

EDITED BY

DEBORAH L.  
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ALEGRÍA



≡ The Oxford Handbook of  
**THE AZTECS**

THE OXFORD HANDBOOK OF

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# THE AZTECS

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*Edited by*

DEBORAH L. NICHOLS

*and*

ENRIQUE RODRÍGUEZ-ALEGRÍA

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THE OXFORD HANDBOOK OF

# THE AZTECS





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# INTRODUCTION

## *Aztec Studies: Trends and Themes*

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ENRIQUE RODRÍGUEZ-ALEGRÍA  
AND DEBORAH L. NICHOLS

THE Aztecs are among the most famous and most researched of all ancient civilizations. They have captured the imagination of the public and scholars alike for having one of the largest empires in the Americas; for their military might, great cities, art, and monumental architecture; and, perhaps most important, their program of ritual sacrifice. Claims of descent from the Aztecs are mobilized today by the Mexican government, by sports teams, and by many people living in Mexico and the United States (Sandstrom this volume). Today, themes related to the Aztecs, the Spanish Conquest, and Aztec heritage appear in artwork in Mexico and the United States (Carrasco 2008; Zamudio-Taylor 2001) and in some of the finest murals by celebrated artists such as Diego Rivera, José Clemente Orozco, and David Alfaro Siqueiros (Figure 0.1). International museum exhibits attract crowds of visitors to see Aztec art and artifacts (e.g., Brumfiel and Feinman 2008; López Luján and McEwan 2010). Much scholarly research and government funding is devoted to the Aztecs every year, yet many aspects of this ancient civilization are still unknown.

This handbook presents important developments in Aztec studies of the past half century, along with recent trends in Aztec scholarship. The chapters in the handbook show how Aztec scholars have taken advantage of the many lines of evidence available to them. This includes archaeological material, monuments and other works of art, architecture, and historical sources of both indigenous and European authorship in alphabetic as well as pictorial form. In spite of the rich evidence, we have much to learn about Aztec civilization, and the debates even include the meaning of the term *Aztec*.



FIGURE 0.1 Panel, “Coming of Quetzalcoatl,” of the mural, “The Epic of American Civilization,” painted by José Clement Orozco. Commissioned by the Trustees of Dartmouth College. Reproduced with permission of the Hood Museum of Art, Dartmouth College.

## THE MEANING OF AZTEC

Central Mexico was ethnically diverse in the early sixteenth century. Indigenous histories attribute that diversity to migrations reflecting shifting city-state politics and the importance of place as a primary dimension of ethnic identity (Berdan 2008:108; Taggart this volume). The term *Aztec*, meaning “people from Aztlan,” remains controversial in the scholarly literature, yet it is the term most widely used by the public in Mexico and elsewhere in the world. *Aztlán* means “place of the herons” or “place of whiteness,” and it refers to a probably mythic place north of central Mexico. It appears in ethnohistoric sources as the place where various groups began their migration before settling in central Mexico (León Portilla 2000; Matos Moctezuma 2012:19–20). In that sense, the term is general and could refer to any of the groups of people tracing their origins to Aztlan. Aztec does not refer to a specific ethnic group, and it was not used emically by indigenous groups (Berdan 2008:113). The primary sources do not use the term *Aztec Empire* (Barlow 1945). According to León Portilla (2000), *Aztec* has been most commonly employed in the English-speaking world since 1810, probably in an effort to distinguish between the ancient Aztecs and the modern Mexicans, given that the other commonly used term is *Mexica*.

*Mexica* is an ethnic name adopted by a group who migrated from Aztlán. Ethnohistorical sources state that Huitzilopochtli, patron god of a group that emigrated from Aztlán, appeared and explained to a group of Nahuatl speakers that they would call themselves Mexica from that day on, probably after one of their leaders called “Mexi.” Huitzilopochtli gave them feathers for their ears, bows, arrows, and nets and ordered the sacrifice of three people (Matos 2012:20). Thus the new ethnonym was accompanied by some of the material goods that distinguished “civilized” people (especially bows and arrows) from others. Huitzilopochtli became their patron deity and guided their journey to settle in Tenochtitlan and Tlatelolco in the Basin of Mexico (Escalante Gonzalbo 1995; Florescano this volume; León Portilla 2000). *Tenochca* is a more specific term that refers to the people of Tenochtitlan (Umberger 1996). Both *Mexica* and *Tenochca* are prehispanic terms. Additional ethnic groups included the Acolhua, Tolteca, Matlatzinca, Culhua, Otomí, Teochichimeca, Tepeneca, Ocuilteca, Totonaque, and others that appear in ethnohistoric sources (Berdan 2008:118–120).

Nahua is an important and relevant term used by many scholars to refer to indigenous people after the Spanish Conquest. This linguistic label means “Nahuatl speaker,” and people sometimes referred to themselves as Nahua (Lockhart 1992:1). The term introduces different problems, because people outside the Basin of Mexico, including in Guerrero and Tlaxcala, a rival confederation of the Triple Alliance, also spoke Nahuatl, along with people on the Gulf Coast and other parts of Mexico and central America. Further, in the Late Postclassic (A.D. 1350–1519), although about half of the people in the Basin of Mexico were considered Nahuas (specifically, Nahuatl speakers; see Hill this volume), others were Otomis, Mazahuas, and Matlazincas (Escalante Gonzalbo 1995).

Berdan (2008:113) has argued that “naming was no simple or static matter,” and the difficulties in arriving at a stable term to refer to the Aztecs is an example. The use of terminology changed historically during the Late Postclassic, and it has changed among modern scholars. Readers will find some variation in the terms authors employ in this handbook, but, in general, different authors use *Aztecs* to refer to people incorporated into the empire of the Triple Alliance in the Late Postclassic period. An empire of such broad geographic extent (Fig. 0.2) subsumed much cultural, linguistic, and social variation, and the term *Aztec Empire* should not obscure that. Scholars often use more specific identifiers, such as Mexica or Tenochca, when appropriate, and they generally employ the term *Nahuas* to refer to indigenous people in central Mexico (Fig. 0.3) after the Spanish Conquest, as Lockhart (1992) proposed. All of these terms introduce their own problems, whether because they are vague, subsume too much variation, are imposed labels, or are problematic for some other reason. We have not found a solution that all can agree on and thus accept the varied viewpoints of authors. We use the term *Aztec* because today it is widely recognized by both scholars and the international public.

