso Valley (Trombold 1985:252, Fig. 10) and La Quemada. South of this sphere the Annular Resist Paint bowls are intrusive in

the Sayula Basin (Noyola 1994:79, Fig. 4; Ramírez et al. 2013:121, Fig. 10).

Evidence of specialized economic activities has yet to be discerned in this sphere. However owing to the proximity of Teul to the Huitzila-La Lobera obsidian outcrop (40 km southwest) and the presence of this obsidian in La Quemada, the Juchipila Valley, and the Bolaños, it has been proposed that the southern Tlaltenango Valley was an intermediary in the distribution and exchange of this resource (Darling 1998:290; Jimenez and Darling 2000:176, Fig. 10.21). Source analysis of high densities of obsidian debitage found in Teul will advance the understanding of acquisition, utilization, and exchange of this resource.

The Ixtépete-El Grillo Sphere

As was seen in Chapter 4, the Early Classic period interaction networks that extended into West Mexico correlate with changes in central Jalisco seen in the inception of the El Grillo complex starting at 400–900 CE (López Mestas 2011:83; López Mestas and Montejano 2003; Montejano 2007; Ramírez 2016). The extension of this sphere is based on the spatial distribution defined by López Mestas (2011:83, Map 2) with areas added. Similarities in ceramics of the adjacent Sayula Basin indicate it formed part of this sphere (Lorenza López, pers. com. 2016; Susana Ramírez, pers. com. 2015) during the Sayula phase 400–900 CE (Valdez et al. 2005: 75, Table 1). The diagnostics that define this sphere are Everted Rim effigy jars, Painted plaques, and Atoyac Incised Polychrome (pedestal base) (Figure 5.3). Evidence of specialized economic activities in areas of this sphere has been distinguished within the Sayula Basin for the production of salt (Liot 2000), and the elaboration of shell ornaments (i.e. bracelets, ear-rings, beads) (Mas 2015). Obsidian exploitation is well defined for central Jalisco at this time (Darling 1993, 1998; Reveles 2005; Weigand et al. 2008).

From the above overview, the areas clustered within Kelley's interaction sphere (Figure 5.1), based on the distribution of pseudo-

cloisonné ceramics (Kelley 1974), have been defined by material correlates that distinguish local cultural spheres that make up the Epiclassic regional configuration of central West Mexico. The above overview of the spheres has shown that those at the northern and southern extremes (i.e. Suchil-Guadiana and Ixtépete-El Grillo) present evidence for specialized economic activities for the production of prestige goods in the form of pigments, blue-green stone ornaments, and shell ornaments. Obsidian sources and the spatial distribution of this resource remain to date the best traceable evidence for exchange networks between spheres (Figure 5.4).

From this regional backdrop, empirical evidence indicative of networks has been defined for the presence of two networks that integrate the above-defined spheres. The continuous distribution of the Type I figurine (Jimenez 1989, 1992, 2013; Jimenez and Darling

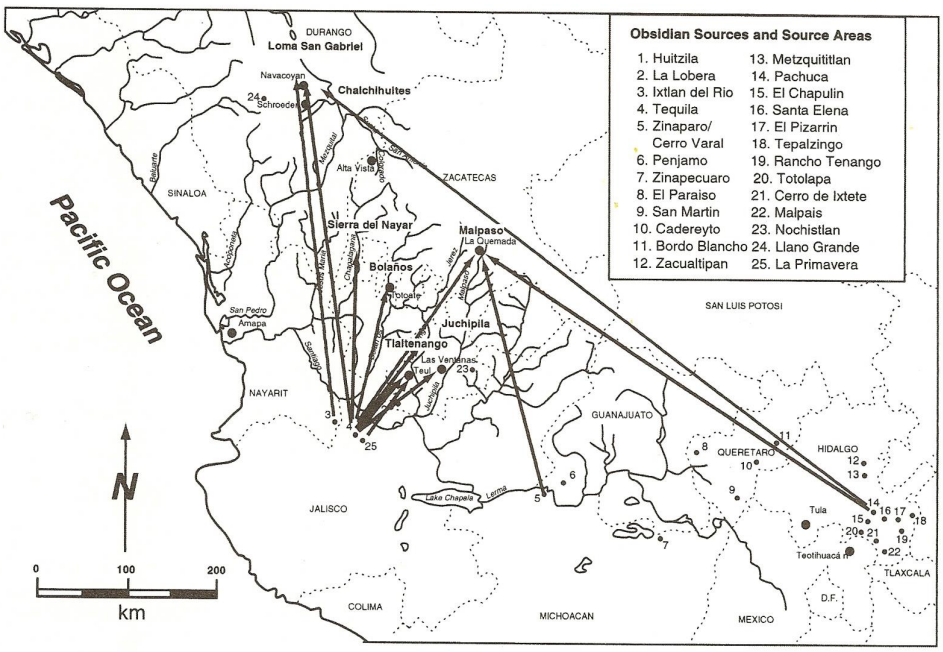
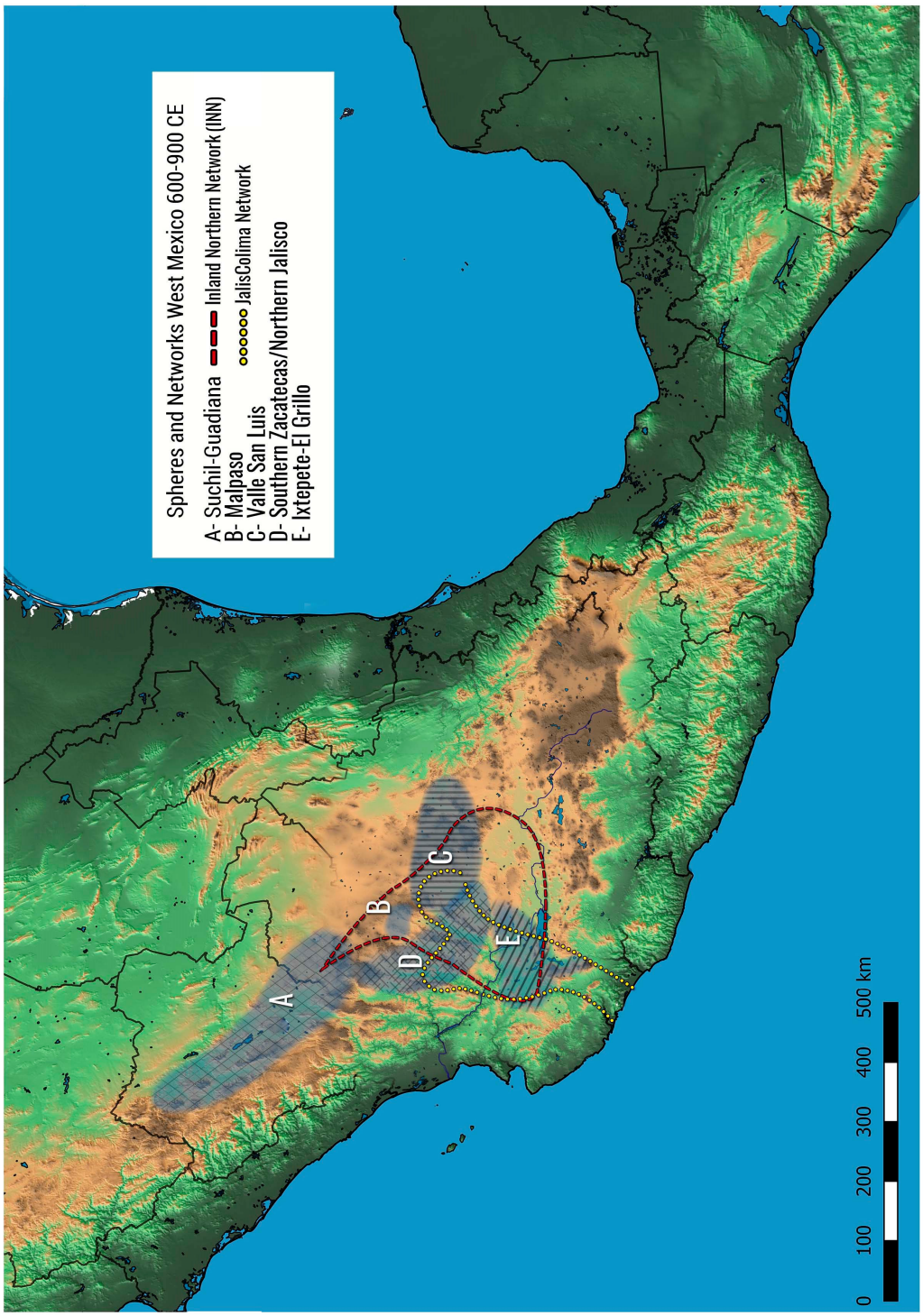
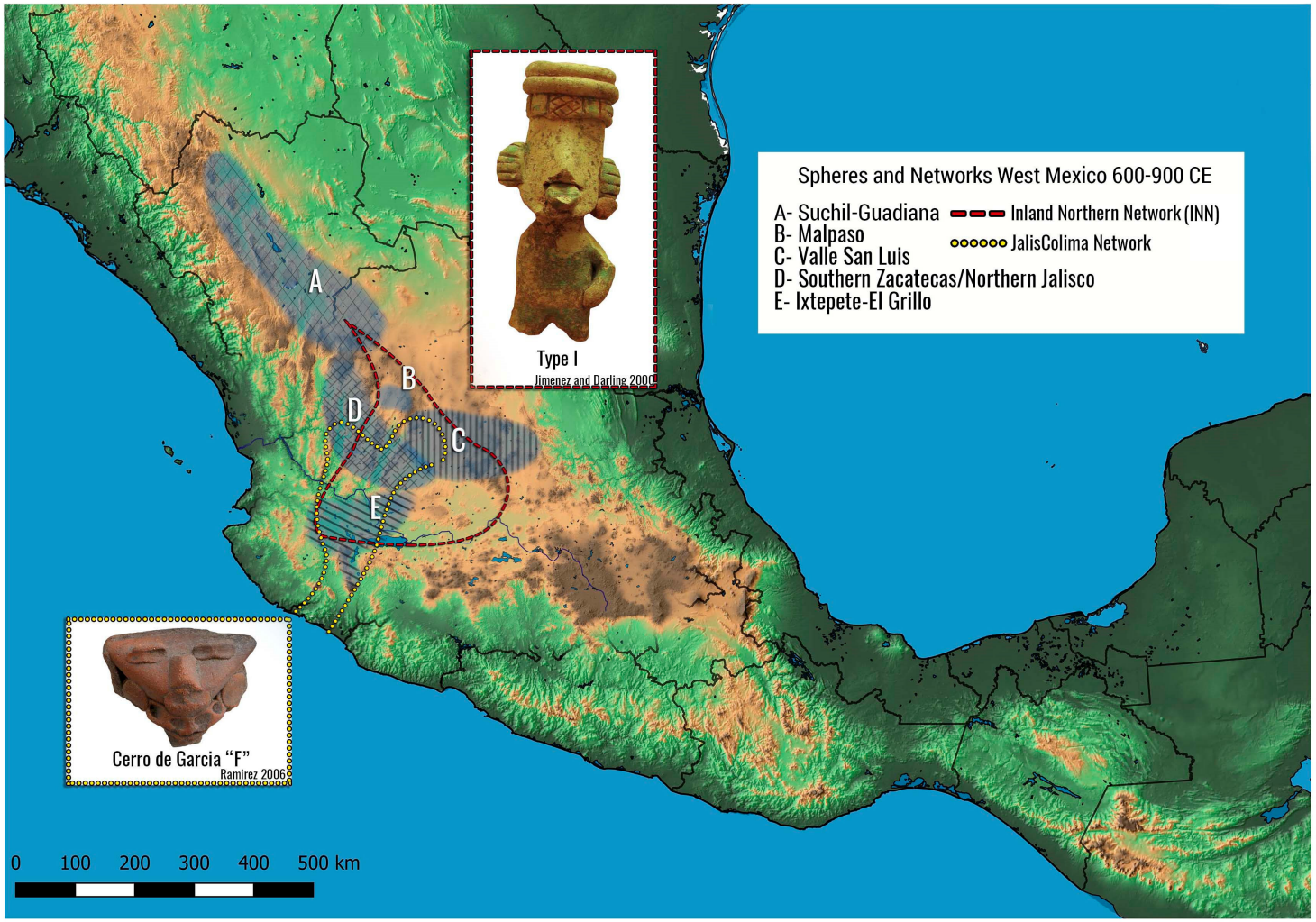


Figure 5.4. *Distribution of prismatic blades from raw material sources in the north-central Mesoamerican frontier based on compositional analysis (after Jimenez and Darling 2000: Fig. 10.22).*

Figure 5.5. *(overleaf) Spatial delimitation of networks mentioned in Chapter 5.*


Spheres and Networks West Mexico 600-900 CE
A- Suchil-Guadiana
Inland Northern Network (INN)
B- Malpaso
C- Valle San Luis
JalisColima Network
D- Southern Zacatecas/Northern Jalisco
E- Ixtepete-El Grillo
A
B
C
D
E
0 100 200 300 400 500 km


Spheres and Networks West Mexico 600-900 CE
A- Suchil-Guadiana
B- Malpaso
C- Valle San Luis
D- Southern Zacatecas/Northern Jalisco
E- Ixtepete-El Grillo
Inland Northern Network (INN)
JalisColima Network
A
B
C
D
E
Type I
Jimenez and Darling 2000
Cerro de Garcia "F"
Ramirez 2006
0 100 200 300 400 500 km

2000) initially proposed as "the Northern Sphere" is presently defined as the Inland Northern Network. This network articulates the Suchil zone of the Suchil-Guadiana sphere, at the site of Alta Vista in particular, with sites within the other four spheres to the south and southeast (Figure 5.5). From the Ixtépete-El Grillo sphere, the continuous distribution of the "Type F" (Gómez Gastélum and de la Torre 1996) figurine south to the coast of Colima, initially discerned as the "JalisColima sphere" (Ramírez 2006), defined here as the JalisColima network, articulates the coast of Colima to the Ixtépete-El Grillo sphere, and the Southern Zacatecas/Northern Jalisco sphere (Figure 5.6). These two proposed networks cluster the five local cultural spheres into two integrated sub-regional systems. The spatial distribution of these networks indicates a zone of articulation with the Southern Zacatecas/Northern Jalisco sphere (Figure 5.5). The shared figurine types within their respective network zones are seen as indicative of information networks that integrated local spheres into larger networks of prestige goods and information exchange.

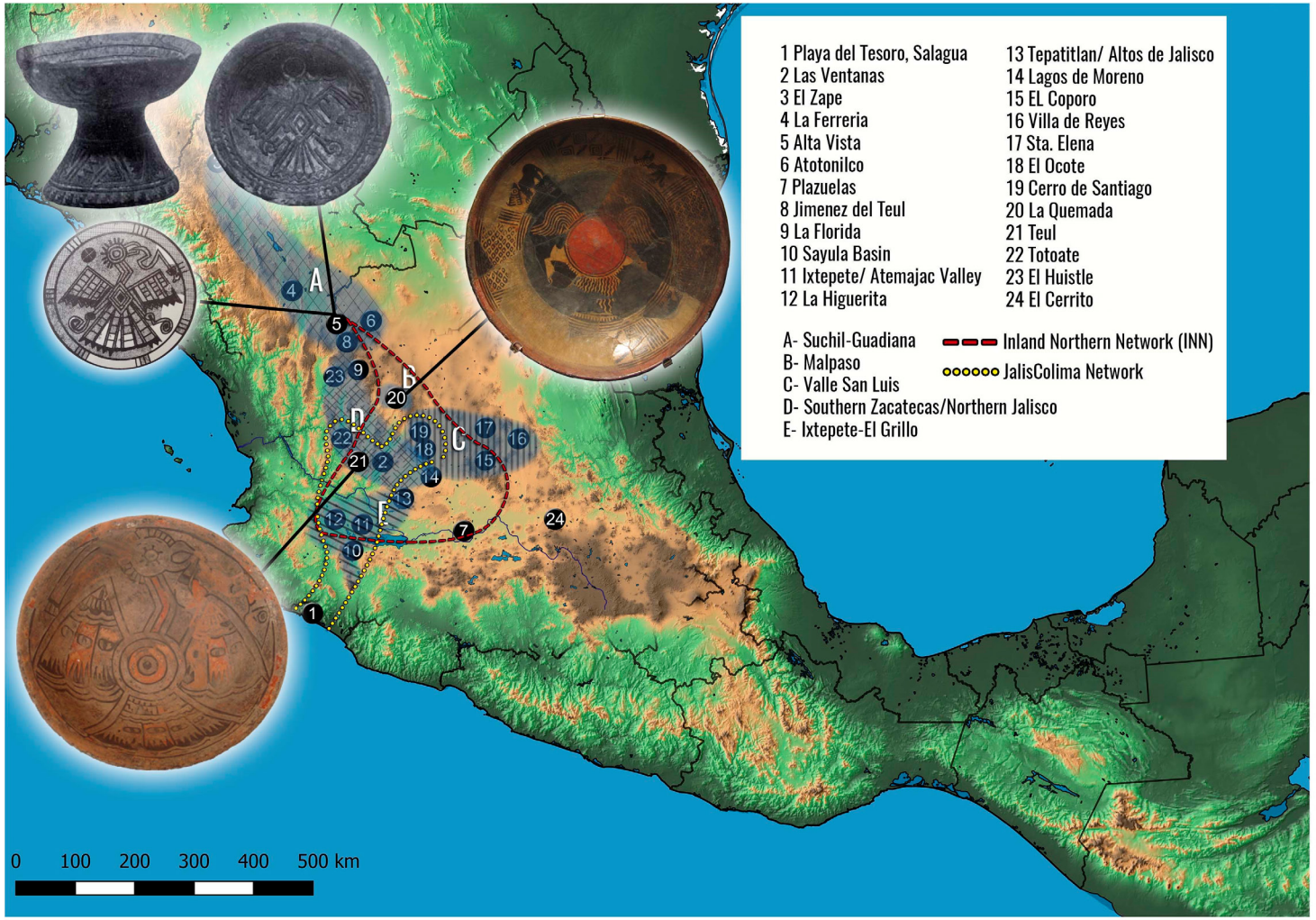
As Kelley noted originally, all areas within the defined interaction sphere share the use of pseudo-cloisonné ceramics. Likewise, obsidian sources and distribution patterns indicate (Figure 5.4) obsidian from the Tequila and La Primavera sources of central Jalisco circulated northwards to sites in the Chapalagana, Bolaños, Tlaltenango, Juchipila, and Malpaso Valleys. The subsequent definition of the Inland Northern Network and the JalisColima network has permitted a more refined empirical patterning of interpolity interaction networks in which peer-polities (Renfrew and Cherry 1986) established down-the-line exchanges extending from the northern frontier of Mesoamerica to the coast of Colima.

Beside the Type I figurines of the Inland Northern Network, additional evidence relevant to information networks that linked local spheres is seen in the shared iconography found in the interiors of pseudo-cloisonné polychrome pedestal base *copas* from the sites

Figure 5.6. *(previous) Diagnostic figurine types of Epiclassic networks mentioned in the text (spatial extension of the spheres after Jimenez and Darling 2000; Ramírez 2006). Above: Type I Figurine (Cerro de Las Ventanas Archaeological Project INAH). Below: Cerro de García F (Cerro del Teul Archaeological Project INAH).*

of Alta Vista (Suchil-Guadiana sphere), Teul (Southern Zacatecas/ Northern Jalisco sphere), Las Ventanas (Southern Zacatecas/ Northern Jalisco sphere), and negative painted plates from La Quemada (Malpaso sphere) which contain the representation of raptorial birds devoring serpents (Figure 5.7). Both figurine and iconography strongly suggest a shared cosmology manifest in ritual paraphernalia, that when combined with the ceremonial architectural pattern of the orthogonal closed patio-pyramid complex correspond to the structural homologies of peer-polity interaction that highlighted the northern frontier at the time of its apogee during the Epiclassic period. The above-described networks constitute a highpoint of sociopolitical and economic developments of central West Mexico from 600–900 CE. The polities within the local spheres described above achieved a complexity of ranked society previously unknown in their respective areas. Interpolity interaction seems to have been a considerable factor for social complexity in which prestige goods and information networks linked elites throughout the region. Both interaction networks defined above will return to the fore in the next chapter as changes in Central Mexico again stimulate core/periphery relations into West Mexico.

