

1 Space and Time in the Aztec World

Economic systems, the Aztec economy included, do not exist in vacuums. They consist of organizations and activities that operate “on the ground.” They draw on known histories, traditions, and expectations. And they are intricately connected to social, political, and religious entities. In other words, to understand the Aztec economy we must establish this culture’s background along three dimensions: historic, geographic, and social-political-religious.

Before we pursue these backdrops, it is necessary to clarify the use of some often ambiguous and confusing terms. “Aztec” is first and foremost. This term, which gained popularity beginning early in the nineteenth century, was not used by the people of central Mexico in pre-Spanish times. It is, however, part of the title of this Element and does have its place: It is used here to refer to the Nahuatl-speaking people of the Basin of Mexico during the Late Postclassic period (AD 1350–1521). “Aztec empire,” also called the Triple Alliance empire, refers to the imperial entity built by the city-states of Tenochtitlan, Texcoco, and Tlacopan from AD 1430 to AD 1521. The term “Aztec” also designates specific chronological periods as well as imperial architectural and artistic styles.

But there is still a major pitfall: “Aztec” is often equated with “Mexica,” or “Colhua-Mexica,” the specific ethnic group that settled and lived in the twin island cities of Tenochtitlan and Tlatelolco. Since people were identified not only by ethnicity but also by city-state residence, the Mexica were also called (and called themselves) Tenochca or Tlatelolca. We therefore read about the Chalca of Chalco, the Xochimilca of Xochimilco, and so on – this was how they identified themselves, and others, on a day-to-day basis. Some also referenced their language: Nahuatl (“good speech”), Otomí, Tlalhuica, Totonaca, and so on. These more nuanced designations allow us to better see the people as they saw themselves. They also highlight the fragmented nature of this landscape: Individual city-states vied with one another for supremacy (often through warfare), and ethnic groups overtly expressed their unique qualities and differences from one another. The use of the term “Aztec” implies a cultural and political unity and uniformity that simply did not exist at the time. Although I use the term here as defined, when appropriate I prefer to use the identities that the people themselves used. Also found throughout this Element is “Mesoamerica,” which refers to the culture area encompassing the areas of Mexico and Central America that saw the rise and fall of complex states and civilizations before the arrival of the Spaniards (Figure 1). Comparatively, Mesoamerica exhibits a certain economic uniqueness among the world’s early civilizations: It combined the sole use of human porters and canoes for transport, a lack of large domesticated animals, and a system of highly developed markets.

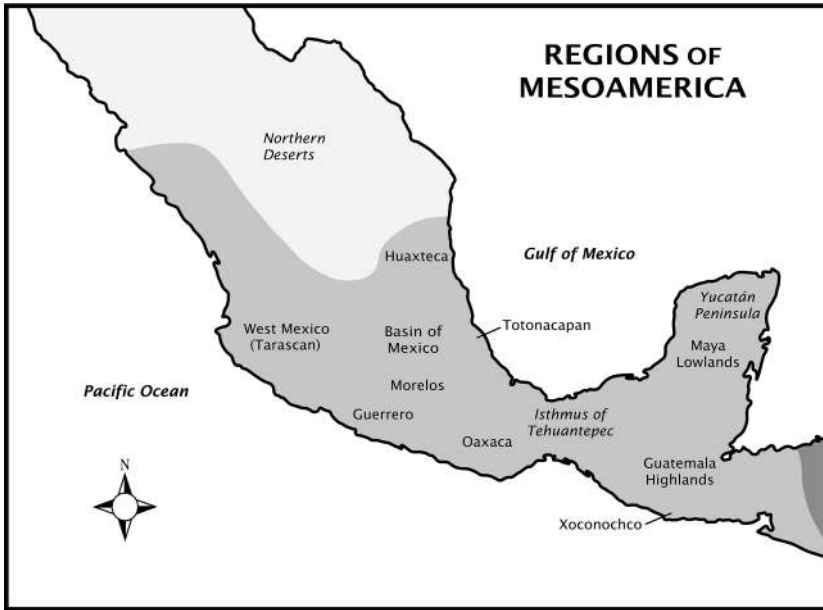


Figure 1 Regions of Mesoamerica. Drawing by Jennifer Berdan Lozano.

