Maya Scribe  Maya scribes used a complex writing system to record religious concepts and memorialize the actions of their kings. An artisan painted this picture of a scribe on a ceramic plate.
The ancient Mesoamerican civilization of the Maya (MY-ah) developed a complex written language that enabled scribes like the one in this illustration to record the important actions of rulers and military events. Recent translations give us a glimpse into the life of a Maya princess. In late August 682 c.e. the Maya princess Lady Wac-Chanil-Ahau (wac-cha-NEEL-ah-HOW) walked down the steps from her family’s residence and mounted a litter decorated with rich textiles and animal skins. As the procession exited from the urban center of Dos Pilas (dohs PEE-las), her military escort spread out through the fields and woods along its path to prevent ambush by enemies. Lady Wac-Chanil-Ahau’s destination was the Maya city of Naranjo (na-RAHN-hoe), where she was to marry a powerful nobleman. Her father arranged this marriage to reestablish Naranjo’s royal dynasty eliminated when Caracol, the region’s major military power, conquered the city. Lady Wac-Chanil-Ahau’s passage to Naranjo symbolized her father’s desire to forge a military alliance that could resist Caracol. For us, the story of Lady Wac-Chanil-Ahau illustrates the importance of marriage and lineage in the politics of the classic-period Maya.

K’ak Tiliw Chan Chaak (kahk-tee-lew-CHAN-cha-ahk), the son of Lady Wac-Chanil-Ahau, ascended the throne of Naranjo as a five-year-old in 693 c.e. During his long reign he proved to be a careful diplomat and formidable warrior. He was also a prodigious builder, leaving behind an expanded and beautified capital as part of his legacy. Mindful of the importance of his mother and her lineage from Dos Pilas, he erected numerous steles (carved stone monuments) that celebrated her life.¹

The world of Wac-Chanil-Ahau was challenged by warfare and dynastic crisis as population increased and competition for resources grew more violent. In this environment the rise of Caracol undermined long-standing commercial and political relations in much of southern Mesoamerica and led to more than a century of conflict. Eventually, the dynasty created at Dos Pilas by the heirs of Lady Wac-Chanil-Ahau challenged Caracol. Despite a shared culture and religion, the great Maya cities remained divided by the dynastic ambitions of their rulers and by the competition for resources.

As the story of Lady Wac-Chanil-Ahau’s marriage and her role in the development of a Maya dynasty suggests, the peoples of the Americas were in constant...
competition for resources. Members of hereditary elites organized their societies to meet these challenges, even as their ambition for greater power predictably ignited new conflicts. No single set of political institutions or technologies worked in every environment, and enormous cultural diversity existed in the ancient Americas. In Mesoamerica (Mexico and northern Central America) and in the Andean region of South America, Amerindian peoples developed an extraordinarily productive and diversified agriculture. They also built great cities that rivaled the capitals of the Chinese and Roman Empires in size and beauty. The Olmec of Mesoamerica and Chavín (cha-VEEN) of the Andes were among the earliest civilizations of the Americas (see Chapter 2). In the rest of the hemisphere, indigenous peoples adapted combinations of hunting and agriculture to maintain a wide variety of settlement patterns, political forms, and cultural traditions. All the cultures and civilizations of the Americas experienced cycles of expansion and contraction as they struggled with the challenges of environmental change, population growth, and war.

CLASSIC-ERA CULTURE AND SOCIETY IN MESOAMERICA, 200–900

Between about 200 and 900 C.E. the peoples of Mesoamerica created a remarkable civilization. Despite enduring differences in language and the absence of regional political integration, Mesoamericans were unified by similarities in material culture, religious beliefs and practices, and social structures. Building on the earlier achievements of the Olmec and others, the peoples of the area that is now Central America and south and central Mexico developed new forms of political organization, made great strides in astronomy and mathematics, and improved the productivity of their agriculture. Archaeologists call this mix of achievements the classic period. During this period, a growing population traded a greater variety of products over longer distances, and social hierarchies became more complex. Great cities were constructed that served as centers of political life and as arenas of religious ritual and spiritual experience.