Figure 5.7. *(overleaf) Shared iconography on pseudo cloisonné vessels from Alta Vista (above left MNA and Kelley 1983a), pseudo cloisonné vessel from Cerro del Teul (below left Cerro del Teul Archaeological Project INAH), and resist paint polychrome plate from La Quemada (MNA).*


1 Playa del Tesoro, Salagua
2 Las Ventanas
3 El Zape
4 La Ferreria
5 Alta Vista
6 Atotonilco
7 Plazuelas
8 Jimenez del Teul
9 La Florida
10 Sayula Basin
11 Ixtepete/ Atemajac Valley
12 La Higuerita
13 Tepatitlan/ Altos de Jalisco
14 Lagos de Moreno
15 EL Coporo
16 Villa de Reyes
17 Sta. Elena
18 El Ocote
19 Cerro de Santiago
20 La Quemada
21 Teul
22 Totoate
23 El Huistle
24 El Cerrito
A- Suchil-Guadiana
B- Malpaso
C- Valle San Luis
D- Southern Zacatecas/Northern Jalisco
E- Ixtepete-El Grillo
Inland Northern Network (INN)
JalisColima Network
0 100 200 300 400 500 km

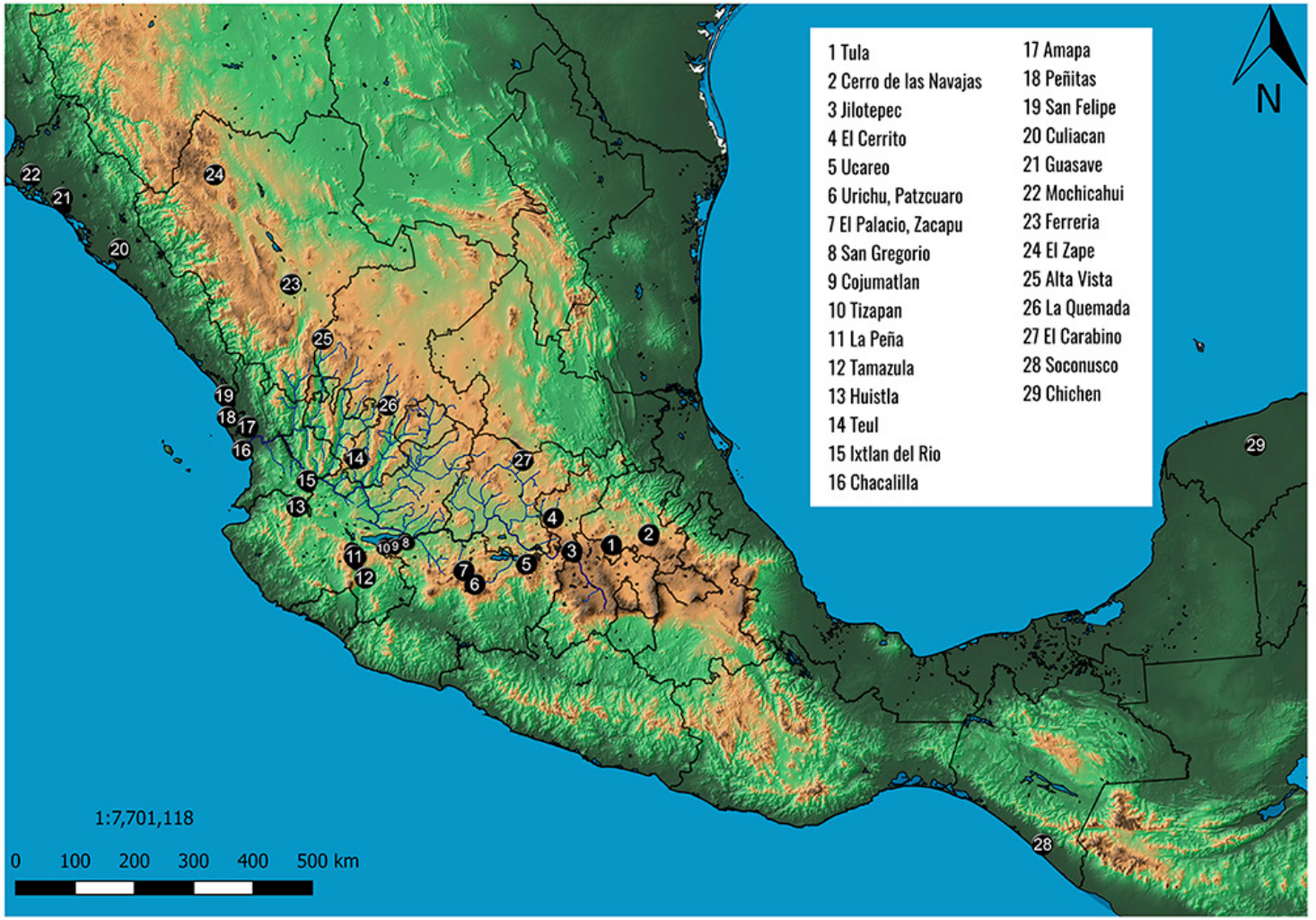
Chapter Six

The Early Postclassic Period Transformation of West Mexico 900–1200 CE

Two recent edited volumes, *The Postclassic Mesoamerican World* (Smith and Berdan 2003c) and *Twin Tollans: Chichén Itzá, Tula and the Epiclassic to Early Postclassic Mesoamerican World* (Kowalski and Kristian-Graham 2011), constitute unique syntheses for a considerable segment of Mesoamerica during the Postclassic period, the former undertaken within a world-systems perspective employing Chase-Dunn and Hall's nested networks model (Chase Dunn and Hall 1997). Taken together, the state of knowledge on this critical period is succinctly brought to the foreground and conceptually updated.

The objective of the present chapter is to fill the geographical void of Central and West Mexico in the Early Postclassic period absent in the aforementioned volumes. The reasons for this void are twofold: first, pertaining to the subject of interregional contacts sustained by Tula with the rest of Mesoamerica. The century-old debate on the nature of Tula's relationship with the distant Maya site of Chichén Itzá has dominated attention, a complex issue that has seen considerable advances (e.g., Bey and Ringle 2011; Kowalski 2011; Smith 2011b), while Tula's ties elsewhere have received scant scrutiny (Healan and Cobean 2009). Second, the principal development in western Mesoamerica during this time, the Aztatlan network, has not been the subject of detailed empirical examination to determine evidence for interregional links that Aztatlan may have established during the Early Postclassic (900–1200 CE) (Mountjoy 1990:543). Both of these issues are examined within this chapter.

Figure 6.1. *(overleaf) Sites mentioned in Chapter 6.*


1 Tula
2 Cerro de las Navajas
3 Jilotepec
4 El Cerrito
5 Ucareo
6 Urichu, Patzcuaro
7 El Palacio, Zacapu
8 San Gregorio
9 Cojumatlan
10 Tizapan
11 La Peña
12 Tamazula
13 Huistla
14 Teul
15 Ixtlan del Rio
16 Chacalilla
17 Amapa
18 Peñitas
19 San Felipe
20 Culiacan
21 Guasave
22 Mochicahui
23 Ferreria
24 El Zape
25 Alta Vista
26 La Quemada
27 El Carabino
28 Soconusco
29 Chichen
N
1:7,701,118
0 100 200 300 400 500 km

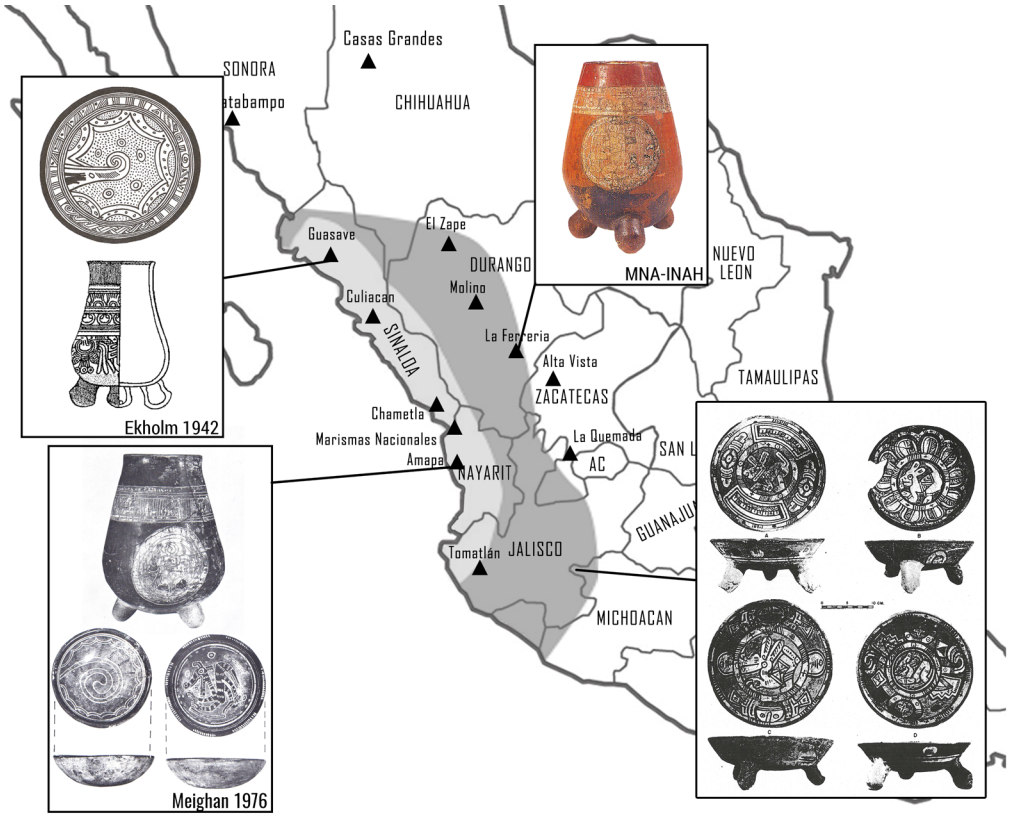


Figure 6.2. *Geographic distribution of Aztatlan ceramics. Light grey: Aztatlan's hearthland area. Dark grey: Eastern expansion at 850/900 CE.*

The Aztatlan network refers to the widespread regional cultural development that extended over a considerable portion of the coastal lowlands, the highlands of central Jalisco encompassing the Chapala Basin, and into southern Zacatecas and the central valleys of Durango (Figures 6.1, 6.2, 6.3). Diagnostic Aztatlan material culture consists of elaborate Polychrome, Incised-Engraved, Red-on-Buff, and Red-on-Brown wares (Foster 1993, 1999) (Figure 6.2).

Throughout this region, these wares are discernable in five ceramic provinces of localized stylistic variations (Guasave/Culiacán, Chametla, Amapa, Cojumatlán, and Autlán). Other traits of the Aztatlan network are Mazapan style figurines of a particular variant, urn burials, incised-engraved spindle whorls, copper items,

Figure 6.3. *Artifacts of the Aztatlan Complex. Mazapan-style figurine (Museo Regional de Tepic); cylindrical seal (Museo Regional de Tepic and Gifford 1950); ceramic pipe and spindle whorls (Museo Nacional de Antropología); ceramic whistle, copper bells, and copper tweezers (Cerro del Teul Archaeological Project Collection).*

smoking pipes, shell ornaments, tabular- erect cranial deformation, and tooth mutilation (Bell 1971; Foster 1993, 1999; Kelley 1986, 2000; Mountjoy 2000; Scott and Foster 2000; Valdez et al. 2005) (Figure 6.3).

The Early Postclassic period in West Mexico is characterized by three occurrences: 1) the demise of the Epiclassic period Inland Northern Network (INN), 2) the rise of the Aztatlan network along the Pacific Coast, west of the Sierra Madre Occidental, and 3) an unresolved problem concerning the nature of Toltec presence in this region of Mesoamerica. Hence, a broad-scale analysis requires

considerations that include developments in Central Mexico at around 900 CE with the rise of Tula in conjunction with the aforementioned occurrences. From a world-systems perspective the problem to be examined for West Mexico in the Early Postclassic period can be underlined: Does material evidence exist that indicate core/periphery relations between the state of Tula and West Mexico? This transformation will be examined and it will be shown that these were all interrelated processes. For the Early Postclassic period, West Mexico has an extensive dataset, which facilitates the examination of this complex question. Curiously, in much the same way that attention to the debate of Early Postclassic period in Mesoamerica has focused on the impact and dimensioning (oversizing versus downsizing) of Tula regarding its connections with Chichén Itzá on the Yucatán Peninsula (Kristan-Graham and Kowalski 2011; Gillespie 2011), so too has Tula and the Toltecs constituted a quandary in West Mexico, making this a critical starting point.

Recasting Tula: The Toltec Period, Horizon, Ascendency, and Rollback

> It was during the succeeding period, the Toltec, that the *cultures of Western Mexico appear to have flourished*. Current opinion would indicate that many sites in Western Mexico existed, or *reached a cultural peak, during that span of time, 900–1200 A.D.* The Toltec horizon in the Valley of Mexico is characterized by the presence of many contemporaneous ceramic groups, indicative of considerable immigration of tribal units and the *infiltration of various culture elements.* […] Archaeological evidence would tend to confirm the beliefs outlined above, for this certainly seems to be the period of greatest cultural expansion in Western Mexico (Lister 1955:55).

An intermittent anecdote of J. Charles Kelley (1974:19) during the 1990s, to remind colleagues and students how knowledge had advanced within the archaeology of Northwest Mesoamerica, was to recall the widely accepted "dogma" of the 1960s and 1970s: all of

West and Northwest Mexico was Postclassic chronologically, and of Toltec affiliation culturally. A perusal of the bibliography of West and Northwest Mexico and the American Southwest enlightens one to the fact that in stark contrast to the five hundred year old crescendoing saga as is the case with the Tula-Chichén Itzá conundrum (Gillespie 2011) and which would have considerable weight upon shifting attention one hundred and eighty degrees, the recognition of Tula-Toltec preeminence over the western half of Mesoamerica coalesced within a period of fifteen years commencing with the First Round Table Meeting of the Sociedad Mexicana de Antropología (SMA) on Mexican and Central American Anthropological Problems in 1941. There, scholars gathered to discuss the theme of Tula and the Toltecs. The impact of two papers emanating from this Round Table, Jiménez Moreno (1941) and Caso (1941) had a profound impact in the domino effect of the orthodox Toltec hypothesis that was to extend through most of Mesoamerica. Jimenez Moreno's paper was the confirmation and distinction of the site of Tula (de Allende), Hidalgo, and not the site of Teotihuacan, as the place of the Toltecs referred to in ethnohistorical sources. During the next fifteen years Acosta's field seasons in Tula highlighted archaeology in central Mexico as the site became a constant center of attention for the Instituto Nacional de Antropología e Historia (INAH), till institutional focus shifted to Teotihuacan in the early 1960s (Acosta 1964).

The weight of Tula arrived to the heart of West Mexico with the excavations of Lister (1949) at the site of Cojumatlán, Michoacán, on the southeastern edge of the Lake Chapala Basin. A major problem addressed by research at this site was "the location of a possible migration route from the central Mexican highlands to the northwestern coast of Mexico. Ekholm (1942) and Kelly (1938, 1945a) have pointed out the existence of central Mexican cultural traits in the Aztatlán complex of Sinaloa, but the route connecting these two areas had not been determined" (Lister 1949:10). The excavations at Cojumatlán were to have relevance on this problem. Lister's correlation of Mazapan figurines, described and illustrated by George Vaillant's earlier work (1938) in the Valley of Mexico, with those detected in Cojumatlán presented a strong correlate

with sculpture fragments (Jiménez Moreno 1941) from Tula (Lister 1949:59–63). Likewise from Cojumatlán, the presence of Tláloc censors "have a wide spread distribution. Thompson speaks of their occurring over central and southern Mexico and extending as far south as El Salvador. Tláloc effigy vessels are usually considered as of Toltec manufacture, or at least the result of Toltec influence" (Lister 1949:58).

In 1953, Alfonso Caso, elaborating on his previous study on Tula (1941), proposed a new chronology for Central Mexico in which he distinguished five major periods, the last two of which were proposed as "Toltec" and "Historical" belonging to what we presently know as the Postclassic period. In his proposed Toltec period (900–1200 CE), Caso proposed Tula as the center of an empire whose influence was seen at Chichén Itzá. Likewise, the diagnostics he proposed for the period throughout Central Mexico was metallurgy, Plumbate and Fine Orange ceramics (Caso 1953).

1955 was the pinnacle year for Tula-Toltec ascendency in archaeology. For West Mexico proper, Lister's *The Present Status of the Archaeology of Western Mexico: A Distributional Study* (1955) constituted a unique overview that reviewed nearly a century of archaeological studies integrating West Mexico into Caso's chronology of Central Mexico. This extensive synthesis set the foundation for research during the next two decades for what was known about this subarea, incorporating empirical data from all known sites for the defining and plotting of trait patterns through time. Diagnostic markers of the Toltec horizon in West Mexico were identified: tripod incised floor *molcajetes* (i.e. mortars), Red-on-Brown wares, Red-on-White wares, animal effigy legs, cloisonné ceramics, Mazapan-style figurines, spindle whorls, and the beginnings of copper metallurgy. The distinctive polychrome ceramics, like those Lister had detected previously in Cojumatlán, were dated 1100–1300 CE, straddling the Toltec horizon and the Historical horizon, this owing to the notion of the later dating for the Mixteca-Puebla style, thus concluding that "In the vicinity of Chapala, in Jalisco and Michoacán, developments are found

indicative of a connection between the culture of that Region and the Mazapan culture of the Toltec horizon" (1955:57–58).

To the north of West Mexico, Lister and Howard's *The Chalchihuites Culture of Northwestern Mexico* (1955), one of the first studies to scrutinize the archaeology of the territory from western Zacatecas to central Durango in chronological terms, showed an acute perception in distinguishing the evidence for a previous sedentary occupation prior to the Toltec horizon. Applying his knowledge of West Mexico to this northern province they postulated that,

> […] the northern spread of culture from central Mexico in Toltec times appears, generally speaking, to have been in the form of a Y. The stem divided in the vicinity of Lake Chapala; the left branch went up the west coast and the right branch stayed east of the Sierra Madre Occidental. Once the influence reached its northern limits in Sinaloa and Durango, a certain intercourse took place over and through the mountains (1955:128).

Lister and Howard went on to suggest that the Chalchihuites culture shared traits with the American Southwest, positing that the north–south axis of the Sierra Madre Occidental, instead of the plateau of Chihuahua, may have served as a conduit for ties between a Mesoamerican Chalchihuites and the distant Southwest.

Still further north, on the heels of Judd's (1954) volume on Pueblo Bonito in Chaco Canyon, New Mexico, which determined that the apogee of the site occurred between 1000– 1100 CE, Ferdon's (1955) study on the architecture of Chaco Canyon proposed that similarities between Chaco and the site of La Quemada dated to the Toltec-Mazapan horizon. During this time, he argued, the cult of Quetzalcoatl may have appeared in Chaco through the arrival of *pochteca*, traveling merchants or displaced Toltecs related to La Quemada, and ultimately to Tula.

In August of 1955, a seminar of prominent specialists was held in Santa Fe, New Mexico, "to examine the assumption that these Southwestern cultures resulted from local acceptance and

development of generalized and/or specific traits which can be isolated in distant cultural contexts at earlier times than their climactic developments can be observed in the Southwest" (Jennings 1956:63). Within this group were two fledgling researchers who in due course were to have considerable impact on the archaeology of West and Northwest Mexico: Clement Meighan and J. Charles Kelley. The resulting document produced from the seminar is benchmark: *The American Southwest: A Problem in Cultural Isolation* (Jennings 1956). Focusing attention on the Hohokam culture (Gila Butte, Santa Cruz, and Sacaton phases 550–1100 CE), perceived new elements arriving in the Southwest during this time could be "traced" to Middle America. Thus it was considered that,

> In effect, so many Mesoamerican traits are incorporated in the Hohokam culture during the Colonial and Sedentary periods that it would be quite possible to identify the Hohokam culture as a peripheral manifestation of the Tula-Mazapan horizon, along with other cultures assignable to this Mesoamerican horizon which had by then developed in Northern Mexico (Jennings 1956:92)
>
> .