1.1 Historic Background

This case is essentially confined to the years AD 1325–1521. The Mexica established their island city of Tenochtitlan in the year Two House or AD 1325, the year that serves as the benchmark for this presentation of the Aztec economy. However, significant economic foundations were laid long before that date, and the Aztecs drew heavily on that earlier-established economic base.

The long pre-Columbian history of Mesoamerica saw the rise and fall of several grand civilizations, including the Olmec of the Gulf Coast (ca. 1200 BC–300 BC), the Classic Maya of southern Mesoamerica (ca. AD 250–900), Teotihuacan in the northeastern Basin of Mexico (ca. AD 1–650), and the Toltecs of Tula, approximately seventy kilometers north of the Basin of Mexico (AD 950–1175). It must be kept in mind that these are only the most highly touted early civilizations; many other complex social and political entities developed throughout Mesoamerica during this time period. By the time these civilizations took root, agriculture was already well in hand; highly productive varieties of maize, beans, squashes, chilis, and other plants (for foods, fibers, and medicines) were developed. Agricultural techniques such as crop rotation, terracing, canal irrigation, hydraulic constructions, swampland reclamation, and raised fields (*chinampas*) were used in pre-Aztec civilizations, depending on their local situations. Additionally, these people were experienced in many procedures for resource extraction and techniques of

manufacture such as stonework, spinning and weaving, pottery making, metallurgy, book making, and feather working. They applied their knowledge and skills to urban planning, monumental constructions such as temples and palaces, and massive works of art. They also moved goods over short and long distances, although our understanding of the exact nature of these movements and exchanges is still murky for the earliest civilizations. At least by the times of Teotihuacan and Tollan (Tula), the most relevant civilizations to the Aztecs themselves, specialized production, merchants, markets, and differential consumption patterns can all be seen in the archaeological record (Diehl, 2004; Hirth et al., 2020; Pool, 2012; Stark and Ossa, 2010; Wells, 2012).

As for the various Aztec peoples themselves, they first appear in the Mesoamerican historical saga as *chichimeca*, peoples usually described as nomadic or seminomadic hunters and gatherers who traveled south from the northern Mexican deserts, ultimately settling in highland regions of central Mexico. There were apparently fairly substantial waves of these populations, moving southward over centuries, often stopping here and there for periods of time. They were diverse in social affinities and ethnic identities and exhibited different degrees of societal complexity. The Mexica, as the last of these groups, practiced maize cultivation, built dams and *chinampas*, wore capes (albeit “tattered”) rather than animal skins, constructed temples, had priests, worshipped multiple deities, and were familiar with fine luxuries such as cacao and precious greenstones. It is clear that “the Mexica and many other *chichimeca* were at least somewhat prepared for their transition from a nomadic to a settled lifestyle” (Berdan, 2021: 41; Anderson and Schroeder, 1997).

When they entered the Basin of Mexico, it was already crowded with city-states competing with one another for economic viability and political supremacy (Figure 2). Once settled on their unpromising island site of Tenochtitlan, the Mexica found a niche by successfully serving the powerful city-state of Azcapotzalco as mercenaries. In addition to gaining economic rewards, this service earned them a reputation as fierce warriors. Early on, the Mexica set about constructing a temple for their patron god Huitzilopochtli and began laying out and building their city by trading their lacustrine resources to lakeshore peoples for building materials. They also firmly established a royal dynasty, negotiated strategic elite marriages, and forged advantageous political alliances. Their population grew along with their wealth and reputation. By 1428, just over a century from Tenochtitlan’s founding, the Mexica were recognized as a potentially powerful, competitive, and threatening city-state.

The other city-states in the Basin had rightful cause for worry, for in 1428–30 the Mexica allied with the Acolhua of Texcoco and the Tepaneca of Tlacopan to throw off their dependence on powerful Azcapotzalco. With little hesitation, the