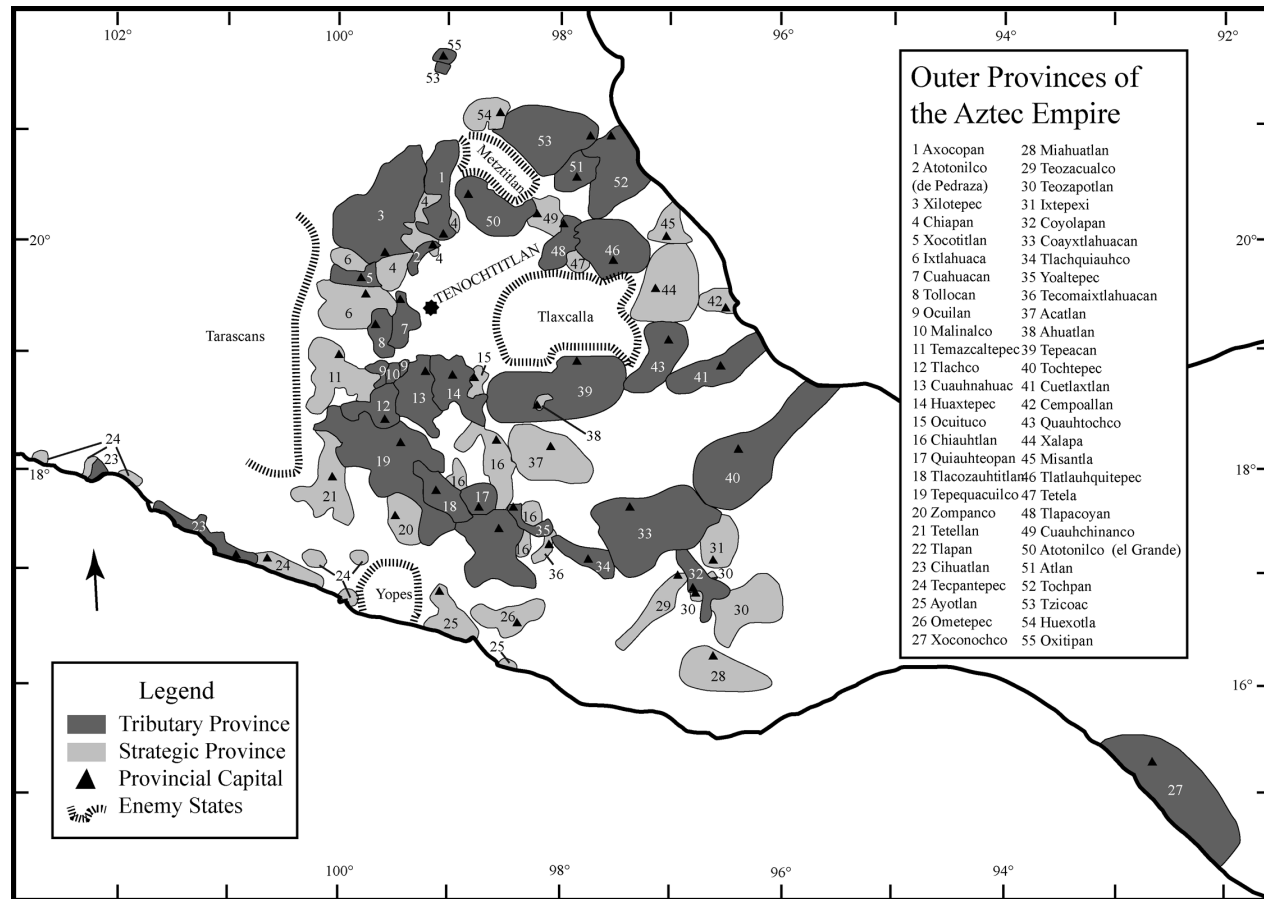


FIGURE 0.2 Map of the Triple Alliance Empire. Redrawn by Maëlle Sergheraert (this volume) and Kristin Sullivan after Berdan et al. (1996:Figure II.1).



FIGURE 0.3 The Basin of Mexico. Drawn by Kristin Sullivan.

## PROTOETHNOGRAPHIES, ECOLOGY, AND PRACTICE

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Scholarship on the Aztecs in the past 50 years has developed in a variety of institutional contexts and diverse theoretical orientations, reflecting broader trends in Mesoamerican studies (Nichols and Pool 2012). Regardless of current theoretical orientations, most, if not all, scholarship about the Aztecs owes a great deal to the rich documentary record produced in the sixteenth century. Especially important sources are the proto-ethnographies written by Fray Bernardino de Sahagún (1950–1982, 1993) in the sixteenth century, historical chronicles of other Spanish conquistadors and colonizers, and the many sources written and painted by indigenous scribes and intellectuals (Batalla this volume; Boone this volume). Indigenous scholarship includes texts in Spanish, Latin, Nahuatl, Otomi, and other languages, as well as pictorial sources (Boone this volume). These sources form the core of most research on the Aztecs, regardless of the theoretical orientation. Newer facsimiles and editions of texts have stimulated new research and expanded geographic coverage (e.g., Batalla this volume; Boone this volume; Gutiérrez and Brito 2014; Williams and Hicks 2010; see also Lee and Brokaw 2010:7–8).

Incredible monumental finds in Mexico City, including the Great Coatlicue and the Aztec Calendar Stone, among others, have spurred an interest in Aztec archaeology and art history since the early nineteenth century (Matos Moctezuma this volume; Matos Moctezuma and López Luján 2012). The initial interest in Aztec antiquities was born out of an aesthetic admiration for the material remains, intellectual curiosity, and nationalist ideas (Keene 1971). A combination of these ideas and monumental findings helped create the institutions that have provided the context for research on the Aztecs, including the Museo Nacional de Antropología, the Instituto Nacional de Antropología e Historia, the Escuela Nacional de Antropología e Historia, and the Templo Mayor Museum, among others. Scholars studying the Aztecs in these institutions have expanded their research programs well beyond the goals of nationalist culture history, developing theoretical perspectives and methodologies that include processualism or scientific archaeology, cultural ecology, Marxism, culture history, and theoretical holism firmly rooted in four-fields anthropology (Gándara 2012; Robles García 2012). The Templo Mayor project deserves special mention. For more than three decades it has directed research that combines excavation, cutting-edge conservation techniques, ethnohistory, and scientific research to provide an unparalleled view of the religion, architecture, and art of the Mexica (Gallardo this volume; López Luján and López Austin this volume).

The theoretical and methodological pluralism of scholars in Mexico has resulted in a series of contributions to Aztec studies that could benefit scholars interested in the past anywhere in the world. Among their major contributions we list the preservation of cultural patrimony, multidisciplinary research methods, the formulation of chronologies, an understanding of Aztec art and its role in society, and attention to the interplay

of cosmology and different aspects of Aztec society. The work of Mexican scholars exemplifies the engagement of scholarship with the general public and a concern for how archaeology can improve the quality of life for people today (Robles García 2012:48). Their museum exhibits, educational programs for children, and publications, especially articles in the widely available *Arqueología Mexicana* journal, make some of the best scholarship on the Aztecs available to wide audiences in Mexico and beyond. Foreign-led projects, most often by scholars based in academic institutions in the United States, have had a major impact in Aztec studies as well.

Benjamin Keen (1971:567) attributed the recognition of the Aztec Empire in the mid-twentieth century as “one of the world’s great civilizations” in part to important archaeological findings in urban capitals and to neo-evolutionary theories of the mid-twentieth century. Trigger (2003) included the Aztecs in his important comparative study of early civilizations, but Scheidel (2015) recently pointed out they and other civilizations of the Americas still do not receive enough attention in comparative studies. He attributes their omission to the way many comparative studies are chronologically framed and the fact that, before the late 1400s, states and cities developed in the Americas apart from interactions with Eurasia.

In mid-twentieth-century neo-evolutionary theory, landscape archaeology and cultural ecology inspired the Basin of Mexico settlement pattern survey that brought a regional perspective to Aztec archaeology and also encouraged the development of household archaeology, historic archaeology, and ethnoarchaeology (Gorenflo and Garraty this volume; Nichols 2004; Nichols and Evans 2009; Sanders et al. 1979). The surveys showed that the population of the Basin of Mexico, the core of the Aztec Empire, grew very rapidly during the thirteenth and fourteenth centuries, resulting in a population four times larger than in any previous period (Sanders et al. 1979:161). Growth took place in urban centers but also in rural areas, resulting in the highest density rural population in central Mexico of the prehispanic era.

Key to sustaining this demographic growth was a complex economic system that has been the focus of significant research, both documentary and archaeological, in recent decades. We thus devote a section of this handbook to Aztec technology and economy. The lakes provided an important artery of transportation and also a source of raw materials such as reeds and important foods. The presence of the lakes partly offset the lack of large, domesticated herbivores and facilitated the relatively high degree of urbanism even with limited transportation technology (Parsons 2008; Millhauser this volume). Intensive agriculture in central Mexico incorporated adaptations to both too little water (e.g., irrigation) and too much water (*chinampas* or drained fields; see Morehart, this volume). *Chinampa* development along the southern lakes was critically important to sustaining the growth of Tenochtitlan. People and land were bound in multiple ways—economically, socially, and culturally. McClung and Martinez (this volume) see historical ecology as offering a way to navigate between systems and agency-centered approaches. Morehart and Frederic (2014), for example, found that a combination of environmental and social factors led to the collapse of Xaltocan’s *chinampa* system near the end of the fourteenth century.



Interest and debates about the political economy and ecology of Aztec hydraulic agriculture have been long-standing (Sanders et al. 1979; Scarborough 2003). Luna (2014:54) shows in his analysis of aerial imagery how the expansion of *chinampas*, or drained fields, depended on system-wide controls of water levels of the southern lakes that involved construction of monumental hydraulic works in the mid-1400s. The scale of these works and the rapidity of the enlargement of the *chinampa* system convince Luna that this entailed central management. At the same time, the variability in *chinampa* construction observed by Frederick (2007) implies local control. This suggests situational state intervention for large construction projects and management of lake levels with tenant farmers and local corporate groups responsible for *chinampa* construction and maintenance.

A theoretical shift began in the 1970s from systems-centered perspectives of neo-evolution and cultural ecology to emphasize humans as agents shaping society and history in interaction with each other (in alliances, conflict, factions, social classes, and many other social groups and forms of interaction), as well as with the environment (McClung and Martinez this volume). In recent decades, scholars have applied and contributed to the development of diverse theoretical strands, including theories of agency and practice, collective action, feminism, Marxism, political economy, urbanism, and world systems, to explain the historical and social dynamics of the Aztecs and other Middle and Late Postclassic societies (Gándara 2012). Most, if not all, of the pioneers of these approaches to Aztec archaeology were mentored by scholars working under cultural ecology and processual theoretical orientations. In spite of the important theoretical shifts and the increasing interest in human agency, the current generation of scholars have always benefitted from the data and substantive contributions of the previous generation. In that sense, rather than a clean break from previous scholarship, their scholarship represents a development of knowledge, and it is testament to the rigor and solid contributions of previous generations of scholars.