The encroaching process of an expansion that swept through this vast area was explained as "the Tula-Mazapan cultures became stronger and more widespread in North Mexico, the geographic gap between them and the expanding Hohokam culture was reduced, and through accumulated pressure, *the former essentially dominated the latter by the end of the millennium*" (Jennings 1956:94, emphasis added). Toltec pervasiveness peaked in 1955 just as Kelley, Meighan, and DiPeso were in the early stages of their pioneering studies. DiPeso would accept it based on the initial chronological evidence recovered from Paquimé and go on to invoke the Toltec *pochteca* trader model to explain the origin of Casas Grandes in Chihuahua (DiPeso et al. 1974), while Meighan would confront it and scale back the entire question, which Kelley would come to accept as adage.

Excavations during the mid-1960s at the site of Tizapán el Alto, Jalisco, on the south-central edge of the Chapala Basin (Meighan

and Foote 1968), represent the moment of trend reversal for Toltec ascendancy in West Mexico. In their analysis Meighan and Foote discern two distinct cultural components interacting at Tizapán:

> About A. D. 1000, the region participated in the expansion from Central Mexico of Toltec influences. Whether this was accompanied by actual migrations of people is uncertain but the *cultural effects were strong* and are seen in such things as Tláloc figures, Mazapan figurines, human-bone rasps, incensarios, and numerous stylistic details characteristic of Central Mexico. At the *same time,* however, a *vigorous* "West Mexican" culture was present and *native elements were not submerged by the influence* from Central Mexico (Meighan and Foote 1968:156, emphasis added).

As will be seen below, the insight of this observation is remarkable.

In the early 1970s as Meighan moved west, closer into the Aztatlan region with his work at the site of Amapa, Nayarit, so too would he again come into contact with the complexity of the Tula-Toltec question in West Mexico. In the conclusions of his monograph one can perceive the difficulties presented by this complex impasse. "Most important is the placement of the Cerritos phase horizon at Amapa in the time period A.D. 600–1000, a dating that indicates that Amapa (and by extension the whole west coast) is not dominated by a Postclassic intrusion of Toltecs or related groups, but instead has its own Classic period with strong resemblances to Central Mexico at the same time" (Meighan 1976a:159). Moreover, from the perspective of pulsations in world-systems as used in the present study, Meighan is most insightful, while likewise seeing a pattern of events in West Mexico mirroring those seen on the eastern side of Mesoamerica (Tula-Chichén Itzá):

> Again, the nature of the new people is not known, but a military-*religious expansion* is most likely and parallels the similar events taking place toward the Maya region in the south […] To sum up, at Amapa it appears that the periods from about A. D. 600–700 and 900–1200 were times of relatively close affiliation to the events (*and*

> *by implication the political and religious structure*) of the great centers of Central Mexico. The rest of the time West Mexico, in the Amapa area at least, was generating its own cultural and population growth with somewhat less external contact (1976a:161; emphasis added).

The presence of diagnostic Mazapan mold-made figurines in Amapa was seen as one of the principal indicators of a shared "religious structure" which "seem to originate in Central Mexico and spread in all directions as an accompaniment of 'Toltec' material culture" (1976a:69) and taken as evidence for a perceived "religious expansion" of Tula. Meighan was keen to point out that interaction between the Pacific Coast and Central Mexico was mutual with West Mexico providing copper objects inland. Likewise he points out the importance of this coastal strip as a conduit for interaction with the Hohokam in the American Southwest in the transmission of ballcourts and copper artifacts, as well as to northern Peru and Ecuador (Meighan 1976a:114), this southern corridor possibly being the conduit for the presence of Plumbate ceramics in Amapa, rather than coming through Central Mexico (1976a:157–159). In essence, *The Archaeology of Amapa, Nayarit* constituted the blueprint for the perspective on the Aztatlan phenomena for the next three decades.

At about the same time as the Amapa monograph appeared, in Mexico, Schöndube's study on prehispanic religion of the Tamazula-Tuxpan-Zapotlán region of southern Jalisco (1974a, 1974b, 1994), together with the subsequent overview of the archaeology of West Mexico (1980), identified the importance of Early Postclassic interaction between West Mexico and Tula. These studies brought to attention the importance of the Chapala Basin as an important zone for Early Postclassic period cultural connections, through his correlation of Tláloc braziers found in Apaztingán, Michoacán (Kelly 1947), fragments detected by Lister (1949) and associated with Plumbate from Cojumatlán, Michoacán, remains of braziers from his region of study, and those from El Chanal, Colima. All told, the presence of Mazapan figurines, the Tláloc/mountain cult and ritual paraphernalia, among other elements, were seen as evidence that Tula had managed to do what no other Central

Mexican polity had done previously (i.e. Teotihuacan) nor after (i.e. "the Triple Alliance", the Mexica): to have their "ideas and religion" permeate on such a wide territorial scale within Mesoamerica without "political control" (Schöndube 1980:224, translated by the author). With the aforementioned studies from Amapa and southern Jalisco, by the 1970s the notion of a Toltec conquest of West Mexico (Jimenez Moreno 1966) and all points north (Ferdon 1955) had given way to substantial reinterpretation which by then had come to perceive the presence of an "expanding religious structure" affiliated with Tula.

Ripples through Aztatlan and the Toltec Horizon Redefined

> It is precisely the movement of ideas that is the central concern of the horizon concept. […] The ideas were not commodities traded in the marketplace, as some have suggested for the lowland Maya in earlier times, but rather cultural beliefs and practices […] New cults and practices may have been introduced along with the appropriate paraphernalia, or local traditional religious practices may have incorporated the new ideas and associated technology. The inhabitants of Tula were recipients as well as donors and some ideas seem to have been integrated into the basic fabric of Tula-Toltec life (Diehl 1993:286–287).

Just over three decades ago, J. Charles Kelley's paper *Hypothetical Functioning of the Major Postclassic Trade System of West and Northwest Mexico* (1983a) was presented during the SMA XVIII Round Table on West Mexico. The paper had the effect of kick-starting West Mexico out of a perceived provincial backwater of Mesoamerica and into a macroregional arena that had not been previously highlighted except in the conclusions of Meighan's aforementioned studies. Kelley's study brought together empirical data from a chain of sites linking a large segment of the West Mexican Pacific Coast extending from central Jalisco north to the Sinaloa border (Figure 6.4), considered the Aztatlan core and dated

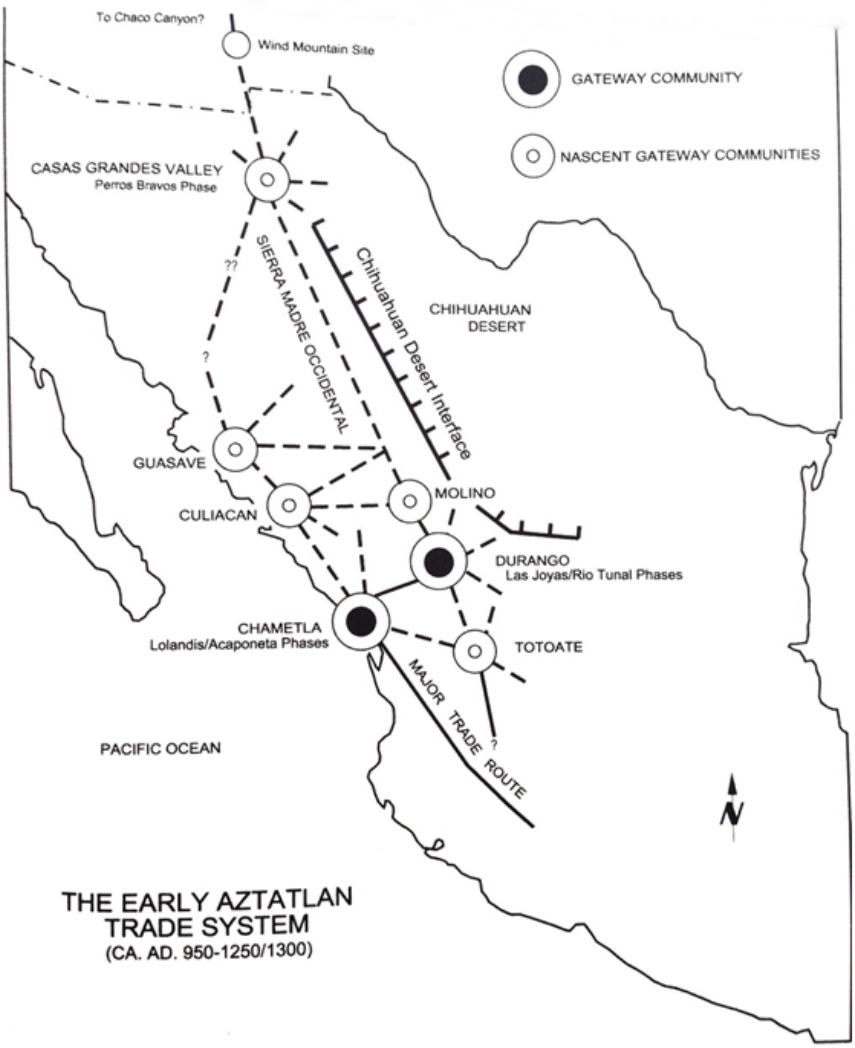


Figure 6.4. *The Early Aztatlan Trade System (ca. AD 950–1250/1300) (after Kelley 2000: Fig. 9.3).*

from 900–1450 CE. From the Pacific Coast, Kelley then proceeded to link the "Greater Aztatlan Trade Route" even further: into the northern reaches to Paquimé, Chihuahua; while to the south, from the coast inland to the Chapala Basin, through the Bajío and into the Valley of Mexico. The geographical scale covered in this paper had no precedents in the archaeology of West and Northwest Mexico.

Prior to the 1983 SMA paper, Kelley's research into the subject of Aztatlan stemmed from a petition by Nigel Davies for his participation in the International Congress of Americanists held in Vancouver in 1979 as part of a session Davies coordinated on Tula and the Toltecs, the subject of his recent monograph (Davies 1977). Davies' work brought into question the widely accepted idea of an extensive Toltec empire, reducing considerably the domain of Tula from that proposed earlier by Wigberto Jiménez Moreno (1966). Kelley's excavations in Durango and Zacatecas had produced evidence of a major Mesoamerican occupation in the Chalchihuites region dating centuries prior to 900 CE, the beginning of the Tula-Mazapan horizon. The opening paragraph of Kelley's Americanists paper is indicative of the significance of both this new chronological component and the impact of Davies' study over the "dogma" of a Tula-dominated West and Northwest Mexico:

> Archaeologists have generally accepted without serious questioning the existence of a <Toltec> or <Tula–Mazapan> component, or period, in the archaeological history of western and northwestern Mesoamerica. During the course of our own protracted archaeological studies of the Chalchihuites Culture, and related manifestations, in western Zacatecas and Durango, Mexico, doubts have arisen as to the reality of this <Toltec> presence there as well as elsewhere in western or northwestern Mesoamerica. (Kelley 1979:1)

After an intense review of data sets published at the time pertaining to Early Postclassic Mesoamerica, Kelley went on to propose a model that covered most of the entire culture area of Mesoamerica, integrating Davies' thoughts on the variable Tula-Culhuacán relationship, and the even closer association of Culhuacán with Cholula, calling to attention the stylistic relationship between Aztec I ceramics of the Valley of Mexico, related types from Cholula and those of the Aztatlan sphere, reiterating Gordon Ekholm's early observations on the presence of Mixteca-Puebla iconography in Guasave, Sinaloa, parallel to that of the site of Cholula, Puebla

(Ekholm 1942; Kelley 1979). Covering the entire horizon of Early Postclassic cultural dynamics, his proposal distinguishes two major "interaction channels": one eastern channel, between Tula and Chichén Itzá through the Gulf Coast, and a second western channel, between Culhuacán-Cholula of Central Mexico and the Aztatlan region on the Pacific Coast (Kelley 1979: Fig. 8). Kelley would remain skeptical of the ties to Tula in West Mexico until the appearance of Fahmel's detailed study in 1981 *Dos Vajillas Toltecas de Comercio: Tohil Plumbate y Fine Orange* (later published by the UNAM in 1988) which circulated widely among archaeologists creating a significant impact for considerations on the Toltec presence throughout Mesoamerica, since the distribution of Plumbate was generally accepted as having been controlled by a distant Tula. Fahmel's study put the now, significantly downsized Tula from Davies' monograph back into a limelight as a major participant in the Early Postclassic Mesoamerican exchange system. The bearing of this study can be observed in Kelley's 1983 SMA paper. The Toltec question is reconsidered and contextualized.

> At Cojumatlán and at Tizapán el Alto excavations revealed the presence of an early red-on-brown pottery horizon, the Chapala phase, which in general terms can be described as "Toltecan", with resemblances in both ceramics and "Mazapan" figurines. *But there are also local traits in the complex and a direct tie with Tula is not necessarily represented* […] Almost certainly there was a strong relationship between these western "Toltecan" complexes, and Tula, probably following a trade route along the Rio Lerma, even though archaeological evidence for this is not yet in […] Interestingly enough Fahmel B. (1981, Fig. 19) maps the distributional line of Tohil Plumbate with runs northwestward from Tula through Guanajuato into San Luis Potosi, rather than following the Lerma […]. In a sense the least known segment is that which hypothetically originated in the Valley of Mexico, followed the axis of the Rio Lerma drainage, and terminated in Lake Chapala (Kelley 1983a:4–5, emphasis added).

Kelley's discernment of "western 'Toltecan' complexes" together with "local traits" is a reiteration of Meighan's aforementioned conclusions, which would now be given full weight. In the revised and modified version of this important paper (1986), published three years later in the well-known *Ripples in the Chichimec Sea* volume, Kelley's chronological division for Aztatlan is seen in process of elaboration.

> It should be pointed out that the Aztatlán horizon is divisible into two major periods. The earlier period is characterized primarily by Lolandis Red-rimmed pottery (Kelley and Kelley:125–127) and associated types which are widespread in the Nayarit-Sinaloa coastal strip and apparently indigenous there. During this earlier period the mercantile system represented appears to have been localized on the West Coast, with extensions eastward across the Sierra Madre Occidental [Durango]; but at Amapa it connected with an early or basic "Toltec" system extending from the lower Río Lerma to Nayarit (Kelley 1986:85–86).

Kelley would return to the theme and details of the coastal Aztatlan exchange system and its connections to the American Southwest for another decade till the time of his passing, consistently utilizing a *Pochteca*, or "mobile merchant" model to explain the presence of diverse prestige goods (copper, pyrite mirrors, macaws) and the cohesion of the trade route that extended into the Southwest. Upon comparing Kelley's maps related to the "greater Aztatlan system," beginning from his Americanists paper (1979), through the Ripples article (1986), to his final study on the Aztatlan mercantile system (2000), one can observe the adjustments made to the model as new data came to light during the two and a half decades of his research on this topic, the most important of these being the refinement in dating of Paquimé sequence (Ravesloot et al. 1995), the chronological placement of La Quemada (Jimenez and Darling 2000; Nelson 1997), and Mountjoy's studies on Aztatlan along coastal Jalisco (Mountjoy 1990, 1995). These allowed Kelley to refine his Greater Aztatlan mercantile model into two phases:

Early (850–1150/1200 CE) and Late (1200–1450 CE) (Foster 1999; Kelley 2000).

In 1986, just as the *Ripples on the Chichimec Sea* volume appeared, Dumbarton Oaks held a symposium on the subject of *Latin American Horizons* in which veteran Tula archaeologist Richard Diehl reexamined and scrutinized the issue of the Toltec horizon (Diehl 1993). From the vantage of Tula to the distant Chichén Itzá, this stimulating essay reviewed the prevailing issues concerning interaction between Central Mexico and the Maya realm, to arrive at the description of a series of artifacts, pertaining in large part to ritual practice, identified from Tula and Chichén Itzá. Pointing out that besides exchanged materials such as Plumbate ceramics and green obsidian from Pachuca, Hidalgo, the distribution of an assemblage composed of distinctive iconography, braziers, open censers and the possible inclusion of Mazapan-style figurines, was indicative of a shared set of ideas that were circulating throughout the Early Postclassic Toltec horizon. Diehl goes to lengths to circumvent any weight implied by the term Toltec: "Calling the horizon Toltec does not gloss over the historical complexities or the contributions of other societies, nor does it imply Tula's military or economic control of the regions that participated in the horizon. Such a claim reads more into the situation than the evidence warrants" (Diehl 1993:287).

Studies on the ceramics referred to by Diehl for inclusion into this horizon are defined in the typology of Tula (Bey 1986; Cobean 1990; Cobean and Mastache 1989:40, Table 5.3) as Alicia openworked censers, Abra Course Brown braziers (Abra, Cylinder, Hourglass, and Tláloc varieties with clay spikes), and frying pan censers (*sahumadores*). Of the survey undertaken in Tula and the surrounding region (Bey 1986:161–165), the three ceremonial types represent 12.26 % of the Tollan phase (950–1150 CE) ceramic assemblage (Bey 1986:258). Subsequent studies refer to these types as the ritual *incensario* complex (Figure 6.5) (Ringle et al. 1998:217), and most recently as the Ceremonial Subcomplex (Bey and Ringle 2011:306). For the remainder of the present study this will be referred to as the Ceremonial Subcomplex (Figure 6.5).

Figure 6.5. *The ritual incensario complex, subsequently identified as the Ceremonial Subcomplex (after Ringle et al. 1998: Fig. 29).*

At this point we come to a crossroads for studies on the Early Postclassic period. On one hand, from the Pacific Coast, Kelley (1979, 1986) is seeing an early segment of the Aztatlan system articulating at Amapa with a "Toltec" trade route, or "system"; while Diehl (1993), from Tula looking east (Chichén Itzá), proposes the existence of a Toltec horizon that involves shared ritual components, while Meighan and Foote (1968) and Schöndube (1974a, 1980) had already pointed out the presence in West Mexico of artifacts indicative of a "religious structure" related to Tula. In conjunction and hindsight we can now see that the perception of an Early Postclassic world-system was close at hand by the mid 1980s and early 1990s. This, at a time when concepts as peer-polity

interaction (Renfrew and Cherry 1986), multi-centric world-systems (Abu-Lughod 1989), and prestige goods and information networks had been defined (Chase-Dunn and Hall 1991a).

In the twenty years following Kelley's last study on Aztatlan and Diehl's proposal of the Toltec horizon, advances have been made in a number of issues and regions that come into question on their development, character and timing. Particularly pertinent to the question on links between West Mexico and Tula has been the recent study on Mazapan figurines (Solar et al. 2011). Above, this figurine type was frequently referred to owing to its presence in West Mexico, particularly associated to sites of the Aztatlan sphere, as evidence for ties to Tula. Initially Diehl (1993:279) cited Mazapan style figurines, as a possible future candidate to include in the group of ritual objects of the Early Postclassic horizon, when their history and distribution was better understood. Diehl's apprehension to include these in his ritual set was due to the analysis of Mazapan-style figurines found at Tula and the surrounding region undertaken by Stocker (1983) who discerned the difference between those of Tula/Central Mexico and those of West Mexico as indicative of two distinct cultural patterns (1983:112–114). While stylistically related and contemporary, those of West Mexico distinguished for being "more elaborate or embellished", as compared to the simplicity of the Tula/Central Mexican type. Stocker concludes that there is no evidence to suggest that Mazapan figurines of Central Mexico evolved from central Mexican figurine traditions, suggesting an outside source for their origins in Tula (1983:124). A further distinction, initially noted by Stocker (1983) of the position of hands and the bilobular headdress between these types has been confirmed in a subsequent study (Solar et al. 2011). This recent analysis of Mazapan figurines defines the attributes that distinguish the West Mexican type and her associations with Earth and Fertility rituals (Solar et al. 2011:68–69). The Mazapan figurines of West Mexico constitute a diagnostic trait associated with the Aztatlan network.