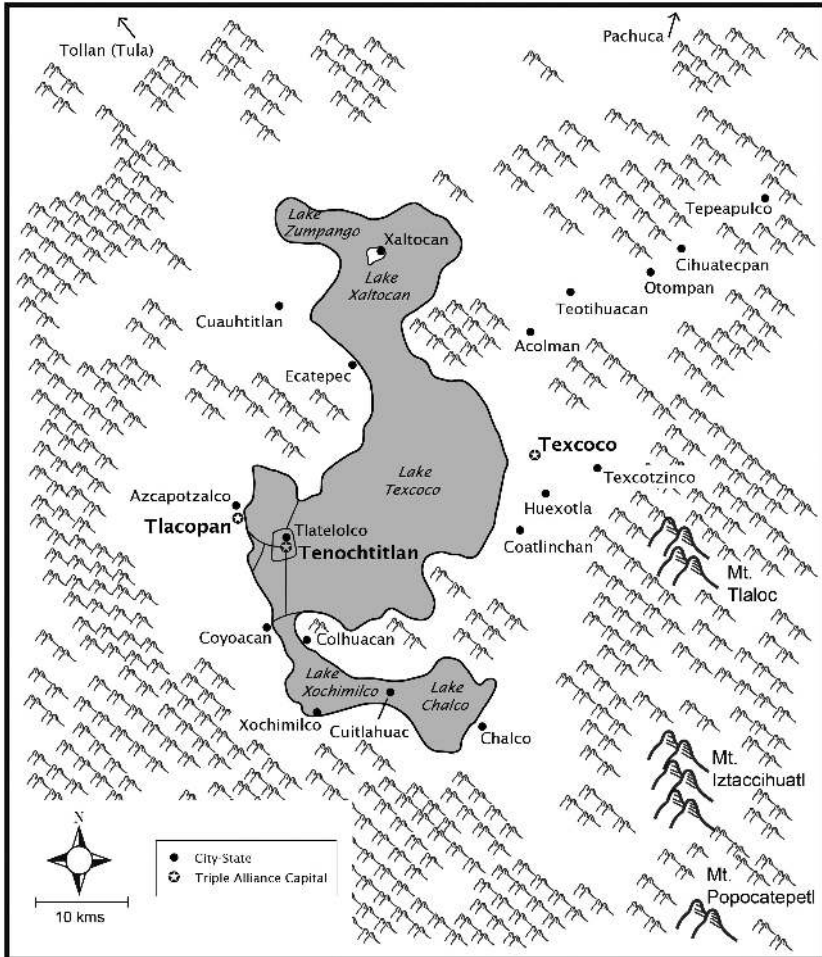


Figure 2 Basin of Mexico city-states. Drawing by Jennifer Berdan Lozano.

rulers of this Triple Alliance embarked on an aggressive agenda of political control through military conquests and cunning alliances. They began with conquests within the Basin itself, moving rapidly beyond that heartland in every direction to attain and consolidate economic and political control on an imperial scale. This involved diverse strategies of empire building through the reigns of six Mexica rulers. There were military conquests and demands of regular payments of tribute – this resulted in domains we customarily call “tribute provinces” that were usually still ruled by their local kings and only loosely controlled by the empire. But conquests were expensive at long distances; the Triple Alliance powers solved this problem by forging asymmetrical alliances along distant hostile borderlands and critical trade routes. These allied

“client states” held those borderlands in check for the empire and protected major commercial networks throughout the imperial domain. We call these “strategic provinces” (Berdan et al., 1996). This may sound straightforward, but the imperial century was uneasy, unsettling, and somewhat unpredictable: Warfare was endemic, conquest motives were fabricated, enemies fomented rebellions, royal ambassadors were assassinated, powerful rulers intimidated, spies spied, and people were sometimes forced to leave their homes in response to military action or natural disasters such as droughts and floods. Enemies became allies, and then back again, almost overnight.

Imperial rulers also engaged some professional merchants (*pochteca* and *oztomeca*) as state agents and spies: They carried their king’s goods beyond imperial boundaries to trade with distant rulers in international trading centers or spied on adversaries in distant marketplaces. As economic entrepreneurs, these merchants traveled far and wide to ferret out economic opportunities that might be exploited by the imperial powers. Additionally, strategic elite marriages continued to be effective in connecting allied and subject rulerships, and the overwhelming military might and expanding wealth of the Triple Alliance powers served to intimidate intractable enemies. But imperial strategies were not always successful and enemies persevered, the most powerful being the Tarascans to the west and Tlaxcalla and its allies to the east. The empire, as we see it in 1519 on the eve of the Spanish conquest, was powerful, wealthy, and intimidating, but at the same time it was loosely controlled and perhaps a bit too sprawling, with rebellions seemingly on the increase.