A main contribution of this generation of archaeologists includes attention to variation across the Aztec Empire (e.g. Berdan et al. 1996; Blanton et al. this volume; De Lucia this volume; Garraty 2010; Garraty and Ohnersorgen 2009; Fargher et al. this volume; Fisher this volume, Gutiérrez this volume, 2013; Hodge and Smith 1994; Levine this volume; Plunket and Uruñuela this volume, 2005; Smith 2008; Smith and Berdan 2003; Venter this volume). Another major focus is on Aztec social relations in studies of gender, age, households, different social classes, and factions (Berdan 2014; Brumfiel 1991, 1992; De Lucia 2010; Overholtzer this volume; Pennock this volume; Smith and Hicks this volume). The current generation of researchers has continued, and even increased, the efforts of previous generations to integrate research on the Aztecs with broadly relevant social theories, (e.g., Blanton et al. this volume; Blanton and Fargher 2008; De Lucia 2010; Garraty 2010; Smith this volume). Culture history remains an important focus of Aztec archaeology and ethnohistory in Mexico (Florescano this volume; Gándara 2012). Scholars have also sought to engage with the public through national and international museum exhibits (Brumfiel and Feinman 2008; Brumfiel and Millhauser 2014; Solis 2004a, 2004b; McEwan and López Luján 2009; Pohl and Lyons 2010).

Since the 1970s, a major contribution of art historians has been the integration of Aztec monuments into specific historical moments through the careful analysis of texts and formal aspects of the art (e.g. Townsend 1979). Scholars have shown that the monumental artwork of the Aztecs did not merely consist of ahistorical representations of deities and religious concepts but was also involved in particular historical moments and often made for political purposes. For example, Umberger (2007, 2012:821) suggests that the Coyolxauhqui stone in front of the Templo Mayor is not just a depiction of an element of the charter myth of the Mexica but also commemorated the Mexica victory in the war against Tlatelolco through a series of metaphors that portrayed Tlatelolcas as feminine and failed rulers. The study of monumental art has enhanced knowledge obtained from historical documents, making its own contributions to Aztec scholarship (Barnes this volume; Matos Moctezuma and Lopez Luján 2012; Townsend 1979; Umberger 1996, 2012).

Another major development in Aztec studies began in earnest in the 1990s. Called the “New Conquest History” (Restall 2012), its roots can be traced to previous decades, including seminal works by Gibson (1964) and Lockhart (1992). The New Conquest History has challenged histories that focus narrowly on Spanish conquistadors. It questions the Spanish as the sole protagonists of the Conquest and of Colonial Mexico and the overreliance on conquistadors’ descriptions of Aztec society and the Conquest, including the victory of the Spaniards. Scholars have thus reexamined documents written by the Spanish. They also have studied a wealth of documents written in indigenous languages and pictorials drawn by indigenous people (e.g. Diel 2008; Mundy 2015; Wood 2003) to understand different versions of events, processes, and the perceptions and ideas of different people, whether Spanish, indigenous, or African.

Their contributions have shown that many indigenous people did not see themselves as conquered and defeated by the Spanish (Oudjik and Castañeda this volume; Restall 2003); that indigenous people and Africans were important participants, even protagonists, in the long process of the Conquest (Matthew and Oudjik 2007); that colonial Nahuas saw continuity in their colonial history well into the Aztec and pre-Aztec past (e.g., Diel 2008, Mundy 2015); and that there was much continuity in the daily life, politics, and economic life of indigenous people before and after the Spanish Conquest (Gibson 1964; Lockhart 1992). For decades, archaeologists and art historians also have studied the topic of change and continuity in daily life before and after 1521 (e.g., Boone and Cummins 1998; Charlton 1968, 1976; Charlton et al. 2005; Fournier and Charlton this volume; Pastrana 2007; Rodríguez-Alegría 2008).

## THE FUTURE OF AZTEC STUDIES

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We anticipate that the application of archaeological science and the pursuit of interdisciplinary science studies will continue to increase. Debates about sociopolitics and

commerce and their roles in shaping the Aztec's other premodern economies drove much productive research during the late twentieth and early twenty-first centuries (Berdan 2014; Hodge and Smith 1994). Expanded applications of geochemical sourcing methods provided a means for archaeologists to track and model market exchange of household goods not detailed by chroniclers. These studies have been extended both back in time into the Early Postclassic and earlier and also into the Early Colonial period, to provincial areas of the Aztec Empire (Garraty 2013; Nichols et al. 2002; Rodríguez-Alegría et al. 2013; Skoglund et al. 2006), and across the boundaries of the Aztec Empire and neighboring states (Millhauser et al. 2015). The ceramic database for neutron activation analysis (NAA) for archaeological ceramics from the Basin of Mexico is now the largest in Mesoamerica, and it is heavily weighted with Aztec ceramics (Nichols et al. 2013). Combining NAA with other sourcing methods and attribute-based stylistic analysis can improve the resolution of composition groups and allow a finer-grained analysis of the market trade (Crider et al. 2017; Garraty 2013; Stoner et al. 2015).

Ethnohistorians have expanded their research about the Aztec economy to capture more of its geographic and cultural breadth (Berdan 2014). Few today would question the importance of commerce in the Aztec economy. Most goods continued to be made in household workshops that often engage in multicrafting to produce the large amounts of goods that move through the market and tax/tribute systems (Hirth and Nichols this volume; Nichols 2013) despite limited transportation technology (Garraty 2006:209). This research has contributed to broader theories of market development, although no Aztec marketplace has been excavated (Blanton and Fargher 2008; Garraty 2010; Hirth 2013). Comparative research is leading to new theories and new understandings of Aztec imperialism and Postclassic state formation and urbanization (Blanton et al. this volume; Covey and Aland this volume; Smith this volume). From a comparative perspective, Smith (2015) makes a strong case that the fiscal payments conventionally referred to as tribute for the Aztecs meet the criteria of taxes in their regularity. Moreover, Smith feels that use of the term *tribute* harkens back to the substantivist-formalist debates of the 1960s and 1970s that obscured understanding ancient/historic economies such as the Aztecs. Berdan (2014), on the other hand, feels that *tribute* better conveys the ritualized aspect of these payments and their expression of domination and subordination. The application of collective action theory by Blanton and Fargher (2008) is also advancing comparative studies of the Aztecs and organizational differences between their imperial state and the Tlaxcallans/Tarascans and other world regions (Fargher et al. this volume; Fisher this volume).

Demography remains a long-standing matter of debate among Aztec scholars. It is relevant to issues related to agricultural production, urban provisioning, imperial power, and post-Conquest demographic collapse, among others. The overall size of the populations in the core of the Aztec Empire, and in many of the major cities, including Tenochtitlan, is periodically debated using a combination of historical and archaeological evidence (Evans 2013: 49; Gorenflo and Garraty this volume; Storey and Morfin this volume), and future work may result in a better understanding of the size, composition,

and histories of populations in the Aztec Empire. Isotopic and DNA analysis will contribute much to our understanding of the effects of disease, work, and the changing political conditions on populations in prehispanic and colonial Mexico (e.g., Mata-Míguez et al. 2012). The relatively small number of human remains from most Aztec provincial and rural sites has hindered biogenetic studies that can also provide important details about social relations. Given the number of Aztec houses that have been excavated, this is puzzling; perhaps there are prehispanic cemeteries that have yet to be discovered? The pioneering residue analyses of Luis Barba and his colleagues (1996) at the Templo Mayor to document rituals warrant broader application, as does the micro-archaeology approach of De Lucia (2013) to households.

Research that focuses on the colonial period will remain a strength in Aztec studies, and we anticipate that the use of different lines of evidence, not just historical documents, will increase in the following decades. The use of material evidence, including archaeological material and works of art, will increase as scholars recognize the importance of all kinds of evidence to discover different aspects of the lives of colonial Nahuas, Spaniards, Africans, and *castas* (Fournier and Charlton this volume; Rodríguez-Alegría this volume). In the years ahead, scholars will intensify their attention to indigenous material culture and power in the Colonial period, including in places that have been traditionally associated with the Spanish, such as Mexico City. Scholars have shown not only continuity in household material culture but also the construction of public architecture associated with indigenous rulership in Mexico City in the Colonial period (Mundy 2015). As researchers find empirical and theoretical support for understanding the dynamics of indigenous power, politics, and social stratification in colonial Mexico City, this will add complexity to previous models that emphasized Spanish rule. It is likely that a model that emphasizes parallel structures of power and governance, one Spanish and one indigenous, will emerge, or that the complexity of power and governance in Colonial Mexico and its consequences for social and cultural life will be even greater than we can imagine now.