In the north, recent corrections on the Durango chronological sequence undertaken by Punzo (2013), initially proposed by Kelley

and Winter more than five decades ago and thereafter known as the Guadiana Branch (Kelley and Abbott Kelley 1966). To the south, the most recent and significant advances on Aztatlan's inland encroachment have been the study of the site of La Peña, Jalisco, on the northern fringe of the Sayula Basin (Liot et. al. 2006b). During the same time research on Tula (Mastache et al. 2002; Healan 2012) has seen important proposals pertaining to its external aspect throughout Mesoamerica (Bey and Ringle 2011), its relationship to West Mexico (Healan 2012; Jadot 2016; Pollard 2015), as well as its relationship with the North American Southwest (McGuire 2011; Mathiowetz 2011).

Evidence of Early Postclassic Networks in West Mexico

> Given Tula's quite limited political role within central Mexico, it is not surprising that there is no clear evidence for political impact on more distant areas. *When we turn to cultural influence, however, the data tell a different story*. Tula and the Toltecs were renowned throughout Mesoamerica, and Tula clearly played a major role in the larger Mesoamerican world system. Diehl's (1993) Toltec horizon suggests the inhabitants of Tula were active participants in the interaction networks that created and maintained the horizon style. *We would rephrase his discussion in world system terms; the wide-spread occurrence of this ritual complex points to important systems of stylistic interaction and information exchange.* Tula was an important participant in these interaction systems, even if the major traits did not diffuse outward from there (Smith and Montiel 2001:268, emphasis added).

In the above section both Meighan and Schöndube's rescaled perceptions relating to the nature of Tula's presence in West Mexico were detailed: a number of polities in West Mexico associated with the Aztatlan culture region had integrated elements associated with Tula (i.e. Mazapan style figurines, Plumbate ceramics) into their local ritual repertoire. Their observations correlate with Smith and

Montiel's recent interpretation made from the vantage of Central Mexico. Although not as evident as the renowned manifestation of relations between Tula and Chichén Itzá, the problem can now be refined beyond notions of Toltec control, or empire with a robust and imposing military apparatus (Davies 1977; Diehl 1983) rather to be observed within the realm of "cultural influence" focusing on the evidence of the materialization of a "religious structure" that transcended Central Mexico into West Mexico as part of a macroregional interaction system that integrated much of the Early Postclassic world. To determine the nature of the connections between Tula and West Mexico, the following section will examine material evidence for proxies for empirical patterns that can be related to the four networks defined above.

Bulk-Goods Networks

> "Hinterland" refers specifically to the area and settlements that probably provided Tula's occupants with most of its food and labor and in turn were dependent on the city for various goods and services. City and hinterland are thus interdependent components of the larger state, as *indicated by their shared ceramic assemblage that reflects not only a common cultural tradition but the existence of markets and other linking infrastructure* (Healan 2012:92).

At the height of its history during the Tollan phase (900–1150 CE) the city of Tula was an urban zone covering 16 km^2, containing a population between 32,000–37,000 inhabitants (Diehl 1981:204; Healan 2012:53). Surveys in the surrounding region (Mastache et al. 2002:179–215; Healan 2012:40–42) suggest an inner hinterland population of 30,000 to 50,000 (Mastache et al. 2002: 210–211). Surveys and excavations in the hinterland (Bey 1986; Cobean and Mastache 1999) found that

> Ceramics from these two studies as well as Mastache's survey *exhibit a high degree of similarity to the urban ceramic assemblage.*

> *The rural sites in Bey's study contained all of Tula's major ceramic types, and in roughly the same proportions, suggesting that rural sites generally enjoyed access to the same ceramic production and distribution or marketing systems as the city* (Bey 1986, p. 330). This also is true of obsidian, with both rural and urban Tollan phase obsidian assemblages showing a predominance of prismatic blades and green (Pachuca) obsidian (Sánchez 1999a). There are, however, notable differences between the urban and rural ceramic assemblages, *including substantially fewer imported and ritual-related ceramics in rural sites* (Healan 2012: 89; emphasis added).

Surveys and excavations south of the Tula region (Fournier 2007:111) in the Basin of Mexico produced material evidence indicating that Tula's outer hinterland include a considerable portion of the basin, extending south through Cerro Portezuelo to the Chalco region (Crider 2013; Healan 2012:92–93; Nichols and Charlton 1997:194; Parsons 2008:72–76; Sanders and Santley 1983:269, Fig. 11.4; Tovalín 1998). The Valley of Toluca, which was shown above to have constituted the western boundary of Teotihuacan's bulk-goods network, presents material evidence of a Coyotlatelco occupation, the principal culture sphere of Central Mexico in the Epiclassic period, which it shares with the Tula region at the same time (Healan 2012:76; Sugiura 2006). However, for the Early Postclassic period, material evidence suggesting any significant relation with Tula is scarce (Healan 2012:93; Yoko Sugiura, pers. com. 2015). Hence, the Basin of Mexico delimits the southwest boundary for Tula's hinterland. East of Tula, studies have confirmed the province of Jilotepec was integrated into Tula's ceramic sphere (Avilés 2004). In the circumscription of hinterland Healan concludes,

> Tula's hinterland would extend for c. 125–150 km in a north–south direction, with Tula near the middle. Its east–west extent, which probably includes the Pachuca obsidian source area and the upper Teotihuacan Valley to the east and Jilotepec and possibly the Acambay Valley (Folan 1981; Hernández and Healan 2000) to

> the west, is estimated to be 135 km […] As tentatively delineated, Tula's hinterland would roughly approximate a circle missing the southwest quadrant and have a maximum area of c. 13,000 km^2. This is considerably smaller than the 25,000-km^2 area Nichols and Charlton (1997, p. 196) suggested was under Tula's "control," although these are not necessarily equivalent terms (Healan 2012:93).

Material evidence for bulk-goods includes maize, amaranth, beans, maguey, lime, ceramics, and lithic resources, such as obsidian, and would be augmented by raw materials and foodstuffs of the resource base proposed for the Basin of Mexico (Healan 2012; Sanders et al. 1979). While not as extensive as the territory proposed for Teotihuacan's bulk-goods network above, the material patterning that would delimit Tula's network is analogous: a continual distribution of types characteristic of the urban core. As observed above in Chapter 4, the territorial delimitation for the proposed Teotihuacan control (Smith and Montiel 2001) corresponds accurately to the review undertaken for the determination of bulk-goods networks. However, when focusing their attention on the question of Tula's territorial domain it is seen here as premature owing to the limited excavations in regions where evidence of a Toltec presence had been previously noted, notably in regions north of Tula such as El Carabino (Bey 1986; Braniff 1972; Healan 2012) which were not contemplated in their study. Further research in sites such as El Carabino, Guanajuato, is needed to examine in greater detail the Toltec presence revealed from test pits excavated nearly a half century ago (Braniff 1972; Bey 1986). Likewise, and for the directionality of this study, to define the western limits of Tula's bulk-goods networks the empirical data set is again incomplete for regions that come into play on this question. The obsidian source at Ucareo, Michoacán, was heavily exploited from the Epiclassic period constituting the major source of obsidian used in Tula at that time (Healan 2012). However, during the Early Postclassic period, Tula's growing preference for green obsidian from the nearby Pachuca, Hidalgo source reduced the usage of Ucareo obsidian

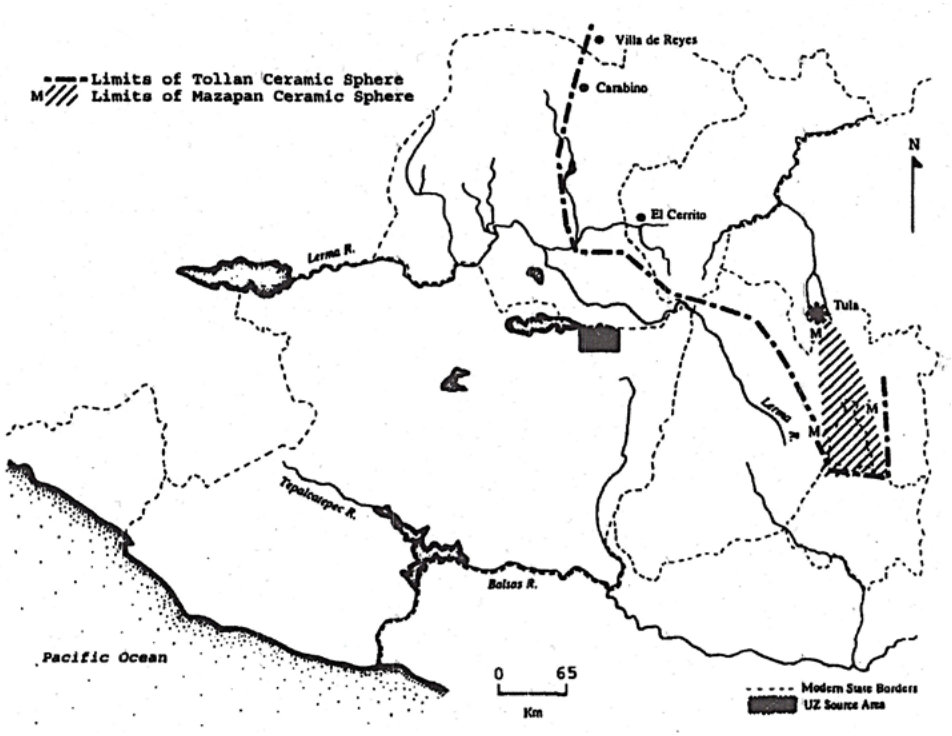


Figure 6.6. *Limits of the Tollan Ceramic Sphere (after Hernández 2000: Fig. 50).*

in Tula, while both Ucareo and Pachuca obsidian were imported into Chichén Itzá constituting the two main obsidian sources from Central Mexico into this Maya site (Braswell 2003b; Healan 2011). Research into the question on how Ucareo obsidian, 150 km west of Tula, made its way to the Toltec polity (Healan 2011) requires additional information pertaining to the distribution of sites and ceramic spheres for the intervening regions between Jilotepec, Acambay (Piña Chán 1981), and Ucareo (Hernández and Healan 2008). Jilotepec was fully integrated into Tula's ceramic sphere (Avilés 2004), which suggests its integration into the bulk-goods networks of Tula. In the site of La Sorpresa de San Miguel, Avilés identified components of the diagnostic artifacts for the Ceremonial Subcomplex (Bey and Ringle 2011) associated with a high proportion of Ucareo obsidian, with lesser amounts of obsidian from Pachuca, Hidalgo and Fuentezuelas, Querétaro. Excavations in the site of El

Cerrito, Querétaro (Crespo 1991; Valencia and Bocanegra 2013) 50 km west of the Fuentezuelas obsidian source have added much insight into what is considered a large secondary ceremonial center emulating many of Tula's most distinctive architectural elements. Artifacts recovered from El Cerrito include Abra braziers, Alicia open censors, pan censors, Mazapan figurines, copper bells, and buttons (Valencia and Bocanegra 2013: Figs 69–73, 79) again, as in the case of San Miguel, Jilotepec, indicating the presence of the Ceremonial Subcomplex. The copper artifacts and turquoise from El Cerrito (Cobean and Mastache 2003) are indicative of exchange with West Mexico. Taken together, the information from these sites gives weight to the proposed western and northwestern limits of the Tollan Ceramic Sphere (Figure 6.6) as proposed by Hernández (2000).

Political Networks

Evidence for political networks associated with Tula in West Mexico is found in the lake district of northern Michoacán. In the Pátzcuaro Basin, 95 km east of Ucareo, excavations in the site of Urichu have produced a number of burials from tombs (Pollard 2005, 2008, 2014; Pollard and Cahue 1999; Pollard et al. 2005). Burials from the Early Urichu phase (900–1100 CE) the richest in grave contents, "some of which appear to be ritual paraphernalia imported from Tula or in Toltec style" (Pollard 2014:9). Among the contents of Tomb 1, burial 13, were found 3 prismatic blades from Pachuca, Hidalgo, three flutes, a Macana style bowl, shell from the Atlantic (1) and Pacific (5), and a bluestone plaque (visually identified by Phil Weigand as turquoise from Cerillos, New Mexico). The presence of an openwork censor in the style of the Alicia type, and the Macana vessel as defined for Tula (Cobean 1990) are significant. The Urichu burials manifest ties to both regional (i.e. Zináparo and Balsas) and macroregional networks, linking elites of the Pátzcuaro Basin (Pollard and Cahue 1999; Pollard 2008: Fig. 4) to regional peer-polities, while at the same time establishing long-distance ties with Tula (Figure 6.7).

Figure 6.7. *Urichu, Michoacán. Burial 13 contents (after Pollard 2008: Fig. 9(a). Photo by Hellen Pollard, used with permission).*

From her study of mortuary patterns in the evolution of political complexity from the "highly ranked local chiefs" of the Early Urichu phase (900–1100 CE) to a stratified elite class of the emerging Tarascan state during Middle to Late Postclassic period, Pollard concludes, "This transformation involved a shift in *elite identity from one primarily associated with imported finished goods from distant powerful centers* [Tula] *and control of prestige goods networks* to an identity primarily associated with locally produced, distinctively Tarascan goods and control of tributary, military, political, and ideological networks" (Pollard 2015:109, emphasis added).

Excavations undertaken 30 km west of Urichu in the adjacent Zacapu Basin in the site of El Palacio add further insight concerning the relations between elites from the lake district of northern Michoacán and Tula. Analysis of materials pertaining to the El Palacio phase (900–1200 CE) characterized by the Hornos and Palacios ceramic groups (Jadot 2016:108–112, Fig. 40) distinguish ceramics related to Tula:

> We have seen several ceramic evidences of the Palacio phase (900–1200 A.D.) that connect the site of Mich.23 [El Palacio] with Tula.

> Thus, the discovery of sherds of the types Hornos Pintado (bowls painted divergent walls of red lines), Braseros San Antonio (braziers with applied decoration and printed), Palacio Polished Incised (bowls and mortars tripod hollow bulbous feet), Plumbate (mainly miniatures bottles) and comales associated with several fragments Mazapan style figurines (Figure 46; cf. Section 3.6) indicate contact with the Toltec culture. The Tula region could have operated as a transit point between the region of Soconusco and the Zacapu in the case of Plumbate. El Palacio ceramics therefore reflect the image of exchanges between populations of the regions of Tula and the Zacapu during the Early Postclassic (900–1200 A.D.) […], the presence of other objects associated with the Toltec culture in the site Mich.215 (Potrero de Guadalupe) located in Lomas (Pereira 1997a: 78; cf. Chapter 3.6), indicate that several groups in the basin of Zacapu had established links with the Toltecs (Jadot 2016:198, translation by the author).

Jadot (2016:538) concludes that material evidence from El Palacio suggests that elites and institutions of the Zacapu basin were integrated into long-distance exchange networks during the El Palacio phase (900-1200 CE) with Tula. Notably however, fragments of the Mazapan figurines from El Palacio (Jadot 2016:142, Fig. 46) indicate the presence of varieties diagnostic of Central Mexico (Figure 6.9 top row; Stocker 1983) and two large fragments diagnostic of the Aztatlan varieties (Figure 6.9 third row, Solar et al. 2011). The former indicate that besides the above-mentioned ceramic types, the inhabitants of the Zacapu Basin were emulating figurines characteristic of Tula, while the latter are evidence of interaction with the Aztatlan network in the adjacent Chapala Basin.

The Zacapu Basin material evidence consisting of the predominant local Hornos and Palacios ceramic groups, together with the "strong morpho-stylistic similarities" (Jadot 2016: 473, footnote 287) between San Antonio braziers, Palacio Polished Incised, Palacio Polished wares of Zacapu, and Abra Café Burdo braziers, Macana Red-on-Brown (Marcada variety), and Sillón

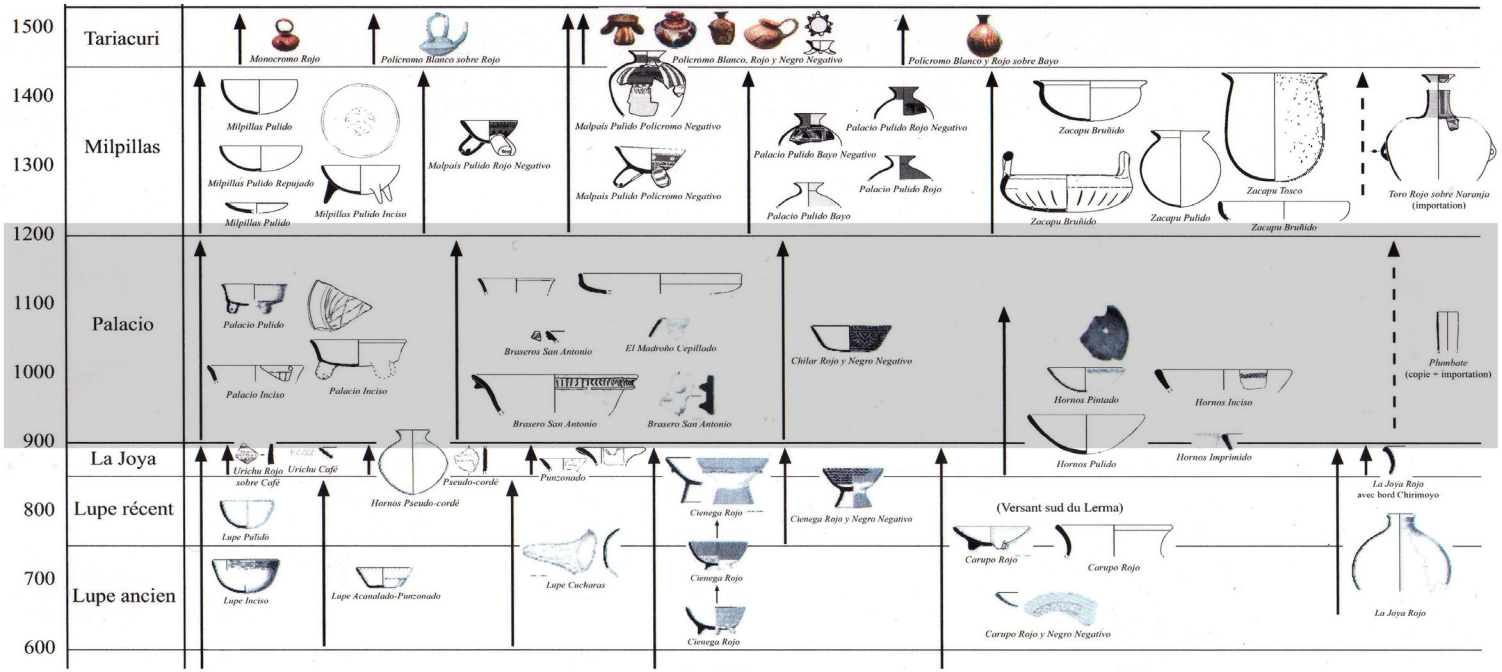


Figure 6.8. *San Antonio braziers, Palacio Polished Incised, Palacio Polished wares from El Palacio Site, Zacapu (after Jadot 2016, Annex 5, shaded area added).*

Incised wares of Tula (Cobean 1990) present an empirical patterning consisting of local wares, local wares emulating Tula/Toltec types, and prestige goods. It is relevant that the Early Postclassic empirical patterning of Zacapu (i.e. the lake district of northern Michoacán) in its interaction with Tula correlates with the patterning defined in Chapter 4 for political networks for the lake district of northern Michoacán in their relation with Teotihuacan. In sum, material evidence indicates that elites from the sites of El Palacio and Urichu in the Zacapu and Pátzcuaro Basins of northern Michoacán are integrated through three interaction networks to Tula: political, prestige goods (i.e. Plumbate ceramics and obsidian from Pachuca), and information networks (i.e. the Ceremonial Subcomplex). The presence of turquoise and Pacific Coast shell in both sites requires analysis of empirical evidence for prestige goods and information networks further to the west (Figures 6.8), which in the specific case of the aforementioned Mazapan figurines in El Palacio, take us into the Aztatlan realm.