Classic-period civilizations built on the religious and political foundations established earlier in Olmec centers (see Chapter 2). Like these earlier centers, the cities of the classic period were built around raised platforms and pyramids devoted to religious functions, but they were more impressive and architecturally diversified. They also had large full-time populations divided into classes and dominated by hereditary political and religious elites who controlled nearby towns and villages and imposed their will on the rural peasantry.

The political and cultural innovations of this period did not depend on the introduction of new technologies. The agricultural foundations of Mesoamerican civilization were in place centuries earlier. Major innovations in agriculture such as irrigation, the draining of wetlands, and the terracing of hillsides had all been in place for more than a thousand years when great cities were first developed around 200 C.E. Instead, the achievements of the classic era depended on the ability of increasingly powerful elites to organize and command growing numbers of laborers and soldiers.

Teotihuacan

Located about 30 miles (48 kilometers) northeast of modern Mexico City, Teotihuacan [teh-o-tee-WAH-kahn] (100 C.E.–750 C.E.) was one of Mesoamerica’s most important classic-period civilizations (see Map 11.2 on page 318). At the height of its power around 450 C.E., it was the largest city in the Americas. With between 125,000 and 150,000 inhabitants, it was larger than all but a small number of contemporary European and Asian cities.

Religious architecture rose above a city center aligned with nearby sacred mountains that reflected the movement of the stars. The people of Teotihuacan recognized and worshiped many gods and lesser spirits. Enormous pyramids dedicated to the Sun and Moon and more than twenty smaller temples devoted to other gods were arranged along a central avenue. They
dedicated the largest pyramids to the Sun and the Moon and to Quetzalcoatl (kate-zahl-CO-ah-tal), the feathered serpent, a culture-god believed to be the originator of agriculture and the arts. Murals suggest that another pair of powerful gods, the storm-god Tlaloc and a powerful female god associated with fertility, were also central figures in the city’s religious life. Like the earlier

The Temple of the Sun  The temple of the sun is the largest pyramid in Tenochtitlan. The smaller temple of Quetzalcoatl displays the serpent images associated with this culture god common to most Mesoamerican civilizations.
Olmec, people living at Teotihuacan practiced human sacrifice, illustrated by the discovery of more than a hundred sacrificial victims during the excavation of the temple of Quetzalcoatl. Scholars believe that residents viewed sacrifice as a sacred duty to the gods and as essential to the well-being of society.

The rapid growth in urban population initially resulted from a series of volcanic eruptions that disrupted agriculture. Later, as the city elite increased their power, they forced farm families from the smaller villages in the region to relocate to the urban core. As a result, more than two-thirds of the city’s residents retained their dependence on agriculture, walking out from urban residences to their fields. The elite organized the city’s growing labor resources to bring marginal lands into production, drain swamps, construct irrigation canals, and build terraces into hillside. They also expanded the use of chinampas (chee-NAM-pahs), sometimes called “floating gardens.” These were narrow artificial islands constructed along lakeshores or in marshes by farmers who heaped lake muck and waste material on beds of reeds and anchored them to the shore. Chinampas permitted year-round agriculture—because of subsurface irrigation and resistance to frost—and thus played a crucial role in sustaining the region’s growing population.

The city’s role as a religious center and commercial power provided both divine approval of and a material basis for the elite’s increased wealth and status. Members of the elite controlled the state bureaucracy, tax collection, and commerce. Their rich and ornate clothing, their abundant diet, and their large, well-made residences signaled the wealth and power of aristocratic families. Temple and palace murals make clear the central position and great prestige of the priestly class as well. Teotihuacan’s economy and religious influence drew pilgrims from as far away as Oaxaca and Veracruz. Many became permanent residents.

Unlike the other classic-period civilizations, the people of Teotihuacan did not concentrate power in the hands of a single ruler. Although the ruins of their impressive housing compounds demonstrate the wealth and influence of the city’s aristocracy, there is no clear evidence that individual rulers or a ruling dynasty gained overarching political power. In fact, some scholars suggest that alliances among elite families or weak kings who were the puppets of these powerful families ruled Teotihuacan.