Finally, we anticipate that scholars will enhance their efforts in collaborating with contemporary populations that think of the Aztecs as an important part of their heritage (Sandstrom this volume). Collaborations will likely include consulting with descendant communities to understand their questions, assess the impact of knowledge production on their lives, and identify the ways that scholarly research may benefit those communities. Intellectual work by colonial and contemporary Nahuas is capturing the interest of contemporary scholars (McDonough 2014), and we believe such an interest will increase in years ahead. The revived interest in communicating and collaborating with contemporary communities can only make our work on the Aztec Empire more relevant and more useful to society. Public debates about the Aztecs often address stereotypes and overemphasize Aztec sacrifice, morality, cannibalism, and warfare. The scholarship we present in this volume, and scholarship in the decades ahead, will continue to add nuance to those debates and counterbalance the tendency to provide normative depictions of Aztec society by showing the rich variety of the social and cultural lives of the many people who formed the Aztec world.

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PART I

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ARCHAEOLOGY  
OF THE AZTECS

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## CHAPTER 1

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# ANCIENT STONE SCULPTURES

### *In Search of the Mexica Past*

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EDUARDO MATOS MOCTEZUMA

ON August 13, 1790, a huge stone sculpture representing the goddess Coatlicue (“she who wears the skirt of serpents” in Nahuatl) was unearthed in the *Zócalo*, Mexico City’s main plaza (León y Gama 1832, Part. I:10). On December 17 of that year, the monumental “Sun Stone,” also known as the “Aztec Calendar,” was discovered (Figure 1.1).

The following year, another monumental sculpture—the “Stone of Tizoc”—was located near the Catedral Metropolitana de la Ciudad de México (Mexico City’s Metropolitan Cathedral) (León y Gama 1832, Part II:46). All three monoliths were unearthed during works commissioned by Viceroy Revillagigedo with the goal of leveling the city’s main plaza and installing drains.

The sculpture of Coatlicue—at the time known as Teoyaomiqui—represents a decapitated deity, with two streams of blood gushing from her severed neck; the streams of blood take the form of two serpents that come together at the top, taking the place of her head (León y Gama 1832). This goddess is the focus of one of the most important Mexica myths recounting how Coatlicue became pregnant with Huitzilopochtli—god of the sun and war—while doing penance on Coatepec Hill. According to the myth, Huitzilopochtli was born to battle his siblings because some of Coatlicue’s other children—the *centzon huitznahua*, or “400 (innumerable) southerners (constellations)” —were outraged over their mother’s mysterious pregnancy. They convinced their sister Coyolxauhqui, the moon deity, to go to Coatepec Hill and kill their mother in revenge. Huitzilopochtli was born full-grown and fully armed; he immediately began attacking his siblings, overcoming them and taking Coyolxauhqui prisoner. He decapitated his sister and threw her body off the top of the hill; her body rolled to the bottom of the hill, where it lay beheaded and dismembered (Figure 1.2).

The Sun Stone is the best example of the Mexica concept of time. Tonatiuh, the sun god, is depicted in the center, surrounded by four quadrangles corresponding to the four previous Suns, or *eras* (León y Gama 1832, Part I:93–95, Figure 1.1). In the Mexica concept



FIGURE 1.1 The “Sun Stone” or “Aztec Calendar.” Courtesy of the Templo Mayor-Instituto Nacional de Antropología e Historia, Mexico.



FIGURE 1.2 Coyolxauhqui. Courtesy of the Templo Mayor-Instituto Nacional de Antropología e Historia, Mexico.

of time, these four Suns preceded the current one and represented attempts by the deities to create and sustain humans, each ending cataclysmically. The gods came together in Teotihuacan and created the Fifth Sun; once it was set in motion, they once again created humans and, this time, provided them with corn. Quetzalcoatl was the god who created this marvel of sustenance and thus began the new Sun. On the monolith, these four Suns are encircled by images of the 20 days composing each month. Another circle surrounds it, and four triangular rays of sunlight emerge from both circles. Finally, two fire serpents surround the sculpture, carrying the sun across the sky from east to west.

The content of the third stone monument is distinct. At the top, we see the sun surrounded by images depicting the victories of Tizoc, a Mexica *tlatoani* or emperor who ruled from A.D. 1481–1486. The monument portrays a very important ceremony: a lopsided battle between a heavily armed Mexica warrior and an enemy prisoner of war forced to defend himself with blunt weapons. Ultimately, the vanquished prisoner of war is sacrificed (Matos Moctezuma and López Luján 2012).

The discovery of these stone sculptures during the eighteenth century marked the inauguration of Mexica archeology. The first study of these important pieces was undertaken by Antonio de Leon y Gama (1832), who published his book *Descripción histórica y cronológica de las dos piedras* in 1792. The work included the first two monuments, and in 1832 a second edition was released, including all three sculptures as well as others uncovered during construction work undertaken by the viceroy Revillagigedo. In 1803 Baron Alexander von Humboldt arrived in Mexico from South America, interested in learning more about these sculptures and their content. He described his impressions in his book *Vistas de las Cordilleras y Monumentos de los pueblos indígenas de América* (Humboldt 1995). Humboldt saw to it that the Coatlicue sculpture was exhumed from the university courtyard, where it had been buried by monks from the Real y Pontificia Universidad de México (Royal and Pontifical University of Mexico) who feared that the sculptures might lead to idolatry. The sculpture's reappearance was brief; the baron left as soon as he had seen the sculpture, and the monks reburied it shortly thereafter. It would be some time before the sculpture's permanent unveiling.

New objects continued to be uncovered during the nineteenth century, including one piece of particular interest: a diorite sculpture of the goddess Coyolxauhqui. The sculpture represents the goddess after being decapitated by her brother Huitzilopochtli; her eyes are half-closed and in place of her neck is the *atlachinolli*, or symbol of war. The discovery occurred in 1830 at the Convent of the Conception, and the abbess donated the sculpture to the Museo Nacional de Antropología (National Anthropology Museum). The museum was founded in 1825, and these and other important artifacts became part of the archaeological collection. Mexico achieved independence from Spain in 1821 and to the emerging country the prehispanic world represented an indigenous past destroyed by the Spaniards. Hence Mexico's flag and coat of arms both depict Tenochtitlan with an eagle perched on a cactus devouring a snake.

Some of the most important studies on the ancient world have been presented by researchers at the Museo Nacional de Antropología (National Anthropology Museum), which was founded in 1825 by a decree from President Guadalupe Victoria. In 1877 the



*Anales del Museo Nacional (Proceedings of the National Museum)* included the most recent research by eminent scholars specializing in the Mexica (Mendoza 1877). During the presidency of Porfirio Díaz, archaeologist Leopoldo Batres founded the Inspección de Monumentos (Monuments Inspectorate) in 1884 and in 1900 directed excavations behind Mexico City's Metropolitan Cathedral, publishing most of the excavated materials in his book *Exploraciones en la calle de las Escalerillas* (Batres 1902, 1979). In 1901 Jesús Galindo y Villa (1979) announced the discovery of two important sculptures carved from volcanic stone and unearthed beneath the Palacio del Marqués del Apartado (Palace of the Marquis del Apartado): a feline over 2 m long currently exhibited in the Sala Mexica (Mexica Hall) of the National Anthropology Museum and a serpent's head currently on display at the Museo del Templo Mayor (Templo Mayor Museum). Further excavations in 1985 revealed yet another important sculpture, a stone eagle uncovered in the building's patio. Together, these sculptures form a triad composed of the eagle, feline, and serpent. In 1914 Manuel Gamio discovered the southwest corner of Tenochtitlan's Templo Mayor at the intersection of Calles Santa Teresa and Seminario, near the main plaza (Gamio 1920–1921). We now know that the segment encountered in 1914 represents Construction Phase III, dating to ca. A.D. 1430. The site remains open to the public, but it would be another 60 years before further work would be undertaken at this important site.