Prestige Goods and Information Networks in the Aztatlan Realm

Adjacent to the Zacapu Basin, the Chapala Basin is the center of the eastern-most extension of the Aztatlan network, regionally distinguished as the Cojumatlán phase (850/900–1050/1100 CE) (Liot et al. 2006b; Ramírez 2016). The Chapala Basin forms a natural and cultural hub from where two major bifurcations extend through the remainder of West Mexico to the Pacific Coast. From the west side of the Chapala Basin these follow two natural corridors: the southern corridor extending from the Sayula Basin through southern Jalisco via the region of Tamazula to northern Colima. The second, northwest corridor extends through central highland Jalisco to southern Nayarit, around the site of Ixtlán del Río, and from there on to the site of Amapa (Fahmel 1988:83; Grosscup 1976:264; Liot et al. 2006a: Fig. 84). For the Chapala Basin, evidence for prestige goods and information networks come from the site of Cojumatlán,

on the southeastern edge of Lake Chapala. Here, two test trenches produced diagnostic ceramics of Cojumatlán polychrome and Cojumatlán Incised polychrome, the regional variants of the Aztatlan polychrome horizon, together with Mazapan figurines and copper artifacts. Plumbate ceramics, a Tláloc censer, and fragments of openwork censers were detected (Lister 1949).

From the site of San Gregorio, on the eastern edge of the Chapala Basin (102 km northwest of El Palacio, Zacapu), and the site of Tizapán, Meighan and Foote (1968) identified the regionally diagnostic Cojumatlán polychrome ceramic ware, Mazapan figurines, and copper artifacts. Fragments of openwork censers and a Tláloc censer were identified. The examination of the censers (*incensarios*) from Tizapán, and comparison with fragments of clay "pipes" found in Cojumatlán (Lister 1949:68–69), led Meighan and Foote to properly identify the "pipe" fragments of Cojumatlán with the censers found in Tizapán. Additional material evidence of the Ceremonial Subcomplex is found in fragments from the open bowls at the distal end of censers that Lister originally identified as "pieces of censer" in Cojumatlán (Lister 1949:56, Fig. 23a, d).

The extension of the Cojumatlán province, centered on the Chapala Basin, is represented on its western extension in the site of La Peña, Jalisco on the northeastern edge of the Sayula Basin (Liot et al. 2006b). The site is located high up on the narrow area where the two basins intercept around the Cerro de García. La Peña represents the most extensively excavated site in the Chapala-Sayula lake districts to date, thus providing a greater regional understanding of this portion of the Early Postclassic, Cojumatlán phase (900–1100 CE) in West Mexico (Ramírez et al. 2006:20, Table 1). This period in the northern Sayula Basin is marked by the presence of the Aztatlan horizon at around 800/850 CE, which represents a major "intrusion of a new social, political, economical and ideological order" (Liot et al. 2006a:417, translation by the author), within the regional settlement pattern and cultural characterization of the Sayula phase (500–1100 CE). The intrusive character of the Aztatlan network out of its nuclear area of coastal Nayarit and Jalisco indicates that at around 850/900 CE Aztatlan

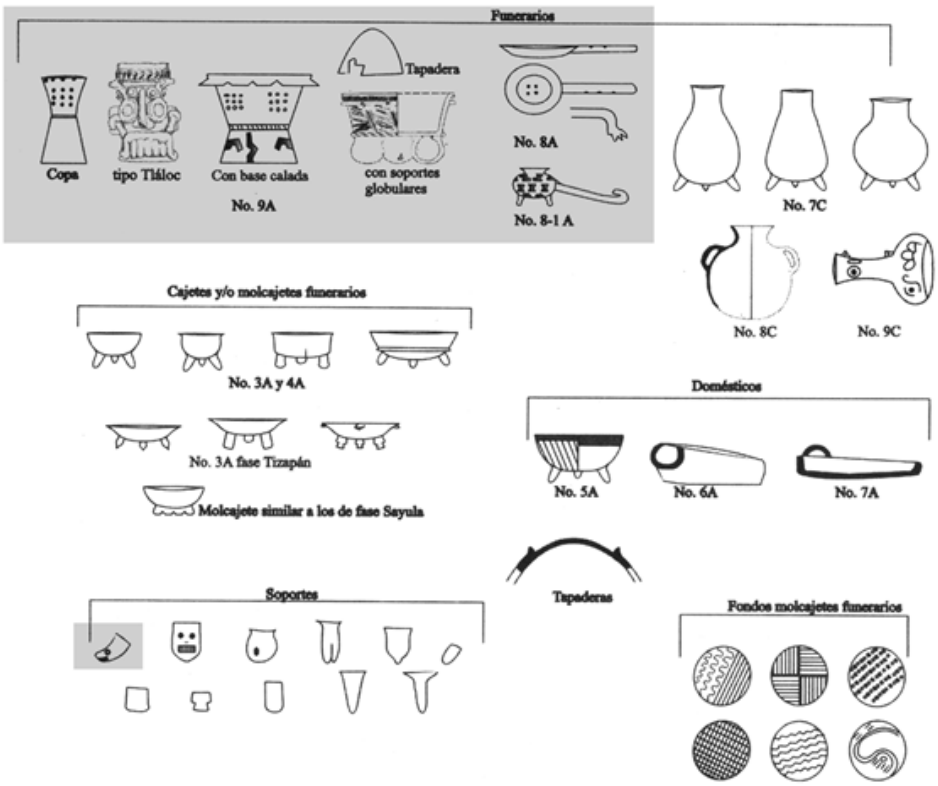


Figure 6.9. *The Tlaloc Complex as defined from the site of La Peña, Jalisco (after Ramírez and Cárdenas 2006: Fig. 66; shaded area added).*

is incorporating inland highland regions into its network system, a process that has been documented in highland Durango (Foster 1999; Kelley 2000; Punzo 2013). Subsequently, in La Peña at 1050 CE the entire Ceremonial Subcomplex is found (Figure 6.9), albeit un-recognized, described locally as "the Tláloc Complex" (Ramírez and Cárdenas 2006:321). Concurrently, prismatic blades from Pachuca, Hidalgo, are found in La Peña associated with higher ranked sectors of the site or as result of ritual activities within these sectors (Reveles 2006: 392).

Of particular relevance to the present study is the evidence from La Peña for the absolute dating of the Ceremonial Subcomplex at 1050 CE (Ramírez and Cárdenas 2006:360, Fig. 78; Susana Ramírez, pers. com. 2017). It is underscored that both the Ceremonial

Subcomplex, and Pachuca obsidian constitute material evidence of the prestige goods and information networks extending into West Mexico. The dating of the Ceremonial Subcomplex at 1050 CE in La Peña, correlates with the transition of the Cojumatlán phase (850–1050 CE) into the Tizapán phase (1050–1350 CE), as well as with the chronology of the Ceremonial Subcomplex in Tula for the Tollan phase (950–1150 CE) (Bey and Ringle 2011:306). The above data indicates that the Aztatlan network of West Mexico has articulated with the Early Postclassic world-system at 1050 CE.

As mentioned, the Chapala Basin is a hub for two natural corridors: one into southern Jalisco and Colima, and the second to the northwest across central Jalisco into Nayarit. Beyond the Chapala Basin, evidence for information networks is found in southern Jalisco around the Tamazula-Tuxpan-Zapotlán region, where Tláloc braziers were originally identified as part of Tula's religious permeation (Schöndube 1980). As mentioned above, certain varieties of Mazapan figurines are a pervasive trait of the Aztatlan network. The northwest corridor extends from Chapala into the Aztatlan heartland of coastal Nayarit. Excavations in La Peña, Sayula identified a number of intrusive ceramics associated with this area: Botadero Incised, Cerritos Polychrome, Tuxpan Incised, diagnostics of Amapa, Nayarit in the Cerritos phase, 900-1100 CE (Ramírez et al. 2000:44; Meighan 1976a; Grosscup 1976). The distance from the Chapala Basin to the site of Amapa, Nayarit, is 240 km. This is indicative both of the geographical extension of the Amapa ceramic sphere, as well as its marked directionality towards the Chapala Basin. Midpoint in this trajectory is the site of Ixtlán del Río, Nayarit, while 80 km northwest of the Chapala Basin is the province of Etzatlán, Jalisco. Recent ceramic analysis from sites around the town of Etzatlán, originally recuperated from test excavations by Long and Glassow, confirm the preponderance of the Amapa sphere. "One clear finding involves the striking parallels between Amapa and Etzatlán during the Cerritos phase, defined for Amapa dating between AD 900 and 1100. The site of Amapa is 16 km from the Pacific Coast as the crow flies. As we have indicated, the typological similarities are so detailed that they

suggest close cultural ties between Etzatlán and communities in that direction during this period" (Nance et al. 2013:230–231). Mazapan figurines and a distinctive effigy vessel foot (Nance 2013:142) were identified in their analysis. Etzatlán is within 25 km of a number of the major obsidian sources of West Mexico: Llano Grande, La Joya, and La Mora/Teuchitlán, the analysis of which has determined their excellent quality (Glascock et al. 2010).

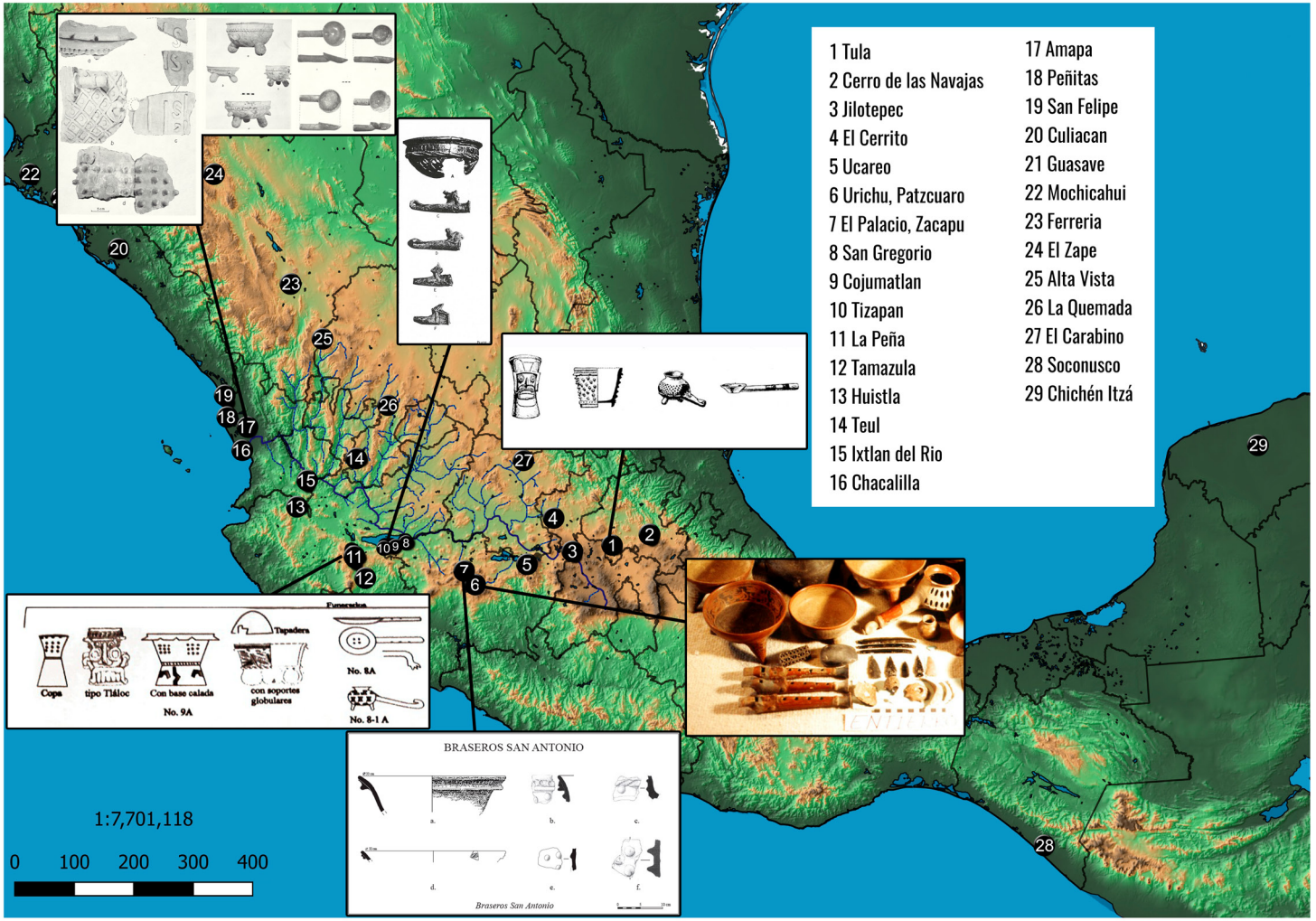
Excavations in the site of Ixtlán del Río, Nayarit, have exposed an extensive amount of architecture of what corresponds to one of the largest civic-ritual centers of southern Nayarit. From the initial surface survey of Ixtlán del Rio, and nearby sites, ceramics manifested a clear correlation with the Aztatlan complex (Gifford 1950). Ceramic analysis of materials recuperated from the salvage excavations in the Valley of Ixtlán—in the sites of Los Pitayos and El Ranchito—during the construction of the Ixtlán–Tepic highway, and excavations from Ixtlán proper from the 1980s identified a Middle period (900–1100 CE) that included a number of types characteristic of the Aztatlan complex, including: Tuxpan engraved, Cerritos Polychrome, Botadero Black-on-Buff, Botadero Incised, and Red and White Incised on Orange (Gámez 1996). Of particular relevance are the Polished Brown openwork censors and White Caedizo braziers (Gámez 1996: Figs 51 and 52), two of the most conspicuous components of the Ceremonial Subcomplex. The recent analysis (González Gómez 2001) of the excavated data from the Corona Núñez's 1967 season at Ixtlán del Río reiterates Gámez's study with the inclusion of additional diagnostics for the Ceremonial Subcomplex: Ixtlán Abra braziers, and hour-glass formed censers. González Gómez and Equihua also identified Plumbate ceramics among this collection (González Gómez 2001, pers. com. 2016). Likewise of pertinence is an annular base bowl with an appliqué ornament in the form of the stylized butterfly-shaped pectoral analogous to those seen on the Atlantean sculptures from Tula.

In the site of Amapa, Nayarit, the Cerritos phase (900–1100 CE) is highlighted by Cerritos Polychrome ceramics (Grosscup 1976). Resemblances of designs and fine line incision with painting were

identified and correlated to Cojumatlán Polychrome of the Chapala Basin, prompting Grosscup to conclude, "that the Cojumatlán phase is equivalent to the Cerritos phase" (1976:265). Among the components of the Ceremonial Subcomplex found in Amapa are: Red-slipped frying-pan censers (*sahumadores*), spiked censers, and large cylindrical incensarios (Meighan 1976a:118–122, Plates 27–30). Plumbate ceramics are likewise present in Amapa. The site stands out in West Mexico for the abundance of finished copper artifacts, fragments of copper slag, stone tool kits (flakes and drills), sandstone abraders, shell beads, square pieces of shell identified as blanks for beads, and fragments of shell (Meighan 1976), indicative of specialized activities related to prestige goods production. The excavated ball court at Amapa (Clune 1976) corresponds to Type III (Taladoire 1998:179), a diagnostic trait shared with other Aztatlan sites near Amapa, Chacalilla and Coamiles (Taladoire 1998:181), as well as the ball court of Chichén Itzá. The Aztatlan ball court corresponds to what Taladoire considers the "Mesoamericanization" of West Mexico, a view which is much in accord with Schöndube's previous consideration on the integration of West Mexico into the Early Postclassic Mesoamerican realm. From the perspective of this study, the Type III ball courts are a highly relevant evidence of the information networks of the Early Postclassic world-system.

The recovery of Plumbate in San Felipe Aztatán, Nayarit, 65 km north of Amapa, indicates that the prestige goods of the Early Post Classic networks circulated into the Aztatlan heartland (Garduño 2015). This is verified from the excavations in Chacalilla, Nayarit, 20 km south of Amapa, where Cerritos phase diagnostic ceramics (Tuxpan Engraved, Botadero Black-on-Buff, Sentispac Red-on-Buff, Iguanas Polychrome, and Iago and Botadero Incised) define the major occupation of the site (Ohnersorgen 2005). INAA and X-Ray Fluorescence identified obsidian from local sources (Volcán de las Navajas, Nayarit, 50 km east of the site), nearby sources (Ixtlán del Río, 115 km to the southwest), and the Las Joyas, Las

Figure 6.10. *(overleaf) Sample of sites mentioned in the text with presence of the Ceremonial Subcomplex (top left, after Meighan 1976a: Figs 122,120, 118, 27; middle, after Meighan and Foote 1968: Plate 19; right, after Ringle et al. 1998: Fig. 29; bottom left, after Liot et al. 2006a: Fig. 66; middle, Jadot 2016, Annex 5; right, courtesy of Hellen Pollard).*


1 Tula
2 Cerro de las Navajas
3 Jilotepec
4 El Cerrito
5 Ucareo
6 Urichu, Patzcuaro
7 El Palacio, Zacapu
8 San Gregorio
9 Cojumatlan
10 Tizapan
11 La Peña
12 Tamazula
13 Huistla
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21 Guasave
22 Mochicahui
23 Ferreria
24 El Zape
25 Alta Vista
26 La Quemada
27 El Carabino
28 Soconusco
29 Chichén Itzá
Funerarios
Copa
tipo Tláloc
Con base calada
No. 9A
Tapadera
con soportes globulares
No. 8A
No. 8-1 A
BRASEROS SAN ANTONIO
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Pilas, and Santa Teresa sources of eastern Jalisco, 150 km southeast of Chacalilla), all of which are considered evidence of Aztatlan's bulk-goods networks. Green obsidian from Pachuca, Hidalgo, has been indentified at Chacalilla (Ohnersorgen 2005). The Pachuca obsidian is a material correlate of prestige goods networks extending across West Mexico tied to Tula.

The examination of sites and empirical data presented in the preceding section, extending from Tula in Central Mexico to the Pacific Coast, underscores the presence of locally reproduced (i.e. local ceramic types) components of the Ceremonial Subcomplex—as opposed to imported objects—in West Mexico (Figure 6.10). This emulation constitutes evidence for information networks linked to Tula. Likewise, the distribution of Plumbate ceramics and prismatic blades from Pachuca, Hidalgo, represent diagnostic and traceable parcels of the prestige goods networks. The conjunction of the bulk-goods, political, prestige goods, and information networks extending out of Tula is proposed as material evidence for what is described for the remainder of this study as the Early Postclassic Highland Network (EPHN).

Discussion: The Early Postclassic Highland Network, Aztatlán, and the Demise of the Epiclassic Networks System

In the initial section of this chapter it was mentioned that in West Mexico the transition from the Epiclassic to Early Postclassic periods was characterized by two major phenomena: the disintegration of the Inland Northern Network (INN) and the rise of the Aztatlán interaction network along the Pacific Coast. With the definition of the EPHN system this transition may be better understood as an interregional interconnected process. For half a century it was hypothesized, and curiously taken for granted by many researchers, that the site of La Quemada and the local settlement system of the Malpaso Valley was subject to demise sometime between 1100–1250 CE owing to a drastic climate change which resulted in the invasion of Chichimec groups from further north (Armillas 1964,

1969; Hers 1989). However, paleoclimate studies (Elliot et al. 2010; Somerville 2015) indicate that the increased aridity that today prevails in the Malpaso Valley is the result of more recent climate change corresponding to the activities of accentuated deforestation required for colonial mining operations, which began during the second half of the sixteenth century. La Quemada, from 500 CE on, was characterized by stable climatic conditions for agricultural production. This allows one to look to other indicators and causes that may be related to this demise which involved major changes brought about not only in La Quemada and the Malpaso Valley, but likewise in Alta Vista and the surrounding Suchil branch sites of the Chalchihuites region, the area east of La Quemada of what has been defined here as the Valle San Luis sphere, and the northern region of the Altos region: in essence, most of the sites within the spheres of the INN of the Epiclassic period (Figures 5.2 and 5.5). In contrast to the above, polities in southern Zacatecas (Cerro del Teul and Cerro de Las Ventanas) continued into the Early Postclassic period shifting their links to West Mexico, establishing ties to the Aztatlan network and central Jalisco, and loosening their interaction with its northern neighbors. This shift in network alignment was part of a larger process occurring in adjacent regions to the south.