This was the empire encountered by the Spaniards who, along with their native allies, conquered the Mexica and dismantled the Aztec empire. Economically, the Spaniards introduced foods such as wheat, sugarcane, and grapes (for wine) and domesticated animals such as horses, cattle, mules, donkeys, pigs, sheep, goats, and chickens. They brought iron tools (machetes, knives, plows, and scissors, for example) and practical use of the wheel (for transport, spinning, and pottery production). They introduced distilling (for tequila), candle making, and stringed instruments, as well as large treadle looms for weaving. But many aspects of the pre-Spanish economy persisted: Women continued to weave on backstrap looms, people continued to drink *pulque* from maguey sap, European clothing merged with native garments, and cacao bean money circulated alongside Spanish coins in thriving Indigenous marketplaces.

1.2 Geographic and Cultural Landscapes

The Aztec domain lay entirely within the tropics. While this may suggest geographic uniformity, considerable variations in landscapes exist, largely shaped by rainfall patterns, altitude zones, and topography. Rainfall is seasonal, with the year

divided into wet (May–October) and dry (November–April) seasons. This customary pattern is only a generalization – rains can begin late, appear during the winter months, or not come at all. Summer rainfall often falls in great torrents. Too little or too much rain was a perennial problem for the Aztecs who suffered epic droughts and floods.

A convenient way of comprehending the environmental diversity in Mesoamerica is the oft-used *tierra caliente*, *tierra templada*, and *tierra fria* altitudinal scheme. *Tierra caliente* (hot land) consists of hot, humid lands extending from sea level to an elevation of 1,000 meters (3,280 feet). It encompasses coastal lowlands (Gulf and Pacific) and inland hilly areas that exhibit high rainfall, lush tropical vegetation, diverse wildlife, and the potential for abundant and reliable crop yields. These lands were prized by the Aztecs as sources of cacao, cotton, precious stones, jaguar pelts, and exquisite feathers. *Tierra templada* (temperate land) rose above 1,000 meters to 2,000 meters (6,560 feet) in elevation. Local environments in this zone range from dry scrublands to rolling hills and sprawling grasslands to mountain forests. Rivers and deep barrancas provide definition and drama to these mountain-and-valley landscapes. The Aztec empire targeted this zone for staple foodstuffs and localized resources such as bees' honey, dyes and pigments, paper, gold, copper, and turquoise.

Tierra fria (cold land) lies above 2,000 meters: These are lands of broad highland plateaus, interior-drainage basins, and majestic volcanoes. In Aztec times, *tierra fria* supplied resources such as staple foodstuffs, maguey, timber, obsidian, reeds, clay for pottery, and salt on its abundant arable lands, pine-oak forests, and mountain-rimmed basins with large lakes. One of these, the Basin of Mexico, was the heartland of the Aztec empire. This Basin was dominated by five lakes that coalesced into a single body of water during the rainy season; the lakes themselves offered up an abundance of lacustrine and lakeshore resources, provided the setting for intensive agriculture (*chinampas*), and attracted millions of migratory birds annually. This all sounds quite attractive, but the people frequently faced disasters on a grand scale – droughts, frosts, floods, earthquakes, and vermin infestations interrupted and severely disrupted their daily lives.

By the early sixteenth century, the Mexica city of Tenochtitlan was home to an astounding 200,000–250,000 people, although most Basin cities ranged from around 2,000 to 25,000 people (Smith, 2008: 152). By comparison, Seville's population, for that time, is estimated at 55,000. The Basin itself (at about 7,000 square kilometers or 2,700 square miles) was home to approximately a million people. If we extend our view beyond the Basin to the larger imperial domain, we are talking about perhaps as many as 25 million people spread over approximately 200,000 square kilometers (77,220 square miles).

In the Basin and throughout the empire, in cities and in the countryside, people lived their everyday lives in households – some large, some small, some in-between. The largest of these, royal and noble palaces, contained many rooms, courtyards, and gardens and were exquisitely appointed – all to serve administrative functions and large polygynous families. Houses of commoners ranged from multiroom compounds to single-room dwellings, depending on the householders' status and wealth. Nuclear or extended families, along with other unrelated people, lived and worked in these households; they were the most fundamental social and economic units in Aztec society.