In the early morning of February 21, 1978, workers from Luz y Fuerza del Centro, the now-defunct Mexican Light & Power Company, were working at the corner of Calles República de Guatemala and República de Argentina (formerly Calles Santa Teresa y Relox) near the Metropolitan Cathedral in the heart of Mexico City. They encountered a large stone that prevented them from advancing and soon realized that the monolithic stone was engraved. Work came to a halt and archaeologists from the Instituto Nacional de Antropología e Historia (National Institute of Anthropology and History) inspected the find. Excavation of the monolith started on March 20 in the same year in which I initiated the Proyecto Templo Mayor (Templo Mayor Project) as project director (Matos 1982, 1988). Working in an urban setting involves certain peculiarities that must be taken into consideration. First, there is constant pressure from the press, who inquire incessantly about what has been uncovered. Second, the city's historical and modern buildings were built on top of the prehispanic monument, seriously complicating excavation efforts. Upon further analysis, some buildings from the twentieth century were deemed to have little architectural value, permitting their demolition in order to continue with the excavation. Thus it was possible to uncover the remains of the principal Mexica temple, the Templo Mayor, which represented the fundamental core of the Mexica worldview. With its main façade oriented toward the west, the structure consisted of four sloped terraces and two stairways leading to two shrines at the top. One shrine was dedicated to the sun and war god Huitzilopochtli. The other shrine was for venerating Tlaloc, the god of water and rain, who was associated with agricultural production. Together they represented the basis of the Mexica economy: agriculture and tribute extracted from groups conquered through military expansion.

The temple was gradually enlarged; excavations have revealed up to seven construction stages or enlargements, as well as a number of partial enlargements of specific areas (Matos 1982, 1988). When the Spaniards arrived, the Templo Mayor measured 82 m on each side and towered 45 m overhead. Following the final victory of Hernán Cortés' forces, which included indigenous allies who were enemies of the Mexicas, the temples were destroyed and their building blocks were used to build new houses and churches in the colony. Those who had supported the Spanish captain during the Conquest were rewarded with houses built on the ruins of the Templo Mayor Houses. Cortés tried to erase all vestiges of the main temple and was successful to the point that during the twentieth century we still did not know where this important building might be located until it was accidentally uncovered. Manuel Gamio's (1920) excavations preceded those conducted as part of the Proyecto Templo Mayor, creating an impressive database consisting of thousands of artifacts uncovered inside the Templo Mayor and nearby shrines.

A museum located next to the excavated portions of the temple offers visitors the opportunity to view many of the archaeological pieces uncovered during excavations. Visitors to the archaeological site can view the architectural remains of the Templo Mayor, including the building's various construction phases, as well as other shrines like the "Red Temple," where traces of the paint that once decorated the structure's walls are still visible today. To the north of the Templo Mayor, the Mexicas conducted important ceremonies and rituals in the "House of the Eagles," where excavations have uncovered ceramic sculptures of Mictlantecuhlti, Lord of the Underworld, and two sculptures of Eagle Warriors.

One of the most surprising finds occurred on October 2, 2006, when the monumental sculpture of the earth goddess Tlaltecuhlti (Figure 1.3) was uncovered during excavations conducted as part of the Programa de Arqueología Urbana (Urban Archaeology Program), which I initiated in 1991 in order to recover data from the Mexica ceremonial site (Matos and López Luján 2007, 2012).

The monolithic stone sculpture measures 4.16 m × 3.58 m, with an average width of 32 cm. The goddess is shown in a squatting position in preparation for childbirth; a stream of blood originating from her womb trickles out of her mouth. Her arms are raised and huge claws emerge from her hands; on her right claw is the glyph "10 Rabbit," or A.D. 1502, marking the death of the Mexica ruler Ahuitzotl, who reigned between A.D. 1486 and 1502. This *tlatoani* was succeeded by Motecuhzoma II until the latter's unfortunate death in A.D. 1520; two possibilities have been presented regarding who executed him. The Spanish version states that while the emperor tried to calm the masses surrounding Axayacatl's palace where the Spaniards were staying, the Mexicas themselves stoned their *tlatoani* who eventually died from his wounds. The indigenous version, in contrast, states that it was the Spaniards who killed him. I lean more toward the latter idea, since Motecuhzoma had already been deposed as *tlatoani* and Cuitlahuac had been chosen to replace him as ruler of Tenochtitlan. Therefore, Motecuhzoma was powerless against his own people and was no longer useful to the Spaniards; on the contrary, he was now a hindrance to the conquerors. The fate of Motecuhzoma—"The



FIGURE 1.3 Tlaltecuhltli. Courtesy of the Templo Mayor-Instituto Nacional de Antropología e Historia, Mexico.

Bereaved,” as Alfonso Reyes (1964b) refers to him in his book *Visión de Anahuac*—had been sealed.

We return once again to Tlaltecuhltli. This deity devoured the dead and then gave birth to their souls, directing them toward their particular destiny, which was based on their manner of death. Warriors killed in combat or sacrifice were destined to accompany the sun from its appearance in the east until noon. Women who died during childbirth accompanied the sun from noon until sunset, since childbirth was considered combat and thus women who died while giving birth were seen as warriors. The eastern portion of the universe was the male half, while the west conceived of as feminine. Those whose death was related to water (drowning, edema, etc.) went to Tlaloc’s paradise, Tlalocan, while those who died in other ways went to Mictlan. According to some historical sources, the Cuauhxiccalco—where the ashes of some Mexica rulers were interred—was located in front of the Templo Mayor (Reyes 1964b, 1964b). Thus both Leonardo Lopez Lujan and I argue that this sculpture was the headstone of Ahuitzotl, who ruled Tenochtitlan from A.D. 1486–1502 (Matos and López Luján 2007, 2012). Excavations around and underneath the piece have yielded an enormous number of artifacts, most associated with mortuary rites. The piece is currently on display

in the Templo Mayor Museum, along with thousands of other artifacts associated with this deity.

On 2015 our excavations located the *tzompantli* or skull rack. Before that, we had found the *Cuauhxicalli*, a building where some of the Aztec kings had been buried, including Axayacatl, Tizoc, and Ahuizotl. We also found part of the ball court. These architectural remains are located west of the Templo Mayor.

Upon completion of excavations and analysis of the recovered materials, we hope to be able to respond in greater detail to the myriad questions raised so far. Downtown Mexico City, of course, is actually one city superimposed upon another; thus it is no surprise that objects from Tenochtitlan are constantly being uncovered. As Alfonso Reyes states in his *Visión de Anahuac*:

Ecstatic before the cactus and the eagle and serpent—happy emblem of our countryside—they heard the voice of the prophetic bird, promising them refuge among the hospitable lakera. From huts of mud a city rose, peopled again and again by the incursions of mythological warriors who came from the Seven Caves, cradle of the seven tribes that dwell in our land. From the city an empire grew, and the roar of a giant civilization, like that of Babylon or Egypt, still reverberated, though diminishing, in the woeful days of the feeble Moctezuma. And it was then that, in an hour we well may envy, Cortés and his men (“dust, sweat, and iron”), the snow-cruised volcanoes behind them now, stood wonderstruck on the rim of that circle of resonance and light, spaciouly ringed about by mountains.

At their feet, in a shimmering crystal mirage, lay the painted city, all its streets emanating from the temple, radiating from the corners of the pyramid [Reyes 1964a:83–84].

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## CHAPTER 2

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# THE HISTORICAL SOURCES

## *Codices and Chronicles*

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JUAN JOSÉ BATALLA ROSADO

HISTORICAL documents describing Aztec culture are abundant and rich in information on the cultural development of the group that dominated much of present-day Mexico City prior to the arrival of the Spanish. Given the sheer number of sources, I focus here on the most important documents from the sixteenth century in terms of the quality of the data presented, evaluating the veracity of the sources whenever possible.

I divide these historical documents into two types: codices and chronicles. The former includes works with pictorial content made using the prehispanic technique of presenting information through images and glyphs. Nearly all of them were painted after the Conquest and at the request of the Spanish; thus space was left on each page so written descriptions of the illustrated scenes could be added. Thus these documents offer two types of data: pictorial (“indigenous book”) and textual (“European written book”) (see Batalla 2002b:7–8). In addition, I include among the “codices” those works that have traditionally been considered as such, although they are, in fact, European “illustrated works.” In contrast, the chronicles include books written by Spanish soldiers, priests, civilians, and descendants of the Aztecs.

## CODICES

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Many codices or “painted books,” which offer extensive information on Aztec culture, have survived to the present day (Batalla 2011b). A detailed description can be found in Reyes and Oudijk (2013) where documents are listed in alphabetical order along with an extensive bibliography. I also make reference to the most recent editions, as they include images, as well as the authors who have studied these documents. Moreover, when I discuss a particular codex, I indicate in parenthesis where the entire document



can be found online so that readers can consult the contents directly. Finally, I only discuss codices we are certain come from the Aztec area. Thus, despite their importance, I do not include documents from nearby areas, like the so-called Borgia Group, among other sources.