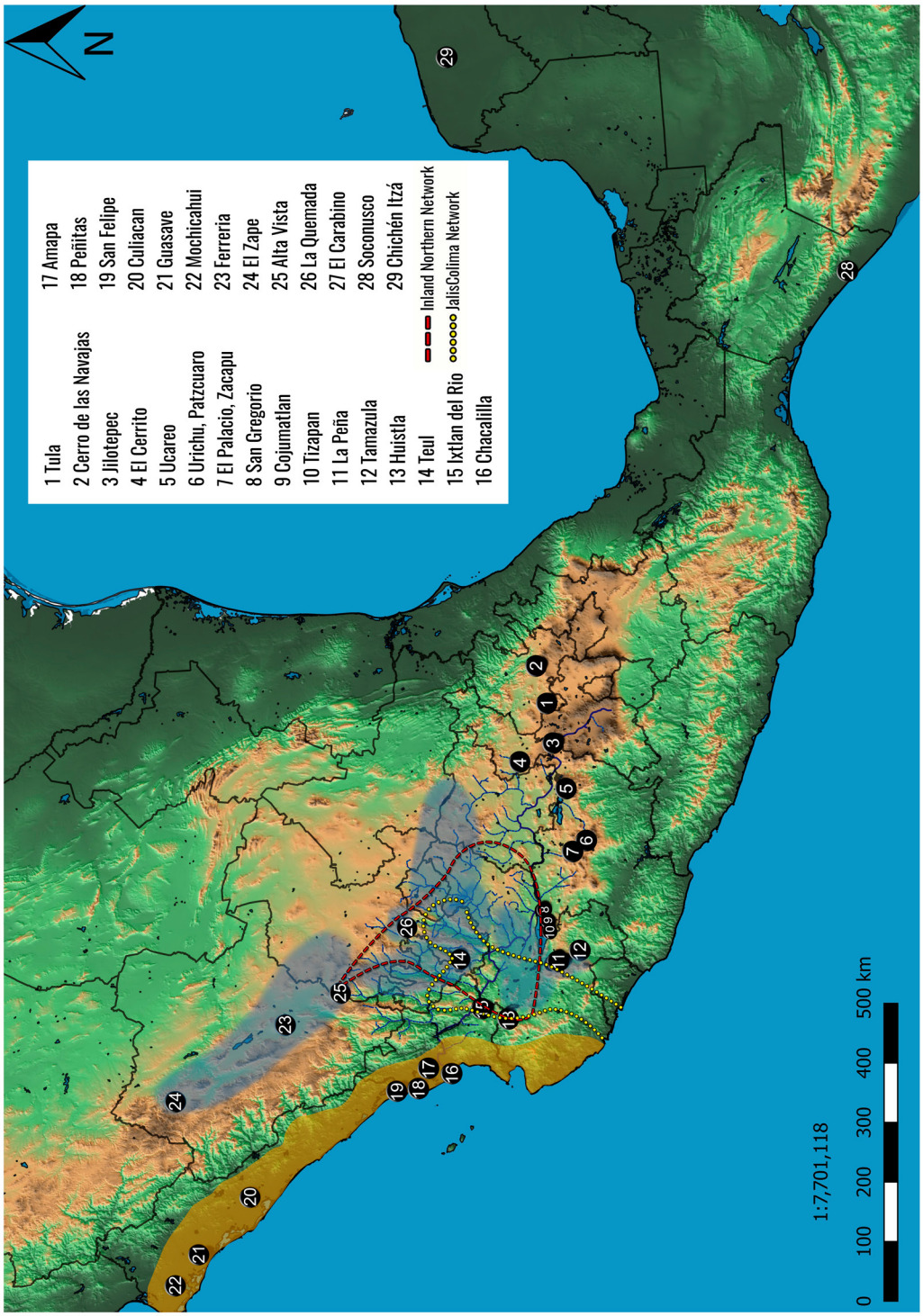
Evidence from sites mentioned in the previous section allows a spatial-temporal analysis of the transition between the Epiclassic and Early Postclassic periods. Between 850–900 CE the Aztatlan network, in particular the polity of Amapa, extended its networks inland through the polities of Ixtlán del Río and Huistla, the latter in western Jalisco (Gámez 1996; Gifford 1950; Nance et al. 2013) (Figure 6.11). During this time elites in central Jalisco, the Chapala Basin, and the Ixtépete-El Grillo sphere, were drawn into contact and interaction with adjacent elites to the west (i.e. Huistla and Ixtlán del Río). The increase in interaction with the Amapa zone resulted in the Cojumatlán phase of the Chapala Basin at 850 CE as local elites integrated into the Aztatlan network through prestige goods and information networks tied to Amapa (Figure 6.12). By 850–900 CE, elites in areas previously integrated into the INN and JalisColima network (Ixtépete-El Grillo sphere) in the zone of central Jalisco

modify the direction and density of interaction towards the west, integrating with the Aztatlan network system. This new network alignment must have altered the previous configuration of the interaction networks of the JalisColima and INN in the zone where these networks articulated. At 1000–1050 CE elites of the Cojumatlán realm of the Chapala Basin also established links with interaction networks from the east (i.e. Zacapu and Pátzcuaro Basins) (Figure 6.13). The merger of the Aztatlan network with prestige goods and information networks from the lake district of northern Michoacán, and ultimately Tula, marks the coalescence of West Mexico into the Early Postclassic world-system. The geographical north/south axis of the INN and JalisColima and network was at this time subject to change as turquoise, shell, and other resources from the Aztatlan network circulated within prestige goods and information networks in exchange for Plumbate ceramics and prismatic blades of obsidian from Pachuca.

Process-wise the transition between the late Epiclassic and Early Postclassic involved a change of interaction networks on the part of elites in central Jalisco (i.e. Ixtépete-El Grillo Sphere and Chapala Basin) that caused their northern peer polities to collapse. This change occurred first with the Aztatlan network to the east (between 850–900 CE), followed by their subsequent merge (i.e. 1000–1050 CE) with the networks of the adjacent lake district of northern Michoacán (i.e. Zacapu, Pátzcuaro). It is posited here that this change interrupted the INN, as it was cut off from the new configuration of networks of the Early Postclassic period owing to the realignment of elites of the JalisColima network into the Aztatlan network (Figures 6.11–6.13).

From this structural change it seems highly probable that the political economies of Alta Vista (the local Suchil sphere of the San Antonio and Río Colorado Valleys of Chalchihuites), La Quemada (the Malpaso sphere), and the settlements of the Valle San Luis sphere were affected owing to the interruption and eventual cut off of the flow of exchange of resources and prestige goods that had previously circulated between the INN and JalisColima network. This suggests that one of the roles and possible basis of power of

Figure 6.11. *(overleaf) Aztatlan heartland (yellow) coexistent with Inland Northern Network and JalisColima network (around 850/900 CE).*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17 Amapa
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19 San Felipe
20 Culiacan
21 Guasave
22 Mochicahui
23 Ferreria
24 El Zape
25 Alta Vista
26 La Quemada
27 El Carabino
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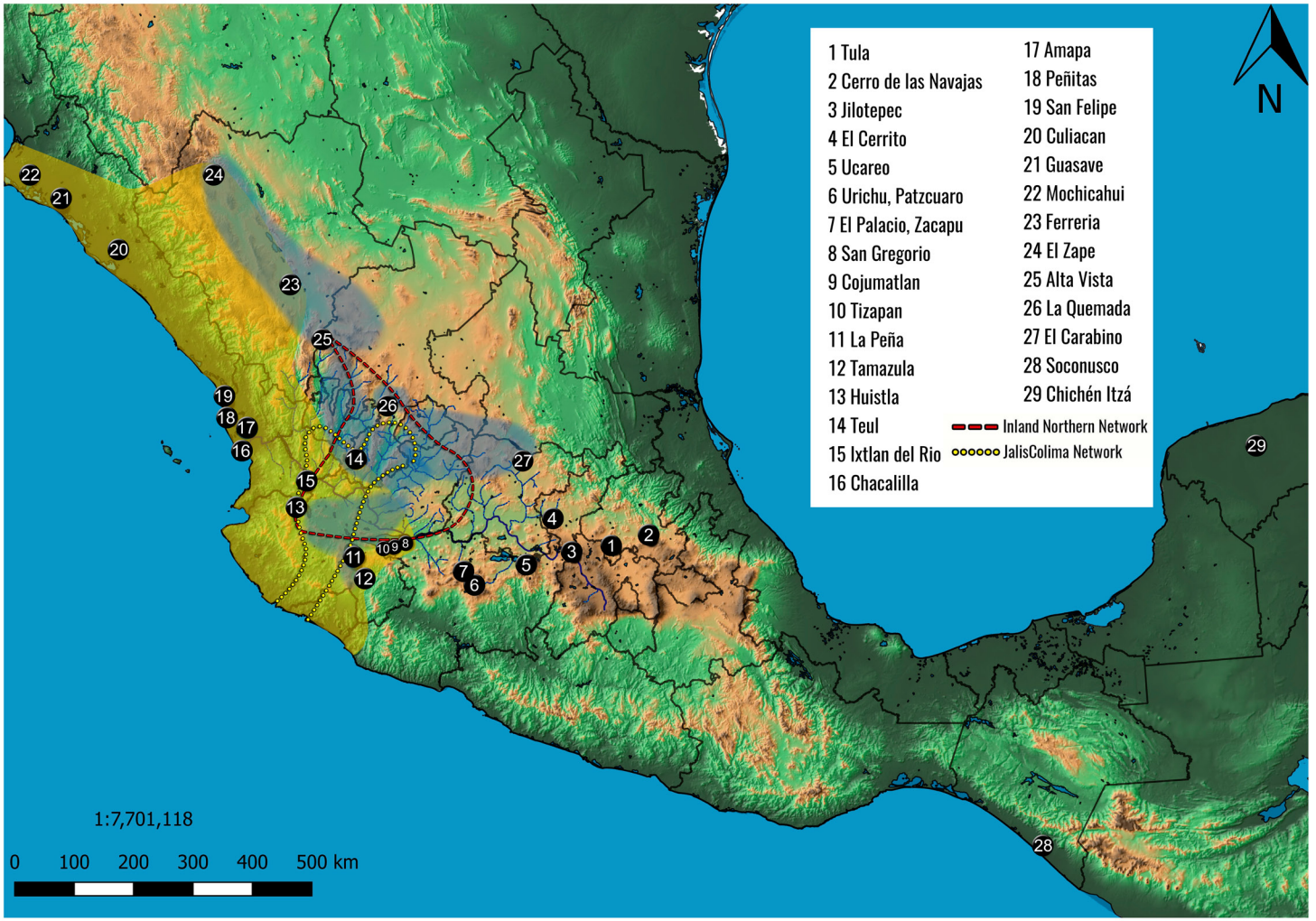
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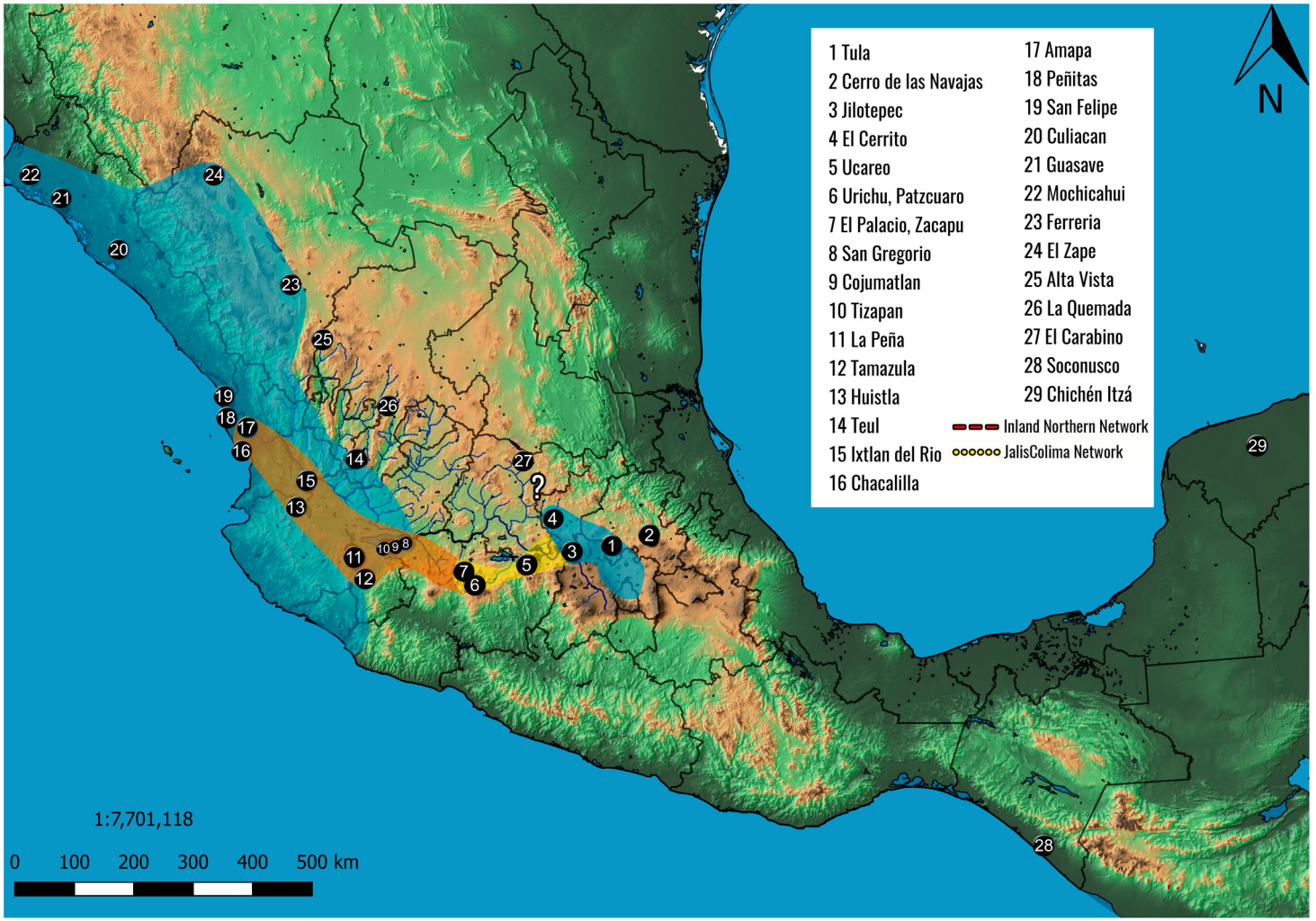
La Quemada during the Epiclassic INN resided in a function as an intermediary that linked the Suchil-Guadiana sphere and the Valle San Luis sphere, with West Mexico. When abrupt change came about between 900–1000 CE, La Quemada may have had little to offer in the way of specialized exchange. Likewise, the religious clout the site may have possessed as a possible peregrination center during the Epiclassic period (Wells and Nelson 2007) may have been reduced, or became ultimately insignificant, within the changing Early Postclassic world-system, which as seen above possessed an elaborate ritual and religious system of its own. In the realm of the Early Postclassic period, La Quemada may have been too distant from the new interaction corridor of networks to the south, ultimately becoming isolated and facing eventual demise, along with a substantial segment of West Mexico's northern frontier of Classic period Mesoamerica.

In essence, the above described change in network configuration occurring between 900–1050 CE in West Mexico represents the transition from the inland corridor which followed the eastern flanks of the Sierra Madre Occidental as an interior zone of interaction for the greater part of the Classic period, to the Pacific Coast as a corridor for interaction network of Aztatlan. Finally, it should be underscored that the interregional process that played out across West Mexico in the Early Postclassic period should be considered a significant factor that gave way to the geographic spatial reduction of the limits of the northern frontier of Mesoamerica. With the demise of the Suchil, Malpaso, and Valle San Luis spheres in the Early Postclassic period, Mesoamerican sedentary occupation in the central segment of the northern frontier was substantially reduced, as originally highlighted in the definition of Mesoamerica (Kirchhoff 1943).

Figure 6.12. *(previous) Aztatlan expansion (yellow) into the highlands of Durango (Guadiana Valley), Jalisco (Chapala Basin), and southern Zacatecas (around 900 CE).*

Figure 6.13. *(overleaf) Limits of boundaries of Tula's bulk-goods network (blue), political/military network (yellow), prestige goods and information networks (orange), merging with Aztatlan networks (light blue) in the Chapala Basin (around 1000 CE).*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The Ceremonial Subcomplex and the Coalescence of the Early Postclassic Period World-System

In the preceding sections an areal analysis of the material evidence from a continuum of sociopolitical developments across West Mexico defined the presence of the Ceremonial Subcomplex and the distribution of Plumbate ceramics and green obsidian from Pachuca, which through political, prestige goods, and information networks articulate this subregion of Mesoamerica to central Mexico at Tula during the Early Postclassic period (900–1200 CE). This connection to Tula, which had been perceived from isolated evidence for decades, can now be contextualized within the larger perspective of the Early Postclassic world-system. At the beginning of this chapter it was pointed out that studies on the Early Postclassic period of Mesoamerica have focused on understanding the complex relationship between Tula and Chichén Itzá (e.g., Bey and Ringle 2011; Kowalski and Kristan-Graham 2011). Analysis to determine the timing of the contact and the nature of the exchange between these two sites has been undertaken by Bey and Ringle (2011). The study is based on complimentary categories of evidence made from ceramic analysis of the Tollan and Sotuta complexes, and architectural stratigraphy. Regional chronologies for both sites, the Tollan phase (950–1150 CE) and the Sotuta phase (950/980–1050/1100 CE) frame contact and the duration of interaction (Mastache et al. 2002:42; Volta and Braswell 2014:389). On the issue of direct exchange between Tula and Chichén Itzá, Bey and Ringle point out that "apart from a restricted set of imported vessels, direct exchange between the two sites was almost nil" (2011:314). In the matter of the Ceremonial Subcomplex, their analysis sheds light on a distinct situation.

> The Sotuta complex, unlike the Cehpech complex, is characterized by the use of a ceremonial subcomplex consisting of braziers, frying pan censers, and openwork censers (Figure 4). The spiked brazier appears to have deep roots in the Maya area (Rice 1999) as opposed to the central highlands, where it is a largely Epiclassic-

> Postclassic type […] The frying pan censers found at both sites are also extremely similar, even down to the use of red, blue, and yellow "postfire" paint. Finally the long-handled, openwork censers at Chichén Itzá are also similar to those found in Tollan phase Tula. Bey has compared both the frying pan censers and the openwork censers from both sites and has found those at Chichén to be modally the same, regarding rim diameter vessel color and rim form, as those from Tula (Bey and Ringle 2011:309).

The shared Ceremonial Subcomplex that links the two sites is well defined. However, on the regional scale there is a marked difference in the distribution of the Ceremonial Subcomplex. Across the Basin of Mexico it is present at important sites (Crider 2011:315), while in the northern Maya lowlands, besides Chichén Itzá and Balancanché, the Ceremonial Subcomplex is absent from contemporary ceramic complexes (Bey and Ringle 2011:315). The above observation also touches on a significant aspect of the Ceremonial Subcomplex in signaling that some of its components have regional antecedents. Pertinent to Tula's previous Epiclassic period occupation in Tula Chico, Coyotlatelco phase materials include spiked hourglass braziers and handled censers (*sahumadores*) (López et al. 2006:224, Fig. 14). These have likewise been associated with other highland Epiclassic areas in the sites of Cantona and Xochicalco (Crider 2011:487). The nature of the relationship between Tula and Chichén Itzá perceived through Bey and Ringle's analysis is relevant for explaining the transition from Epiclassic to the Early Postclassic periods in other regions of Mesoamerica. They conclude,

> Both were important ritual centers and entrepôts, but probably entered a system already in formation and were thus heavily indebted to other sites of the Epiclassic, both highland and lowland. Economically, the network appears to have been involved primarily in the distribution of exotic raw materials and prestige craft works, as was the later *pochteca*. […] *This network closely followed and expanded on the networks already established by Teotihuacan during the Early and Middle Classic*, where clearly the

> Feathered Serpent was already a deity of significance. […] These centers suggest that authority and identity among Mesoamerican peoples were more complex than has commonly been allowed. *We have tended to view political, economic, and religious identity as coextensive: indeed the latter two are often viewed as in service of the former. Instead, Tula, Chichén, and Cholula strongly suggest that religions and trade organization may have become emergent institutions before A.D. 1000.* On the one hand, *this permitted the dispensation of political and religious legitimacy over areas much greater than were probably under their direct administration.* […] These arguments also go a long way toward providing a model for explaining the similarities *between trade wares and ceremonial subcomplexes* found in the Tollan and Sotuta complexes. It is not surprising that *a set of related behaviors* that include ritual, militarism, and exchange would result in exchange and acquisition of similar types of imported pottery or necessitate similar types of ceremonial ceramics (Bey and Ringle 2011:332–333, emphasis added),

Volta and Braswell state that the "emulation of foreign styles, wide-ranging trade relations, and a shared world religion are all plausible explanations for the participation of Chichén Itzá in the Early Postclassic Mesoamerican world" (2014:393), and should be seen as a response on the part of the Itzá state to fill the "political vacuum and demographic void" resulting from the Terminal Classic collapse that affected the Maya Lowlands (Chase and Scarborough 2014; Douglas et al. 2015; Hodel et al. 2005; Turner 2017).