But that is only the beginning of the story. Households were grouped into residential neighborhoods called *calpolli* or *tlaxilacalli*; people were bound together in these neighborhoods through a common leader, patron deity, temple, and military school, along with shared labor, tribute, and ceremonial duties. *Calpolli* combined to form *altepetl*, or city-states, arguably the most important political units in Aztec times. As the basic building blocks of Aztec political life, *altepetl* exhibited “a legitimate ruling dynasty, a sense (if not the actuality) of political autonomy, control over local lands and labor, a well-established founding legend, often with mythological underpinnings, and a patron deity complete with temple” (Berdan, 2014: 135–136). Tribute was assessed and paid by *altepetl*. Some city-states became well-known for particular economic occupations, as exceptional marketplaces, or as pilgrimage destinations. *Altepetl* opportunistically warred and forged alliances with one another, creating a highly volatile political environment.

Spatially, city-states typically consisted of an urban center (capital city) and surrounding rural settlements and farmland. The capital city was the political, economic, and religious hub of the *altepetl*; it was the seat of the city-state's ruler (*tlatoani*, pl. *tlatoque*) and his palace, and it encompassed the major temples, ballcourt, marketplace(s), and other civic buildings. It was the scene of the most spectacular ceremonies held in the city-state. City-states also typically exhibited a predominant ethnicity, although, with many large and small movements and resettlements of people, most were multiethnic and multilingual.

Beyond residence and ethnicity, people were also distinguished by social class. This was an intensely hierarchical system. Rulers and other high-ranking nobles made political decisions, lived grandly, and had important social and economic responsibilities to their communities. Most of the population (perhaps 95 percent) were commoners: farmers, fishermen, porters, midwives, masons, artisans, merchants, and myriad others. They differed considerably in wealth and status, ranging from wealthy professional merchants to humble landless farmers. At the bottom of the social pyramid were slaves who were often attached to others in order to pay off gambling debts or stolen property.

In Aztec times, the Basin of Mexico was crowded with an estimated thirty to fifty *altepetl*. Three of these, Tenochtitlan, Texcoco, and Tlacopan, absorbed the others into their Triple Alliance empire. Beyond the Basin, this empire controlled about 450 city-states by 1519 (Smith, 2003). Household, *calpolli*, *altepetl*, and empire – these were the essential social and political entities within and through which the complex economies of the Aztec world operated.

1.3 Sources

Although flourishing more than 500 years in the past, Aztec economic life can be reconstructed through a variety of sources. The Aztec elite (perhaps exclusively) were literate and produced innumerable pictorial books (*codices*) housed in vast palace and temple libraries. Unfortunately, most of these are now lost, and for the Mexica themselves, perhaps only one codex produced in pre-Spanish times (*Matrícula de Tributos*) has survived. Still, now-lost pictorials sometimes served as the bases of Indigenous and Spanish narratives, and many were composed in the early colonial period by native scribes presenting native content (such as maps, genealogies, histories, and tribute tallies) in native styles. Among the most significant of these are the *Codex Mendoza*, which documents Aztec history, tribute accounts, and daily life (Berdan and Anawalt, 1992), and the *Florentine Codex* compendium, illustrated and written in Nahuatl by native scribes and supervised by the Franciscan friar Sahagún (1950–82).

Most of our available documentation dates from colonial times. Many of these address economic matters: some in Spanish, some in Nahuatl, and some with accompanying illustrations. There are on-the-spot letters and reports by *conquistadores*, as well as their recollections (Cortés, 1928; Díaz del Castillo, 2008; Fuentes, 1963); accounts of Aztec history and culture by Spanish ecclesiastics such as Diego Durán (1971, 1994) and Bernardino de Sahagún (1950–82); and native chronicles by, for instance, Fernando de Alva Ixtlilxochitl (1965) and Fernando Alvarado Tezozomoc (1975). Spaniards interested in making the most of their newly conquered lands undertook censuses of native communities, wrote official reports, and produced a plethora of legal and tax records. Meanwhile, everyday Indigenous people adapted to the new order and produced, in their native languages, documents such as wills, land claims, lawsuits, and complaints (Anderson et al., 1976).

This is a robust and diverse documentary record. It is also flawed. *Conquistadores* wrote self-serving and biased accounts, ecclesiastics were primarily interested in religious conversion, and Spaniards saw their encounters with this new world through Spanish eyes. Indigenous authors often had the

promotion of their own city-state as a major motivation. Some matters, such as women's activities and the daily lives of slaves, are rarely addressed. Still, although the documentary record is incomplete and unbalanced, it is rich and diverse enough to allow us important insights into the Aztec economy.