I present the different documents based on the type of information they contain (Batalla 2011b:218–221; Glass 1975:28). The main categories are religion, history, society, and economy. In many cases, all of these data are interspersed throughout a given document.

The existence of a hieroglyphic writing system in ancient Mesoamerica allowed indigenous groups to record information they wanted to transmit over time. The Spanish were so taken aback by the existence of these “painted books” or “books of symbols” that priests and administrative officials allowed their production to continue into Colonial times, particularly during the sixteenth century. The missionaries used these documents to learn about indigenous religion in order to monitor idolatrous practices. Moreover, from the administrative point of view, the books helped the Spanish learn about and understand the history, way of life, and, above all, economy of the Aztecs, so they could successfully levy taxes (see Batalla 2011b:203–214).

Regarding Aztec religion, the first document that should be mentioned is the *Codex Borbonicus* (1974). The reasons for this are clear. It is, in my opinion (Batalla 1994a, 1994b, 2011a), the only Aztec codex with religious content that is prehispanic in origin. Painted on *amate* paper, with a folding screen layout, it originally contained a total of 40 pages. It now contains just 36, because both the first and last two pages have been lost (Anders et al. 1991). Its content describes the calendars used by the Aztecs. These included the *tonalpohualli*, or 260-day cycle (Anders et al. 1991:2–20), indicating the patron deities of each trecena (13-day period), the 13 lords of the day, the 9 lords of the night, and the 13 prophetic birds; the *xiuhmolpilli*, or 52-year cycle (Anders et al. 1991:21–22), which identified the gods that presided over each year; the *xiuhpohualli*, or 365-day cycle (Anders, et al. 1991:23–36), which showed the patron gods of each of the 18 months of 20 days, as well as the major rituals and festivals held throughout the year; and a new, somewhat anomalous *xiuhmolpilli* (see Batalla 2011a), discussed on pp. 37–38 of the *Codex Borbonicus* (1974). Despite the difficulties in dating and the presence of the last cycle of years, Batalla (2011a) is one of the most important existing sources on Aztec religion. Furthermore, it is a wonderful example of how prehispanic books were produced.

After the Conquest, European religious authorities saw these books as “the work of the devil” and thus burned them. This represented a serious loss in terms of our knowledge of Aztec culture. However, with the arrival of more open-minded friars, a very interesting phenomenon occurred: Aztec painters, or *tlacuiloque*, were asked to once again produce books with religious content. In addition, they were generally asked to leave enough space on the pages for written descriptions of the painted scenes, such that any Westerner could understand the contents as well. Thus were born the Colonial codices, in which written texts slowly replaced painted images. Two sets of manuscripts exemplify this type of document: the Magliabechiano Group and the Huitzilopochtli Group, both from the second half of the sixteenth century.

The former is named after one of the documents that comprises it, the *Codex Magliabechiano* (1970), although the documents included in this set were not copied from the original. In fact, the source that gave rise to all of these texts was the indigenous book known as the *Codex Tudela* or the *Codex del Museo de América* (Batalla 2002b:159–165, 2010). This, then, is a clear example of the European tradition of manuscript copying in the Americas—in this case, transmitting two different types of information: the copies of the paintings in the group and the translation of the texts describing the images. Thus after the pictorial information from the *Codex Tudela* was copied into the *Libro de figuras* (since lost), the images were discussed separately, resulting in similar European written books but with clear differences in terms of the information they contained.

The *Codex Tudela* (Batalla 2002b) not only describes the different calendars but also includes considerable information on rituals dedicated to the god of death (Mictantecuhli) and the gods of *pulque*, the ritual vestments associated with each deity, and so on (Batalla 2002b:167–435). Therefore, it is also a major source of knowledge on Aztec religion, which is complemented by the descriptive texts in the *Codex Magliabechiano* (Anders and Jansen 1996b; Batalla 2010).

The Huitzilopochtli Group (Glass and Robertson 1975:136–139) consists of two manuscripts: the *Codex Telleriano-Remensis* (1899) and the *Codex Ríos* or *Vaticano A* (1990). The latter is considered a copy of the former, thus both are translations of the same original text that has since been lost: the *Codex Huitzilopochtli*. However, codicological studies suggests that at least some portions of each document may derive from different sources (Batalla 2006, n.d.). Both describe the Aztec calendar, but the *Codex Ríos* contains a wider variety of novel information on religion. Of particular interest in this codex are the sections devoted to the vertical universe, the five eras or cosmogonic suns, the sacred history of deities, and other features of Aztec religion (Anders and Jansen 1996a). What makes the *Codex Telleriano-Remensis* unique are the parts describing the calendars, and, in particular, the historical information provided (Quiñones 1995).

Thanks to these and other documents, such as the *Tonalamatl de Aubin* (1981) and the five *Borgia Group* documents (*Codex Borgia* 1976), today's researchers have access to indigenous pictorial sources that enable us to better understand Aztec religious beliefs. This is of particular importance considering that the religious system is one of the cultural traits that defines the Mesoamerican culture area.

In terms of Aztec history, we only have Colonial codices, which are limited to the information offered to the Colonial chroniclers by their Aztec informants. That is, when the Aztec recounted their history, they painted themselves as “victors” up until the Spanish Conquest. Therefore it is necessary to conduct a comprehensive review of each source to understand how true to life they actually are. Some examples are the systematic “elimination” of information regarding the administration that had previously subjected them, the Tepanec Empire (see Santamarina 2006); data relating to “dark” events in their Motecuhzoma II, the Aztecs or the Spanish (with each, of course, blaming the other). The overall impression is neither side was especially interested in exposing the truth (see Batalla 2011c).



Also, when studying the history of the Aztecs, we must consider the portions of the codices describing the period of migration from Aztlan or Chicomoztoc (the Seven Caves) to the Valley of Mexico as part of their sacred history. This sacred history was rewritten to show the Aztecs as the victors following their defeat of the Tepanec Empire and their rise to power, creating the Era of the Fifth Sun and thus transforming themselves into the “chosen” people. Thus, at the time of the Spanish Conquest, the available historical evidence reflected the interests of the ruling class—who never presented themselves as “defeated”—as they told their history to serve their own interests.

Many existing historical manuscripts describe Aztec history up until the Conquest, including the *Tira de la Peregrinación* (2007), the *Codex Mendoza* (Berdan and Anawalt 1992), the *Codex Telleriano-Remensis* (1899), the *Codex Aubin* or *Codex de 1576* (1963), and the *Codex Mexicanus* (1952). The first describes the Aztec migration as the people “chosen” by their patron deity, Huitzilopochtli, from A.D. 1168 until they reach Chapultepec in the Valley of Mexico in A.D. 1335. The second discusses (folios 1–16) the founding of Tenochtitlan and the conquests carried out by all of the Aztec rulers, or *tlatoque*. The remaining three sources also discuss Aztec history following their departure from Aztlan through to the arrival of the Spanish and continue well into Colonial times.

In terms of the “daily life” of the Aztecs, one work in particular stands out: the third part of the *Codex Mendoza* (Berdan and Anawalt 1992). Without a doubt, this is the most important pictographic work on the subject. Thus, in folios 56–71, the codex describes Aztec life, from birth to 70 years old. Moreover, it is a well-organized codex in terms of its presentation, which also includes abundant textual descriptions of the paintings.

Finally, the *Matrícula de tributos* (1980), which, in my opinion, was produced in Prehispanic times (Batalla 2007a, 2007b), is among the prehispanic codices describing the Aztec economy, listing all of the goods delivered to the Aztec Empire by the groups they conquered. Moreover, it was also copied in the second part of the *Codex Mendoza* (folios 17–55), to which considerable textual information was later added. The *Matrícula de tributos* was also mentioned during Colonial times in the blank spaces between the Nahuatl paintings and the Castilian text. Furthermore, since many of the goods collected as tribute during prehispanic times were later collected during Colonial times as well (corn, cacao, peppers, cotton, loads of wood, containers, blankets, etc.), Colonial codices, like the *Codex de tributos de Coyoacán* (Batalla 2002a), the *Codex Osuna* (1973), and the *Codex Kingsborough* (1993) provide invaluable information on the Aztec economy.