When extrapolated to West Mexico the coherence of the above statements of Bey, Ringle, Volta and Braswell are significant on a number of levels. As seen above in Chapter 4, the spatial boundaries of the bulk-goods and political networks related to Teotihuacan are strikingly similar to those described in the present chapter in relation to Tula. Likewise, in reference to their observation on the increased geographical expansion of the Early Postclassic networks beyond those of Teotihuacan, the networks of the Early Postclassic period in West Mexico verify their observation. The

nested network world-system model used in the present study and the material evidence associated to each network indicate that the political domain of Tula, correlated with the territory of its bulk-goods networks, was of considerably reduced scale in comparison to the geographical extension of prestige goods and information networks. This gives weight to the observation concerning the eminence of the religion (Ceremonial Subcomplex) and trade (prestige goods) as a means of extending political clout through alliances with locally enhanced elites who benefited from "the dispensation of political and religious legitimacy" (Bey and Ringle 2011:333) over increasingly greater spatial realms from the core. From the perspective of the present study, the material culture indicates that the spatial transference of core clout was done by way of the political/military and prestige goods networks. In the former, elites in territory adjacent to the boundaries of the bulk-goods networks are seen emulating Toltec material culture as described in Pollard's and Jadot's observations from the lake district of northern Michoacán. As Volta and Braswell emphasize from the vantage of Chichén Itzá (Volta and Braswell 2014:393), in West Mexico evidence of military conquest or foreign migration is not present.

From this semiperipheral setting, the presence of the Ceremonial Subcomplex and prestige goods (Plumbate ceramics and obsidian from Pachuca) in polities in West Mexico is taken here as an indication of the intensification and consolidation of interregional interaction networks tied to Tula. The political networks of the semiperiphery zone constituted an important systemic link from which alliances through the prestige goods networks extended to the Aztatlan realm on the Pacific Coast. Evidence of prestige goods networks, in the form of turquoise and shell, between Tula and the Aztatlan realm is found in offerings from Room 2 of Palacio Quemado at Tula. The first consists of a mosaic disk, or *tezcacuitlapilli*, made from over 2000 turquoise fragments (Cobean and Mastache 2003). A similar disk comes from the Temple of the Chacmool in Chichén Itzá (Morris et al. 1931:1). An offering found in Room 2, of Palacio Quemado, known as the *Coraza de Tula,* a ceremonial breastplate, is made from more than 1200 *Spondylus*

shell plagues (*Spondylus princeps*, *Spondylus calcifer*, *Pinctada mazatlanica*) from the Pacific Coast (Solís 2011:60–67; Velázquez et al. 2011:212–213).

When elites of the Zacapu and Pátzcuaro Basins of the lake district of northern Michoacán established ties with elites of the adjacent Chapala basin between 1000–1050 CE, turquoise from the American Southwest and shell from the Pacific circulating through the Aztatlan network would have subsequently headed east through the EPHN involving local elites in the lake district of northern Michoacán. Part of the turquoise and shell remained in Michoacán where elites made use of these items in their local political economies. The other part of these highly valued goods found their way to Tula. Part of those that arrived in Tula circulated to the Gulf Coast and found their way to Chichén Itzá. In return, bulk luxury goods in the form of Plumbate ceramics, produced in the Soconusco zone, circulated northwards through Chichén Itzá on to Tula (Diehl et al. 1974; Diehl 1993; Fahmel 1988). From Tula, Plumbate circulated through the EPHN with local elites retaining a portion of these vessels, while others arrived to polities on the coast of Nayarit. This extensive network involved intensive labor in regions at both extremes: to the north, in the extraction of turquoise in the Southwest (Melgar Tisoc 2014; Weigand and Harbottle 1992), while to the south, in the production of a unique ceramic ware (Neff 2014). In between, Pachuca green obsidian blades, produced and controlled by Tula, were found throughout polities in both directions: within the EPHN to the Pacific Coast, and east to Chichén Itzá, including sites within its realm of "economic influence along the littoral from Campeche to Belize" (Kepecs 2011:102). Chichén Itzá at this time (Sotuta phase 920/950–1150/1200) provides a comprehensive characterization of the conjunction of interaction networks integrated into the Early Postclassic world-system.

> The Sotuta ceramic complex includes the greatest variety of long-distance imported ceramics of all periods in the site, including Silho Fine Orange from the *Gulf Coast* (Brainerd 1958:57; Smith

> 1971:184), Tohil Plumbate from the eastern *Soconusco Region on the Pacific Coast* (Neff and Bishop 1988), and Nicoya/Papago and Las Vegas polychrome pottery from *Central America*. It is also associated *with obsidian from the Central Highlands of Mexico* (Braswell 1997), and *turquoise*, gold, and *metal objects*, *in a quantity without precedent or counterpart* in any other Maya site. This array of long-distance goods does not exist in any previous or posterior periods at the site (Pérez 2010:395, emphasis added).

When the EPHN is seen in conjunction with Tula's ties to Chichén Itzá, it becomes clear that the Early Postclassic world-system at 1000–1050 CE was integrated on a macroregional scale of unprecedented dimensions. To better understand the nature and implications of the broad-scale information networks of this system from 1000–1150/1200 CE impels examining evidence that purveys a better understanding of the significance of the Ceremonial Subcomplex. Correspondingly, as Chichén Itzá's ties to the southernmost realms of the Early Postclassic world-system were manifest above, the Ceremonial Subcomplex will be shown to have precipitated change further north in the American Southwest.

Tláloc, the Ceremonial Subcomplex, and Beyond

The pioneer study undertaken in the region of southern Jalisco by Schöndube (1974a, 1994) on Mesoamerican deities underscored the presence of "Tláloc and the Mountain Cult" where the remains of Tláloc effigy censers, bowl censers, and offerings dedicated to this deity were detected from contexts on the sides of mountains, volcanoes, and inside caves located in sites of the Tamazula-Tuxpan-Zapotlán area (including the Colima volcano), as well as from offering deposits in Lake Chapala for the Early Postclassic period. Calling attention to the Tláloc effigy censers, bowl, and handled censers (*sahumadores*), Schöndube (1994: Figs 62–66) shows the similarities of those found around the southern rim of the Chapala Basin in Cojumatlán (Lister 1949). He suggests

this material assemblage, the Tláloc mountain cult, arrived to southern Jalisco through the Chapala basin having originated in Central Mexico (Schöndube 1980; 1994:305). The coherence of this correlation is confirmed at La Peña, Sayula (Ramírez and Cárdenas 2006:321). Fragmented remains of censers, Tláloc censers, handled censers (*sahumadore*s), frying-pan censers, and a burnt Strombus shell were found intentionally broke in the West Plaza associated with a layer of carbon and ash deposits over the floor. These are seen as evidence of ritual activity associated with Tláloc (rain) and the wind in the petition of rains as part of the agricultural cycle (Liot et al. 2006c:263). The material described above of what has been defined as the Tláloc complex in and around the Chapala Basin in the Cojumatlán phase (900–1150 CE) indicates its relation with the Ceremonial Subcomplex, the accouterments of ritual defined for Tula and found in Chichén Itzá (Bey 1986; Bey and Ringle 2011; Diehl 1993; Ringle et al. 1998; Schöndube 1994).

To the other extreme of Mesoamerica, pointing out the six varieties of the Abra Course Brown brazier type of Tollan phase Tula, Diehl underscores the Tláloc variety with those found in the offering caches at Balankanché cave, 4 km west of Chichén Itzá and radiocarbon dated to the Early Postclassic period, indicate the ritual use of Tláloc effigy censers in this latter region (Andrews 1970:14; Cobean 1990; Diehl 1993:281). The Balankanché cave contains both "Mexican" (highland Toltec) Tláloc hour-glass censers, and local censers with representations of the Maya rain god Chaak, who during the dry season is thought to dwell in watery underground realms (caves, springs, *cenotes*), emerging to initiate the rain season in the spring (Moyes and Brady 2012; Vail and Hernández 2014:290). It has been argued that the "presence of Tláloc and Chaak censers in the Balankanché cave suggests that the symbolic domain of these two gods overlapped in Post-Classic Yucatan" (Taube 1992:133). The offering of Balankache has been subject to analysis using Postclassic Maya codices, ethnohistorical sources, and regional ethnography. The identification of Chaak's female pair Chac Chel in the cave context permits Vail and Hernández to discern,

> Acts of world creation and generation that are indicated by the Balankanche artifacts include (1) the pouring of water from jars (an activity performed by both Chaak and Chak Chel in the Maya codices); (2) the use of spindle whorls to make cotton, an act associated with the creation of rain clouds by the daughters of the earth lords in highland Chiapas today (Morris 2000); and (3) the symbolic grinding of maize to form humans (another act performed by Chak Chel in creation narratives) […] Additionally, the burning of incense, suggested by the numerous censers, may be related to the contemporary Maya practice of creating black smoke to call the rain-laden clouds (Thompson 1970:166). Among the Tz´utujil Maya of Santiago Atitlan, smoke from burning censers is said to symbolize "*rain clouds which are born inside sacred mountains*" (Christenson 2001:153). Such a meaning would fit the Balankanche censers especially well, both because they were used within a cave context and because they commonly portray the rain deity Tláloc (Vail and Hernández 2014:298, emphasis added).

In Tollan phase (950–1150 CE) Tula, within the ceremonial precinct, Acosta's excavations in Room 1 of the "Palacio Quemado" uncovered Tláloc hourglass censers, bowl censers and a number of small Tláloc vessels, the latter of which Acosta correlated with those associated with offerings from "the culture of volcanoes" of Central Mexico. From the open roof section in the center of the room, or impluvium, a number of merlons roof adornments in the shape of capital "G", representing sectioned conch shells, were found having fallen over the floor. The conch shell trumpet, and sectioned conch shell (*Strombus sp.*) commonly constitutes a symbol of the wind in Mesoamerica associated with the god Ehécatl-Quetzalcóatl who assists in, and announces, the arrival of rains (e.g., Bassie-Sweet 2008:88; Miller and Taube 1993:153; Saunders 2001:265–266). Room 1 also contained a Chac-Mool sculpture, handled censers (*sahumadores*), smoking pipes, and *comal* fragments (Acosta 1956:69–73; Mastache et al. 2002:127). The adjacent Room 2 in Palacio Quemado contained a series of relief sculpture panels, which encircled the room as a bench. On the south side, the frieze

shows a scene of a procession of figures carrying shields and curved weapons led by a personage with Tláloc attributes (Mastache et al. 2009:308, Fig. 16). Outside the ceremonial precinct of Tula, in the residential complex of the Eastern Group, thought to have been used by priests, Tláloc hourglass censers were recovered along the periphery of the compound's temple, associated with three Pacific Coast shells, whose function has been associated with Tláloc and water (Diehl 1983:92; Stocker 1983:132). Tláloc censers have been found in both ceremonial precinct and domestic contexts in Tula (Mastache et al. 2009:125). Recent scrutiny of deity symbolism in Tula highlights Tláloc as one of the preeminent cults (Mastache et al. 2002:125–126).

When considered in conjunction, the above description of the contents from contexts of the West Plaza (UE3-B and UE4) from La Peña, Sayula (Liot et al. 2006c:259–261), and the materials detected by Acosta in Room 1 of the Palacio Quemado of Tula (Acosta 1956) suggest a possible correlation in ritual contexts: the presence of Tláloc censers, bowl censers, handled censers (*sahumadores*), and conch shell (i.e. merlons in Room 1 of Tula) related to the petition of rain. Likewise, the smoke produced by censers symbolizing rain clouds born within sacred mountains mentioned above in Santiago Atitlán (Vail and Hernández 2014:298) correlate with the Tláloc complex Schöndube (1994) describes with censers found at the foot of prominent mountains and volcanoes in West Mexico. The above analogies, in addition to the shared material culture of the Ceremonial Subcomplex, underscore the role of information networks linking Tula to West Mexico. In sum, this corridor of interpolity interaction, extending from the central highlands (Tula) to the coastal lowlands (Amapa), was characterized by the sharing of ideology, ritual, and bulk-luxury goods.

North of the Aztatlan network and related to the above, a ramification of the pulsation of the EPHN information networks crossing West Mexico into the Aztatlan realm can now be correlated with the presence of Tláloc in the iconography on Mimbres Classic ceramics, from the area around the southwest corner of present day New Mexico, between 1000–1150 CE

(McGuire 2011:38). McGuire defines the presence of the feathered serpent and step fret designs as evidence for what has beed described as the Early Postclassic International Symbol Set (Boone and Smith 2003:189; McGuire 2011:39) in the area, which together with Tláloc, underscore the presence of Mesoamerican worldview circulating within the information networks at this time. Contacts between the Mimbres area and the Aztatlan network in trade for shell bracelets and cacao have likewise been defined (Crown et al. 2015; McGuire 2011:38). Further north of the Mimbres area into the American Southwest, concurrently in Chaco Canyon, items for use in ritual consisting of copper bells, macaw feathers, pyrite mirrors, and cacao have been accepted as evidence for trade with the Aztatlan network in exchange for turquoise (e.g., Crown and Hurst 2009; Kelley 1995; McGuire 2011; Nelson 2006; Vargas 1995; Washburn et al. 2014:204). In his analysis concerning the nature of these contacts McGuire concludes that, "emergent Southwest/Northwest elites exploited already existing connections to West México to draw on goods, beliefs, iconographies, and rituals that would legitimate their status" (2011:39). Hence, it can be posited that from 1000–1150 CE, the political economy of a considerable segment of the American Southwest, linked to the Aztatlan network through prestige goods networks and to the information networks of the EPHN, became a peripheral setting of the Mesoamerican Early Postclassic world-system. The integration of the Southwest into this system underscores the role of prestige goods and information networks in world-system formation, expansion, and maintenance.

Sometime between 1150–1200 CE the city of Tula was abandoned (Patricia Fournier, pers. com. 2016; Healan 2012; Mastache et al. 2002). Recent paleoclimate reconstruction (Stahle et al. 2011:4) has defined a period of "severe and sustained drought" (1149–1167 CE), which seems to have been a critical factor in the city's demise. At around 1150/1200 CE Chichén Itzá began its period of decline (Pérez 2010:396). The two regional capitals, closely linked during the Early Postclassic world-system, foundered at around the same time. This synchronicity is coherent

in world-systems insomuch as "changes within its components affect the entire system" (Hall 2000:6; see also Smith and Berdan 2000:284).

In West Mexico, change at 1200 CE was considerable. From 1200 CE till European contact, the lake district of northern Michoacán became the seat of power for the core state of the Tarascans (Pollard 2003b). During this time the Tarascans consolidated control over a substantial portion of central West Mexico (Pollard 2003a), establishing an empire that would continually find itself in armed conflict with the adjacent Triple Alliance, and subsequent Aztec empire of the Basin of Mexico (Pollard and Smith 2003). From 1200 CE on, the state and consolidating empire of the Tarascans was governed from the central portion of the Mesa Central, virtually ending the previous role of this natural corridor as an "archipelago of cultural islands" extending to the Pacific Coast. These events brought about a structural change in the interregional interaction between Central and West Mexico, with the Balsas River Basin supplanting the Mesa Central as a corridor for contacts to the Pacific Coast (Smith and Berdan 2003b:25–26). This change coincides with the city of Cholula coming into regional prominence after the fall of Tula. Historical sources describe Cholula as a renowned religious center (McCafferty 2000, 2011; Pohl 2003a). Cholula is situated along the Atoyac River, the upper basin of the Balsas River. At the time of European contact, Cholula was described by a Spanish chronicler "as the 'Mecca' of the New World" (Pohl 2003a:173). Closely duplicating much of what Tula had undertaken during the Early Postclassic world-system, Cholula would engage religious clout and long-distance trade into networks that would legitimize outlying elites (e.g., Blomster 2008, 2011; McCafferty 2011:370–372; Pohl 2003a, 2003b), while integrating extensive networks of interpolity interaction. These elites shared ritual, symbolism, and affiliation through marriage in networks that Pohl and Byland describe as alliance corridors (Pohl 1994, 2003a, 2003b; Pohl and Byland 1994). In this manner, interregional interaction continued intensively during the Middle and Late Postclassic Mesoamerican world-system (Smith and Berdan 2003c).

Summary

The objective of this chapter, to undertake an areal analysis of empirical data from Central Mexico to the Pacific Coast of West Mexico during the Early Postclassic period in the application of the nested network model of Chase-Dunn and Hall (1997), has shown material evidence suggesting the following:

1. At the interregional scale of analysis there exist material correlates for empirical patterning for the four interaction networks that linked the core state of Tula in Central Mexico with the lake district of northern Michoacán as the extension of political networks. From northern Michoacán prestige goods and information networks merged with the Aztatlan network of coastal West Mexico. The merging of these networks took place through polities within the Chapala Basin at 1000–1050 CE. Once merged, what has been tentatively labeled as the Early Postclassic Highland Network (EPHN) system constituted the western segment of the Early Postclassic period world-system. The EPHN was linked to the American Southwest through the Aztatlan network of the Pacific Coast during this time. The Southwest can be seen as a peripheral setting of the Mesoamerican world-system during the Early Postclassic period.
2. At the regional scale of analysis seen from the vantage of the Chapala Basin, empirical evidence suggests that local elites incorporated into the Aztatlan coastal network between 850–900 CE through interaction with the Amapa area. Between 1000–1050 CE elites of the Cojumatlán (i.e. Chapala) and Amapa spheres of the Aztatlan network integrated into prestige goods and information networks from the lake district of northern Michoacán resulting in the EPHN system. This process, involving local elites of central Jalisco, suggests that their interaction, first with the Amapa zone to the west (850–900 CE), followed by their

interaction with networks to the east (1000–1050 CE) constituted a significant realignment in the direction and intensity of their interaction networks. This change would have had an impact on the existing INN and JalisColima network of the Epiclassic period. In the case of the latter, the area of this network was integrated into the Aztatlan network. In the case of the INN, between 900–1000 CE polities of the Malpaso sphere, Valle San Luis sphere, and the Suchil segment of the Suchil-Guadiana sphere faced demise. It is posited that the changes in regional network alignments affected the political economies of the above-mentioned spheres and was an underlining factor in their collapse.

3. Elites in political, prestige goods, and information networks of the EPHN shared at least one discernable material aspect of the Mesoamerican cosmology present in Tula. This is observed through the emulation of ritual associated with the ceremonial complex related to the cult of Tláloc and the petition of rain. The presence of Tláloc symbolism in the Mimbres area of the American Southwest, together with prestige goods in the Chaco sphere of northern New Mexico is indicative of the impacts stemming from the pulsation of the EPHN across West Mexico, and the extension of prestige goods and information networks out of the Aztatlan network through Northwest Mexico into the Southwest. The exchange of turquoise, macaw feathers, copper ornaments, and cacao were important components in this northernmost segment of the Early Postclassic world-system.