But there is much more. Archaeological investigations fill in some of the documentary gaps. Available material evidence includes stationary constructions, portable objects (large and small, precious and ordinary), and human biological remains. There are vestiges of lofty temples, grand palaces, smaller houses, shrines, skull racks, ballcourts, warrior assembly rooms, schools, dams, terraces, and multitudinous ritual offerings. There are spectacular monuments. Carefully executed excavations and surveys have been undertaken in the Aztec heartland and in its provinces; those in ancient Tenochtitlan (today's downtown Mexico City) stand out. Numerous religious and civil structures in Tenochtitlan's sacred precinct have been fully or partially excavated and currently 209 ritual caches (containing, collectively, tens of thousands of artifacts) unearthed, greatly expanding our knowledge of the growth of the city and empire (López Austin and López Luján, 2009; López Luján, 2020). Archaeological investigations beyond the Aztec heartland offer perspectives from the conquered (e.g., Smith, 2017; Stark, 2017). Further inroads have been made through sophisticated analytical techniques that refine, for example, materials identification (e.g., Jansen et al., 2019) and sourcing (e.g., Millhauser et al., 2011; Thibodeau et al., 2018). Human remains add to our information assemblage, revealing data on the people themselves: their age and gender, nutrition, ills, occupations, movements, and manners of death (Chávez Balderas, 2020).

As a complement to the documentary record, archaeology serves as a significant and often rich source of information on the Aztec economy. But it too has its drawbacks. After the Spanish conquest, many buildings were leveled and their stones repurposed for Spanish buildings, and Spanish cities were built directly atop native ones (often making archaeological access all but impossible). Many types of objects such as paper and feathers are perishable and rarely survive the ravages of time. Many objects in museums lack useful provenience. Cremation was common, hampering the investigative efforts of bioarchaeologists.

But, on the positive side, there is still more. Today, there are more than two million speakers of the Nahuatl language and millions more who speak other Mesoamerican languages. Other aspects of Indigenous culture have also shown remarkable tenacity: Women still weave cloth on backstrap looms and grind maize on stone *metates*, people pound *Ficus* bark with stone bark beaters to make paper, and hoes and digging sticks are still used in agricultural fields. Sick persons consult *curanderos* and undergo traditional curing ceremonies,

and people perform pilgrimages that embody many ancient practices (Sandstrom, 1991). The intervening 500 years have left their mark on the Indigenous cultures, and many of these technologies and traditions are hybrids (e.g., traditional hoes have steel tips and pilgrims may carry Cheetos on their treks). But enough has persisted to allow us a modern-day glimpse of some pre-Spanish technologies, customs, and beliefs.

1.4 Aims and Scope of this Element

This Element is a synthesis of the Aztec economic system during the last two centuries prior to Spanish contact. It favors no one theoretical posture; the approach here is unabashedly empirical. Collectively, the six sections that follow provide a comprehensive view of the many dimensions of the complex Aztec economy. This approach and organization allow for ease of comparison with other similar economies worldwide.

Section 2 discusses the domestic economy, recognizing that households were the basic units of production and consumption in Aztec society. Considered here are the varying types and scales of domestic economic organization as households secured access to resources, undertook production strategies, and faced opportunities, limitations, and restrictions on consumption. Section 3 covers the institutional economy, discussing economic dimensions of hierarchically arranged social, political, and religious institutions. Covered here are issues of land tenure, labor duties and mobilization, tribute/taxation impositions, palace support systems, special purpose levies, and temple service duties.

Section 4 moves on to economic specialization. Some specialists were full-time, others part-time. Some worked at home, others were attached to royal or noble palaces. Some worked voluntarily, others (like slaves) involuntarily. Economic interdependence was built in since few (if any) people produced all of their needs or perceived needs. This section naturally segues into Section 5: the highly commercialized Aztec economy. Merchants were pivotal actors in moving goods locally and throughout the imperial domain and beyond, markets were bustling and popular venues for exchanging virtually everything, supply and demand forces were at work, and commodity monies such as cacao beans and cotton cloaks facilitated exchanges. Gift exchanges were also instrumental in moving goods in a wide range of social, political, and religious contexts. Section 6 emphasizes changes over time in the Aztec economy, highlighting adjustments made to the changing conditions under imperial rule. Section 7 suggests productive future directions in studies of the Aztec economy. Reference entries provide more detailed and expansive discussions of all the matters treated in this Element.