Among what are considered Mesoamerican codices and chronicles, two authors are especially important for their knowledge on the Aztecs: Fray Bernardino de Sahagún and Fray Diego Duran. Fray Bernardino de Sahagún (1499–1590) is considered the father of ethnography; his *magnum opus* is a sort of “encyclopedia” on the Aztecs. Around the middle of the sixteenth century, he began compiling information about their culture by asking Aztec informants a series of questions, which would eventually form part of his *Historia general de las cosas de Nueva España*. To this end, he first presented information in the *Codex Matritenses* (ca. 1559–1561), which includes a wealth of information in both Nahuatl and Castilian. Moreover, his *Primeros memoriales* (1993)

includes pictorial representations. He dedicated considerable time to the three-volume *Codex Florentino* (1950–1982), which includes texts in Nahuatl and Castilian along with several illustrations, making it more like a European picture book. Finally, based on this document, he wrote his *Historia general* in Castilian. Despite the abundant literature on these three works, no researcher has yet undertaken a critique of these sources. Fray Bernardino de Sahagún conducted his research among indigenous people who were either owned by, or descendants of, the upper class of Aztec society; thus, in my opinion, the information collected reflects the “official version” of the Aztec Empire. Regardless of whether this is the case, it remains the main source of information on the Aztecs, with Aztec culture discussed in several chapters.

Meanwhile, Fray Diego Duran (1581) wrote the *Historia de las Indias de Nueva España e islas de Tierra Firme*, between 1579 and 1581, which is also a typical European illustrated work. Divided into three parts, it presents the history of the Aztecs, from their departure from Aztlan to the rise of their empire, describing in detail what happened during the reign of each *tlatoani*. The work also discusses the deities and ceremonies held in their honor before finally turning to the calendar system. Yet again we have content that requires very critical consideration, as it is clearly biased in favor of the Aztecs since the informants, as was the case with Sahagún’s informants, were either the property of, or descended from, Aztec nobles.

## CHRONICLES

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The chronicles include a number of documents that describe the Aztec Empire at the time of Spanish contact (Esteve 1992:154–314; Gibson and Glass 1975:322–400). If the information contained in the codices is examined critically, the chronicles pose an even greater “risk” in that each chronicler had his own personal and cultural interests. When considering Hernan Cortes’ *Cartas de relación* (2003), for example, it must be noted that he carried out his conquest of Mexico illegally, an offense punishable by death. Therefore, the manuscripts he submitted to the king does little but justify his own illegal actions. However, his second and third *Cartas* offer some credible information regarding Aztec society and its economy at the time of contact. All of this information, however, must be tempered by the realization that at times he may have exaggerated or lied.

Yet another important work, the *Historia verdadera de la Conquista de la Nueva España*, was written more than 50 years after the Conquest by soldier Bernal Diaz del Castillo (1960). Traditionally considered one of the primary sources on Aztec culture from 1519 to 1521, Michel Graulich (1996, 2006) argues that Bernal Diaz came to Tenochtitlan after Cortes’ defeat of Panfilo de Narvaez in Veracruz. Furthermore, according to Christian Duverger’s (2013) recent analysis, the author was Cortes himself, although his idea could be presented with greater conviction. While the debate continues regarding the “authorship” and “participation” of Bernal Diaz, we should use the information contained in this document with care. It is unlikely the story was simply

“made up”; most likely it was based on experiences recounted by peers. Moreover, if Cortes did indeed write it, at least we know he participated in the Conquest from the beginning.

Among the other soldiers accompanying Hernan Cortes, several stand out, including Andrés de Tapia (1866), Bernardino Vázquez de Tapia (1970), and Francisco de Aguilar (1977). These chroniclers wrote descriptions of the Conquest of Mexico, providing information on Aztec life based on their firsthand observations.

Several friars also penned chronicles about the Aztecs, including the *Memoriales* and the *Historia de los Indios de la Nueva España* by Fray Toribio de Benavente (2009, 2014), the *Historia de las Indias y conquista de México* by Francisco López de Gómara (2014), the *Historia natural y moral de las Indias* by José de Acosta (1894), and *Monarquía indiana* (1975–1983) by Fray Juan de Torquemada, originally published in 1615.

Among the works of European authors who were not soldiers or priests, the *Antigüedades de la Nueva España*, (1986) by military physician Francisco Hernández, and the *Relación de las cosas notables de la Nueva España*, by Judge Alonso de Zorita (1999), describe Aztec society and religion.

Also important are the works of authors who were descendants of Aztec nobility, although most of their education was entirely European and they present a highly idealized view of their birthplace. Such works include Hernando Alvarado Tezozomoc's *Crónica Mexicana* (in Spanish, 1878) and *Crónica Mexicayotl* (originally in Nahuatl, Spanish translation [1949]). Both focus on Tenochtitlan, and the author appears to be the only pure indigenous descendant of *tlatoque* who did not receive a European education. In Texcoco, Juan Bautista Pomar's *Relación de Texcoco* (1991) and Fernando de Alva Ixtlilxochitl's *Relaciones históricas* (1891) and *Historia de la nación chichimeca* (2010) stand out. Regarding Chalco, Francisco de San Anton Muñón Chimalpahin's *Relaciones originales de Chalco Amaquemecan* (1965) is an important source, as is Diego Muñoz Camargo's *Descripción de la ciudad y provincia de Tlaxcala* (1981) for Tlaxcala. Of course all of these works emphasize the importance of the groups from which the authors descended, and the authors are biased. The *Codex Chimalpopoca* (1992) is also noteworthy, as it includes the *Anales de Cuauhtitlán* and the *Leyenda de los soles*, which describe Aztec history and religion, respectively.

Finally, among the many other chronicles documenting Aztec culture I review two of the utmost importance: the *Relaciones geográficas del siglo XVI* (Ovando y Godoy 1982–1988) and the *Vocabularios* (Molina 1571).

First, the *Relaciones geográficas del siglo XVI* (Ovando y Godoy 1982–1988), written between 1579 and 1585, was the result of several surveys of the Indies by Juan de Ovando y Godoy. The first consisted of 37 questions (1569), the second 200 (1570), and the third 135 (1573). However, due to the low response rate, Lopez de Velasco condensed these surveys into a 50-question “report,” which was sent with printed instructions on how to respond. Importantly, questions 9, 13, 14, and 15 focus on the history of prehispanic settlement and society in the area. The response from civilians was very uneven, but today these data offer insight into life in Prehispanic and Colonial times. Regarding the Aztec, the most important are those documents relating to Mexico and Tlaxcala,

including works by Juan Bautista Pomar (1991) and Diego Muñoz Camargo (1981), although it appears that the work of Alonso de Zorita (1999) could also derive from this questionnaire.

Second, the *Vocabularios* (Molina 1571) are also a source of knowledge on indigenous cultures. For our purposes, the *Vocabulario en lengua castellana y mexicana* by Fray Alonso de Molina (1571) is important for the study of Aztec culture, as the analysis of the Nahuatl language offers considerable data on their daily lives. For example, for those who doubt the existence of an Aztec writing system, the list of sixteenth-century Nahuatl words listed in this document proves that no words were foreign loans, reflecting their independent origins.

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## CHAPTER 3

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# MUSEUMS AND THE CONSERVATION OF MEXICA CULTURAL HERITAGE

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MARÍA DE LOURDES GALLARDO PARRODI

## WHAT IS ARCHAEOLOGICAL CONSERVATION?

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LIKE many other disciplines, the conservation of archaeological materials has undergone an important phase of development in recent years. The primary goal of archaeological conservation—beyond recovering the aesthetics of a certain artifact—is to conserve the item in the best possible condition. The discipline's methodology involves limiting the use of substances different from those originally used to produce the artifact with the goal of recovering as much information as possible regarding the cultural dynamics to which the object was subjected over time. These procedures can be applied to isolated pieces or entire collections; the latter is more common as archaeological fieldwork typically involves recovering groups of objects.

While conservation is now common practice for archaeological projects, sites, and museums, the early treatment of prehispanic artifacts was different. The conservation project developed by the Templo Mayor Museum exemplifies how modern conservation techniques are applied to archaeological remains.

In Mexico, the assessment and treatment of artifacts as cultural heritage did not become formalized until after Independence; by then, important prehispanic artifacts had already been subjected to more than 300 years of systematic destruction and looting. One of the first steps toward formalizing the field occurred in 1822 when Agustín de Iturbide established the Conservatorio de Antigüedades (Conservatory of Antiquities) and the Gabinete de Historia Natural (Department of Natural History) at the Universidad Nacional Autónoma de México (National Autonomous University of Mexico) in order to assemble the prehispanic artifacts that had survived the Conquest

and Colonial period. Three years later, this initiative would lead to the creation of the Museo Nacional (National Museum), where the first regulations regarding the protection, management, and exhibition of Mexico's cultural heritage were proposed. Some of these provisions would later be put into action at the museum's new location on Calle Moneda (Morales 1994:29–45). Located in the main hall and patio, the Monoliths Gallery showcased the most representative pieces in the collection, including nearly all of the large stone sculptures from the Mexica culture (see Matos this volume). In 1964—nearly a century later—the archaeological collections were relocated to the newly inaugurated Museo Nacional de Antropología (National Museum of Anthropology) in Chapultepec Park (Solís 2004:15). Several of the pieces from the Monoliths Gallery were put on display in the Mexica Hall, complementing the existing collection with an extensive set of objects of varying size manufactured in stone, clay, bone, shell, obsidian, and metal. At that time, these were the materials most commonly recovered from the excavation of archaeological contexts; they were also thought to be the only items to have survived their discard and burial. Although the inorganic nature of these objects affords them greater resistance, we now know that an artifact's composition is not the only factor determining its preservation. Importantly, little or nothing was known of the original contexts of these artifacts.