Chapter Seven

Concluding Considerations and Open Questions

West Mexico from the Early Classic to the Early Postclassic Period World-System

A comparison between the geographical distributions of the prestige goods and information networks defined above for the Early Classic (Figure 4.15) and Early Postclassic (Figure 6.13) periods in West Mexico contrast considerably. During the Early Classic period, from the core setting in the Basin of Mexico, these networks fan out across most of the region (north, northwest, and west) indicating interpolity links extending out to various zones within West Mexico, including the peripheral settings of central Jalisco and southern Zacatecas.

As seen in Chapter 3, all of the zones which present evidence for the presence of prestige goods and information networks were subject to change between 350 and 450 CE as they integrated into networks of interaction linked to the Basin of Mexico. Between 550/600 and 900 CE as Teotihuacan's hegemony declined within the Basin of Mexico all of the zones integrated by the prestige goods and information networks in West Mexico disengaged from the Early Classic world-system, while consolidating sociopolitical complexity of ranked societies during the Epiclassic period (Chapter 4). During this time, regional prestige goods and information networks bound these previous peripheral zones into two networks (INN and JalisColima) of considerable dimensions that enmeshed in polities of the Ixtépete-El Grillo sphere and the Chapala Basin. At 950–1050 CE the pulsation of networks out of

Tula integrated polities in the lake district of northern Michoacán as well as a series of polities in central Jalisco and the coastal Pacific in the EPHN. The network realignment of Epiclassic period polities in the Ixtépete-El Grillo sphere and Chapala Basin into the EPHN was a pivotal change in the consolidation of this macroregional network system of the Early Postclassic period.

From this sequential overview spanning the Early Classic, Epiclassic, and Early Postclassic periods one can observe that world-system formation and expansion is a long-term cumulative process, which evolves by way of its basic cycle of centralization and decentralization of political power (Chase-Dunn and Hall 1997:5). In the case of Mesoamerica, there also seems to exist a tendency towards periodic alternation between centric and multicentric world-systems (Chase-Dunn and Hall 1997) which coincide with those shifts in centralization and decentralization of the core states of Teotihuacan and Tula (Solar 2002:239–293; Smith and Berdan 2003a:4). The core/periphery relations of the Early Classic period stimulated changes with the accretion of ranked societies throughout the semiperipheral and peripheral zones into which prestige goods and information networks extended. During the subsequent Epiclassic period, with the core zone of the Basin of Mexico significantly waned in sociopolitical power, these zones flourished in sociopolitical complexity and economic specialization as components of regional peer-polity networks. The Early Postclassic surge of a core state in Central Mexico again integrated the polities of West Mexico in core/periphery relations. However, the geographical extension of this world-system was substantially expanded through the incorporation of polities of complex chiefdoms that had evolved during the Epiclassic period into the Early Postclassic world-system which enabled the extension of this world-system to the Pacific Coast, subsequently incorporating a significant portion the American Southwest.

The above described sequence of long-term world-system process elaborates on Abu-Lughod's insightful elucidation that, "systems reorganize in a somewhat cumulative fashion, the lines and connections laid down in prior epochs tending to persist even

though their significance and roles in the new system may be altered" (Abu-Lughod 1989:368).

Northern Michoacán and the Role of the Semiperiphery

In applying the nested network approach over the geographical setting of West and Central Mexico in Chapters 4 and 6, material correlates for political networks were twice described in relation to the area of the lake distinct of northern Michoacán (i.e. Cuitzeo and Pátzcuaro Basins/Teotihuacan, Zacapu and Pátzcuaro Basins/Tula). During both periods of core-periphery relations (Early Classic and Early Postclassic periods), the lake district of northern Michoacán was the boundary for political networks conceived as a semiperipheral setting. This suggests that the boundaries of bulk-goods and political networks in Mesoamerica were determined in large part by the restrictions of human portage.

From the data reviewed in Chapter 4, the process of world-system incorporation and expansion by way of the formation of the semiperiphery in West Mexico can be proposed. As Teotihuacan increasingly impinged upon, and subsequently incorporated hinterland zones into its expanding bulk-goods networks, this affected the backdrop of existing interpolity networks in the hinterlands with adjacent neighboring polities. As core bulk-goods networks expanded, elites in adjacent areas would have been aware of the effects and changes underway (Hall 1989). Upon establishing core boundaries of bulk-goods networks, adjacent sovereign chiefdom polities were candidates for establishing political alliances (or defensive military infrastructure in preparation for conflict), through the instigation of what has been defined as political networks. The lake district of northern Michoacán, adjacent to the boundary of the bulk-goods network, was a natural gateway into West Mexico. Polities in this segment of Michoacán were already connected through networks linking polities further west into the Mesa Central. The first contacts between Teotihuacan and local elites from the lake district were instigated through trade. This

eventually evolved into political network alliances, consolidating a first stage of semiperipheral formation.

Subsequently, existing interaction networks between newly enhanced polities of the political networks and neighboring peer-polities to the west were subject to change as elites of the former were in a position to impact and increase control within existing networks through the formation of prestige goods networks. The consolidation of the semiperiphery consisted of the decentralization of the political power and prestige of the political networks through prestige goods networks. In this way, a hierarchical relation bound the elites of these networks.

The material evidence described in Chapter 4 indicate the distribution of Thin Orange ceramics, "Teotihuacanoid" figurines, Pachuca green obsidian blades, and modeled clay earspools, in polities from the lake district of northern Michoacán to southern Zacatecas and northern Jalisco, defining the extension of prestige goods networks. Likewise, it was pointed out that the Cuitzeo Basin presents evidence of high density of locally produced imitations of Teotihuacan ceramics (i.e. Thin Orange). Taken together, this seems indicative of this strategy on the part of semiperipheral elites in manipulating, producing, and distributing prestige goods to local elites beyond the boundary of political networks (see Figure 4.15.).

Chase Dunn and Hall (1997:78–98) state that a constant characteristic of the semiperiphery resides in its potential as a "seedbed" for innovation and change. "Semiperipheries have been unusually prolific sites for the invention of those institutions that have expanded and transformed small systems into a particular kind of global system" (Chase-Dunn and Lerro 2014:27). With this in mind, it is posited that the earspools, a number of which contain the symbolism of Teotihuacan's Storm God, constituted one of the local innovations, modified from a symbol system linked to core ideology, produced and controlled by semiperipheral elites. Instigated by the polities of the lake district of northern Michoacaán, the earspools can be seen as evidence for an institutionalized relationship that functioned to signify and legitimate elites, while integrating their local political economies into the prestige goods

and information networks linked to the political networks of northern Michoacán. The above underscores that a key source of sociopolitical power of these elites resided in the usage of clout and prestige goods at their disposal, in this case, to instigate and control interpolity prestige goods networks.

Concerning the semiperipheral political networks ties to the core, economic ramifications associated with an alliance between these elites and the state apparatus of Teotihuacan can be seen in the presence of the Michoacán enclave (19:N1W5, Chapter 4), located next to the Oaxaca barrio (Tlailotlacan) in the western section of the city (Carballo 2013:116; Gómez Chávez 2002; Gómez Chavez and Gazzola 2007; Manzanilla 2009:25; Rattray 1987; Spence 1992, 1996). The data recuperated from this limited excavation presently suggests that the individuals buried in the enclave may have been associated with trade in obsidian, and possible cinnabar from sources in Michoacán (Gómez and Gazzola 2007). A better idea on the possible range of items circulating through the polites of the lake district of northern Michoacán for trade with Teotihuacan requires extensive excavations in polities of the political networks, together with an extension of the excavations in the Michoacán enclave in Teotihuacan. However, an idea of the settings in which foreigners associated with interregional interaction networks were immersed, and their roles and effects on the political economy of the core, can be seen from the vantage of an intermediate elite apartment compound within the city. Through long-term research into a range of compounds at Teotihuacan, Manzanilla has identified noble houses in which migrants from outside Teotihuacan resided. During the Xolalpan phase (350–550 CE) she discerns,

> […] certain powerful "houses" fostered direct relations with craftsmen of other regions in Mesoamerica, such as the Gulf Coast, without intervention or mediation of the central authority of the Teotihuacan state or the Merchants' Barrio that housed merchants from the Gulf Coast (Rattray 1988, 1989). The elaboration of elite attire decorated with products from Veracruz allowed these powerful "house" heads unprecedented economic power, and

> these more liberal actions allowed them to avoid the corporate strategy (Blanton et al. 1996), and instead employ an exclusionary strategy that increasingly pulled apart the fragile corporate tissue of the state until the collapse (Manzanilla 2009:29).

The timing of the above-described scenario coincides with the duration of the interregional interaction between Teotihuacan and West Mexico described in Chapter 4. Manzanilla's observations serve to illustrate the complexity of situations that would have been confronted by elites of the political networks in their interaction with the core through time. Likewise, her findings evidence the impact of long distance trade where prestige goods coming into Teotihuacan were modified through specialized craftspeople from outside the city, integrated into the core economy directly through intermediate elites of the city.

When contemplating the territorial extension of bulk-goods, political, prestige goods, and information networks of West Mexico during the Early Classic world-system, the political structure of the semiperipheral polities of the political networks was complexly multifaceted. Several interwoven strategies were brought into play by semiperipheral elites and their institutions: 1) in their relations to the core, 2) in their local domains, and 3) in the relations forged with other polities throughout the prestige goods and information networks. Seen in this light, the semiperiphery was a critical and complex component in the systemic structure of the Early Classic Period World-System in West Mexico. Further research is required to address what additional material evidence recuperated from the polities of the political networks are discernable as indicative of behavior relating to the local manipulation (e.g., Filini 2004), or innovations, resulting from the transformation of core elements by elites in the semiperipheral setting.

During the Early Postclassic period (900–1200 CE), much of what was described for the Early Classic period is replicated, but with an apparent district objective: to establish an interaction network corridor directly to the Pacific Coast. Local elites from the Zacapu and Pátzcuaro Basins of northern Michoacán are

seen integrating prestige goods, and emulating core elements as a strategy for their legitimization in the boundaries of political networks. From the Zacapu Basin, the adjacent Chapala Basin of the Aztatlan realm is 85 km west of the site of El Palacio. The presence of the Ceremonial Subcomplex, together with Plumbate ware and Pachuca green obsidian (i.e. information and prestige goods networks) in polities in the Aztatlan territory highlights the initiative of semiperipheral elites of the political networks of northern Michoacán in the merging of the Aztatlan network through prestige goods and information networks stemming from their political networks. This resulted in the EPHN, and the integration of West Mexico into the Mesoamerican Postclassic world-system. At present, material evidence suggests the broad-scale sharing of a specific ritual related to the petition of rain bound the polities of the EPHN to Tula, and further east to elites at Chichén Itzá. This supports the idea of Volta and Braswell for a world religion (Ringle et al. 1998) that bound a considerable segment of the Early Postclassic period world-system. However, a better understanding of the significance of the Ceremonial Subcomplex entails further study to determine if additional ritual components associated with feathered serpent and stepped-fret symbolism between Tula and West Mexico are manifest in the material record. In sum, there remains much to be understood about the use and mechanisms involved in its macroregional distribution.

The Comparative World-System Approach in West Mexico: Questions, Results, and Future Research

The objective of this study has been to analyze empirical data on a macroregional scale to determine if material patterns indicative of world-system connections between Central Mexico and West Mexico are present. This study posed a basic research question: Can processes of core/periphery relations, and changes brought about by these relations, be perceived within the material record?

To address this question, the world-systems analytical framework of the nested network approach as defined by Chase-Dunn and Hall (1997) was chosen for use in this study for two reasons: First, the model represented a significant reworking of core/periphery analysis for use in precapitalist settings through the discernment and definition of four networks (i.e. bulk-goods, political/military, prestige goods, and information) that compose a world-system. This refinement, applied initially by Chase-Dunn and Hall (1997:121–233) in case studies utilizing historical and ethnohistorial data, made an application of the comparative approach to a purely archaeological domain as a material culture model germane to evaluate its utility in WSA. Second, no previous research had ever been undertaken in areal analysis using the comparative approach in Mesoamerica. Thus the proposed core/periphery relations between West and Central Mexico represented a unique temporal-spatial setting to operationalize and evaluate the comparative approach.

Analysis was undertaken through the examination of localized studies and data sets parting from Central Mexico to the Pacific Coast of West Mexico to discern and evaluate material evidence that could be correlated with networks linked to core/periphery relations during two specific periods: the Early Classic period (200–550/600 CE) and the Early Postclassic period (900–1200 CE). The analysis undertaken in Chapters 4 and 6, using the framework of the nested network approach of Chase-Dunn and Hall (1997) has shown emerging empirical patterning for the networks that consist of the following:

Bulk-goods networks: the extension of these networks is characterized by a continual distribution of material culture presenting uniformity to diagnostic types of the urban state zone. As seen above from both Teotihuacan and Tula, this spatial uniformity has been characterized as evidence of hinterland integration. From the examples examined in the present study, the definition of bulk-goods networks juxtaposes considerably from the other 3 networks of the nested network model.

Political networks: In contrast to the bulk-goods networks, these networks present a distinct local diagnostic material culture in high proportion (i.e. Cuitzeo Basin in regard to Teotihuacan and El Palacio, Zacapu in regard to Tula). In a significantly reduced proportion there are local imitations of a few core related ceramic types and intrusive prestige goods are present. This is a network where emulation of core elements is found associated with behavior indicative of local elite legitimization, i.e. Cuitzeo (Filini 2004; Hernández 2016), El Palacio, Zacapu (Jadot 2016), and Urichu (Pollard 2015).

Prestige goods: In contrast to political networks, prestige goods networks present local material culture in very high proportion with emulation of core-like ceramic types greatly reduced to non-existent. Local material culture presenting core elements is discerned in the realm of ideology consisting of symbols, ritual paraphernalia, and status markers (i.e. earspools/Teotihuacan, Ceremonial Subcomplex/Tula) in reduced proportion. Prestige-goods (i.e. Thin Orange in regard to Teotihuacan, Plumbate in regard to Tula) associated with the core are diagnostics of these networks.

Information networks: These networks were observed in two empirical patterns: first, associated with political and prestige goods networks as seen in the distribution of the Ceremonial Subcomplex across West Mexico in the Early Postclassic period (i.e. EPHN). The presence of Tláloc symbolism on ceramics from the Mimbres area is indicative that information networks of EPHN extended into the Mimbres area. Second, associated with the distribution of the pecked-cross petroglyphs in West Mexico and the northern frontier. Likewise, discrete manifestations of information networks can be seen in the architecture of Alta Vista (i.e. stepped merlons), and the measuring unit of 82 cm used in the layout of the site.

In addition to the empirical patterns for the nested networks, the analysis of the archaeological record enabled the discernment of

concordant change (Kowalewski 1996) across a substantial segment of West Mexico stimulated by the expansion and intensification of interaction networks into West Mexico (i.e. pulsation) during the Early Classic and Early Postclassic periods. The material patterning for the four interaction networks and the spatio-temporal dimensions defined for the process of pulsation examined in the previous chapters integrate West Mexico into processes of world-system incorporation and change stemming from Central Mexico during periods of state development.

Placed back into the larger realm of the Mesoamerican world-system, it is posited that analogous patterning and pulsation effects may be observed in other sub-areas of Mesoamerica as a result of system-wide pulsation during the Early Classic and Early Postclassic periods. Specifically, chronological change in regions between 300–500 CE and 900–1050 CE, and the presence of Thin Orange and/or Plumbate ceramics, Pachuca green obsidian and/or Ucareo obsidian, Tláloc iconography and/or components of the Ceremonial Subcomplex, should be taken as indicative of a regions integration into the world-system. For example, a similar areal analysis undertaken to define the boundaries of the four networks east of Teotihuacan may shed light on the characterization of interpolity interactions in the territory between the core state and the Matacapan, Veracruz region (i.e. Stoner 2011). Likewise, the presence of Plumbate and components of the Ceremonial Subcomplex in sites east of the Tula region may likely define the interaction corridors that linked Tula to the Gulf Coast. These are open questions for comparative research. Both, the patterns for nested networks and network pulsations presented in this study, highlight two salient points: the discerning acuity involved in Chase-Dunn and Hall's (1991a, 1991b, 1997) reformulation of WST into the comparative approach for WSA. As a middle-range theory this approach is a research tool, which enables empirical study of world-systems as a material culture model that promotes original, broad-scale synthesis. At the same time, this study underscores the relevance of the material record for the study of long-term social change.

Chapters 4–6 have shown that West Mexico constituted an integral, dynamic region of Mesoamerica between 200–1200 CE. Previous research in West Mexico had defined a relationship with Teotihuacan and Tula in the area of northern Michoacán, while studies in the area of the Aztatlan zone of coastal West Mexico during the last sixty years had repeatedly perceived some form of association with Tula. This is the first study to integrate West Mexico into the greater Mesoamerican world of the Early Classic and Early Postclassic periods. It has shown that interregional interaction networks stimulated change in polities of distinct complexities over considerable distance. Through this study, the archaeology of West Mexico is brought into course with a segment of long-term processes of social change that bound all regions of Mesoamerica as a world-system.

When compared to other spatio-temporal fields of archaeological study where WSA has been scrutinized, and consistently advanced (e.g., Kristiansen 1998; Kristiansen and Larsson 2005; Rowlands et al. 1987), Mesoamerican archaeology has been largely out of sync with WSA since the mid-1990s. Diehl's (1993) proposal for a Toltec horizon, reviewed in Chapter 6, was a response to a proposed chronological pattern defining Central Mexico's "periods of virtually pan-Mesoamerican intercommunication (horizons)" (Price 1977:210). For the Early Postclassic period, Tula had been demoted to "an interregnum status" (Price 1976:20) for not manifesting distinctive horizon markers of an empire. Diehl's proposed diagnostics (i.e. Ceremonial Subcomplex) for a short period of Mesoamerican horizontal integration went largely unnoticed. As seen above, when scrutinized through WSA today, Diehl's ideas are highly pertinent for defining the Early Postclassic period world-system (Smith and Montiel 2001). Postclassic Mesoamerica and the comparative approach for WSA significantly crossed paths a decade later achieving a disciplinary fast-forward, in sync for this period (Smith and Berdan 2003c). The present study contributes to WSA in Mesoamerica by way of operationalizing the comparative approach to long-term areal analysis.

Calling attention to the "daunting task" for surveys needed for establishing the territorial boundaries between states and their annexed distant territories, Marcus concludes that a "new kind of cooperation may be necessary, one that is *multigenerational*, requiring unusual patience from a group of scholars who traditionally have been eager to produce answers within their own lifetimes" (Marcus 1992:409, emphasis added). Time has shown the coherence of her statement. From the perspective of the above chapters, the comparative approach for WSA enables the empirical examination of core/periphery relations, and the definition of its boundaries, for broad-scale synthesis from existing data. The exercise in synthesis undertaken in the preceding chapters is seen here as a first step toward forming more specific research questions to facilitate and enhance the inquiries of the next generation. This is the way of archaeology. For one, as a young student, listening and meditating Paddock's conversations, against the present backdrop of the Chase-Dunn and Hall's nested network framework is revealing: to recall today his exhortations (Paddock 1972a:224) that "Our needs are different now, and we must proceed very carefully among Teotihuacan objects, local imitations, [and] the traces of reflections of the Teotihuacan style", seems succinctly prophetic.

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Abbreviations

ATCNA	Archivo Técnico de la Coordinación Nacional de Arqueología INAH
CEMCA	Centre d'Etudes Mexicaines et Centramericaines
CIESAS	Centro de Investigaciones y Estudios Superiores en Antropología Social
COLMICH	El Colegio de Michoacán
ENAH	Escuela Nacional de Antropología e Historia
INAH	Instituto Nacional de Antropología e Historia
HMAI	Handbook of Middle American Indians
MNA	Museo Nacional de Antropología
ORSTOM	Instituto de Investigación Científica para el Desarrollo en Cooperación
PNAS	Proceedings of the National Academy of Science
SEP	Secretaría de Educación Pública
SMA	Sociedad Mexicana de Antropología
UdG	Universidad de Guadalajara
IIA/UNAM	Instituto de Investigaciones Antropológicas/Universidad Nacional Autónoma de México

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