The documentary sources from the sixteenth and seventeenth centuries offer contradictory information. However, several textual sources agree that the Mexica used a variety of raw materials to produce different goods; the variety of these goods can be appreciated in the lengthy descriptions of the offerings placed around Tenochtitlan's main structures (e.g., Chimalpahín 2012; Durán 1967; Motolinía 2007; Sahagún 2006). In addition to stone, pottery, bone, shell, metal, and obsidian, these chroniclers report that objects were also commonly made from plant fibers, flowers, fruits, seeds, and other perishable materials. However, until a few years ago, artifacts of this nature were only very rarely recovered from archaeological contexts. Fortunately, this situation has changed; today, it is increasingly more common for such objects to be retrieved during excavation and preserved for future generations.

## THE TEMPLO MAYOR PROJECT

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In Mexico, and particularly regarding Mexica artifact collections, one of the turning points in terms of the formalization of archaeological conservation was the commencement of the Templo Mayor Project in 1978 (Matos 1979:20). Since its inception, this unprecedented project has involved the participation of conservators and other specialists from the very moment of discovery. The establishment of the Department of Conservation permitted conservators to design and implement the most suitable procedures to treat each object individually, beginning with their discovery in context, their careful extraction, the application of conservation processes in the laboratory, and the display or long-term storage of the artifacts. The interdisciplinary nature of this

project greatly facilitated recording and recovering materials that otherwise might have been lost and has allowed the project to fulfill one of its primary goals: the recovery of Mexica artifacts from their original archaeological contexts. The most intense stage of excavation occurred from 1978 to 1993. During this time, conservators, archaeologists, and other project members worked collaboratively to solve different problems ranging from treating architectural remains consisting of stone and mortar with mural painting applied over a smoothed mud or plaster surface to the intervention of numerous offerings, including skull masks with shell, obsidian, and flint inlays; bones from a variety of animals; richly decorated stone figurines; sawfish rostrums; turquoise mosaic discs; copper bells; flint knives with inlay decoration; maguey spines; stone sculptures decorated with polychrome painting; and gold beads, among many other items.

As a direct result of the project, the Templo Mayor Museum was founded in 1987 (Matos 1997). At that time, the Department of Conservation was founded and became one of the many departments housed in the new building, which was built on the east side of the archaeological site.

With the transfer of the collection to the museum, the three main areas under the purview of the Department of Conservation were defined: the collections exhibited in the eight permanent halls and curated in storage, the architectural structures and elements of the site, and objects recently excavated from the site. The cultural heritage from the Templo Mayor, including the archaeological zone itself (Figure 3.1), encompasses all three areas.

With the diversification of conservation tasks, new techniques have been developed and unprecedented materials have been employed successfully to treat specific cases, ultimately leading to the establishment of intervention protocols for the growing collection. The permanence and continuity of the project have also provided the opportunity to study the dynamics of deterioration and evaluate the effectiveness of the procedures and substances used over the short, medium, and long term.

It is precisely this growing and diverse collection that has determined the direction of the actions related to its conservation and management. In this case, and unlike at other museums, the collection is constantly increasing due to two factors. First, the archaeological project is still in force, with the eighth season of excavation currently underway at the site. Second, the continuity of archaeological investigation at the site has led to the development of the Programa de Arqueología Urbana (Urban Archaeology Program),



FIGURE 3.1 Archaeological zone of the Templo Mayor. Photograph by author.

focused on exploring the prehispanic ruins under the Colonial and modern buildings that surround the archaeological zone (Barrera 2006). A substantial number of objects have been recovered by the Programa de Arqueología Urbana; most artifacts date to prehispanic times, but some also come from post-Conquest contexts (Rodríguez-Alegría this volume). As a result, the collection has tripled and now exceeds 40,000 items with 1,392 pieces exhibited in the permanent halls and 20,000 artifacts from recent excavations currently under investigation (Fernando Carrizosa Montfort, personal communication, November 2013; personal communication), nearly four times the size of the collection in 1983 (Velázquez 1997:41). This significant increase is directly related to improvements in excavation and conservation techniques, as well as technological advances, which have permitted us to identify and rescue more finds.

During the past 36 years, the redefinition of conservation treatments has also led to a gradual shift toward implementing preventive conservation measures in order to comprehensively address the specific challenge present by each item. Thus the conservation actions for the collection are focused on (a) understanding the behavior of different agents and dynamics of deterioration based on initial diagnoses and follow-up evaluations (Figure 3.2), (b) recording and maintaining the macro- and micro-environmental conditions of different objects, (c) recording and monitoring the specific processes and



FIGURE 3.2 *In situ* conservation of the Mictlantecuhli sculpture. Área de Conservación del MTM. Photograph by author.

materials applied to artifacts, (d) prioritizing and applying specific treatments, and (e) establishing general conservation guidelines and recommendations for the museum as part of the comprehensive management of the collection. Most of the department's permanent programs are dedicated to meeting these objectives.

## COLLECTIONS ON DISPLAY AND IN STORAGE

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Four programs have been implemented to care for this category of Mexica cultural heritage, including the periodic inspection and cleaning of the pieces exhibited outside of display cases; of particular interest are 48 sculptures and other large-format items. A second program is focused on the conservation and movement of monumental sculptures; the program focuses on large-format items like stone or ceramic sculptures and architectural elements with the aim of carrying out treatment to stabilize and protect each piece in situ in order to then transport them to the museum. Emblematic examples of the work carried out as part of this program include the monoliths representing the Mexica goddesses of the moon and earth, Coyolxauhqui and Tlaltecuhтли, respectively. Although discovered 28 years apart, both pieces benefitted from the knowledge and experience of various specialists who proposed the most appropriate conservation systems. As a result of the characteristics of the collection, a third program was developed focusing on the design and installation of conservation supports for pieces that, based on their raw materials and/or formal characteristics, require internal or external reinforcement. Representative cases of these supports can be appreciated in the articulated structures designed to provide internal support to parts of the monumental ceramic sculptures representing two eagle warriors and the two effigies of the god Mictlantecuhтли, as well as the monumental ceramic merlons recovered from Tenochtitlan's *Calmecac* (school for the sons of Mexica nobility; Figure 3.3) (Gallardo et al. 2013). In conjunction with other departments, the fourth conservation program provides ongoing conservation maintenance for the items on display as well as the cultural heritage safeguarded in museum storage. This program also permits the long-term evaluation of different conservation techniques and provides the opportunity to apply other, more appropriate treatments when necessary. This very important program has permitted us to review and update conservation procedures and materials, which in some cases has even resulted in new interpretations of artifacts. An example is the *Pinctada mazatlanica* shell pendants deposited in circles as part of the offering in Chamber II; prior to re-evaluation, they had been interpreted as part of a necklace (see Gallardo [2010] for a complete description of the conservation techniques applied to this offering).

## THE ARCHAEOLOGICAL ZONE

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The Templo Mayor has been exposed to ambient conditions for more than 30 years; thus conserving the architectural elements represents an important challenge. Due to



**FIGURE 3.3** Conservation of monumental ceramic merlon in front of the *calmecac*. Photograph by José Vázquez.

its particular location, the architectural remains have suffered very specific changes and deterioration caused by natural and human agents; the characteristic indications left behind are periodically reported and an attempt is made to control the damage as much as possible. Currently, the primary challenges are related to the differential settlement of the subsoil, water table desiccation, pollution, and weathering. The permanent comprehensive conservation project was established to address these challenges at the archaeological zone, with the goal of performing maintenance tasks such as cleaning, maintaining the exhibits on both floors of the museum, consolidating structural cracks, and treating the plaster and polychrome paint decorating the different constructive stages throughout the archaeological site. The project has also generated some specific conservation interventions that have been developed as part of the regular inspections.

As mentioned earlier, one of the procedures implemented from the very beginning of the project has been the involvement of conservators from the moment an object is discovered. The long-term project has permitted the accrual of extensive conservation experience that complements this ongoing collaboration. Currently, conservation efforts are focused on designing prospective conservation systems and assessing the risks associated