Historians debate the role of the military in the development of Teotihuacan. The absence of walls or other defensive structures before 500 C.E. suggests that Teotihuacan enjoyed relative peace during its early development. Archaeological evidence, however, reveals that the city created a powerful military to protect long-distance trade and to compel peasant agriculturalists to transfer their surplus production to the city. Unlike later postclassic civilizations, however, Teotihuacan was not an imperial state controlled by a military elite.

It is unclear what forces brought about the collapse of Teotihuacan about 750 C.E. By 500 C.E. the urban population had declined to about 40,000 and the city’s residents had begun to build defensive walls. Pictorial evidence from murals indicates that the city’s final decades were violent. Scholars have uncovered evidence that the elite had mismanaged resources. Resulting divisions among the ruling elite then led to class conflict and the breakdown of public order. As a result, the most important temples in the city center were destroyed and religious images defaced. Evidence also shows that elite palaces were systematically burned and many of their residents killed. Regardless of the causes, the eclipse of Teotihuacan was felt throughout Mexico and into Central America.

The Maya

During Teotihuacan’s ascendancy in the north, the Maya developed an impressive civilization in the region that today includes Guatemala, Honduras, Belize, and southern Mexico (see Map 11.1). Given the difficulties imposed by a tropical climate and fragile soils, the cultural and architectural achievements of the Maya were remarkable. Although they shared a single culture, the Maya never created a single, unified state. Instead, rival kingdoms led by hereditary rulers struggled with each other for regional dominance, much like the Mycenaean-era Greeks (see Chapter 3).

Today Maya farmers prepare their fields by cutting down small trees and brush and then burning the dead vegetation to fertilize the land. Such swidden agriculture (also called shifting agriculture or slash and burn agriculture) can produce high yields for a few years. However,
The Great Plaza at Tikal  The impressive architectural and artistic achievements of the classic-era Maya are still visible in the ruins of Tikal, in modern Guatemala. Maya centers provided a dramatic setting for the rituals that dominated public life. Construction of Tikal began before 150 B.C.E.; the city was abandoned about 900 C.E. A ball court and residences for the elite were part of the Great Plaza.

MAP 11.1  Maya Civilization, 250–1400 C.E. The Maya never created an integrated and unified state. Instead Maya civilization developed as a complex network of independent city states.

it uses up the soil’s nutrients, eventually forcing farmers to move to more fertile land. The high population levels of the Maya classic period (250–900 C.E.) required more intensive forms of agriculture. Maya living near the major urban centers achieved high agricultural yields by draining swamps and building elevated fields. They used irrigation in areas with long dry seasons, and they terraced hillsides in the cooler highlands. Maya agriculturists also managed nearby forests, favoring the growth of the trees and shrubs that were most useful to them, as well as promoting the conservation of deer and other animals hunted for food.

During the classic period, Maya city-states proliferated. The most powerful cities controlled groups of smaller dependent cities and a broad agricultural zone by building impressive religious temples and by creating rituals that linked the power of kings to the gods. Open plazas were surrounded by high pyramids and by elaborately decorated palaces often built on high ground or on constructed mounds. The effect was to awe the masses drawn to the centers for religious and political rituals.
The Maya loved decoration. Carved decorations painted in bright colors covered nearly all public buildings. Religious allegories, the genealogies of rulers, and important historical events were the most common motifs. The Maya also erected beautifully carved altars and stone monoliths near major temples. This rich legacy of monumental architecture was constructed without the aid of wheels—no pulleys, wheelbarrows, or carts—or metal tools. Masses of men and women aided only by levers and stone tools cut and carried construction materials and lifted them into place.

The Maya divided the cosmos into three layers connected along a vertical axis that traced the course of the sun. The earthly arena of human existence held an intermediate position between the heavens, conceptualized by the Maya as a sky-monster, and a dark underworld. The Maya believed that a sacred tree rose through the three layers; its roots were in the underworld, and its branches reached into the heavens. The temple precincts of Maya cities physically represented essential elements of this religious cosmology. The pyramids were sacred mountains reaching to the heavens. The doorways of the pyramids were portals to the underworld.

Rulers and other members of the elite served both priestly and political functions. They decorated their bodies with paint and tattoos and wore elaborate costumes of textiles, animal skins, and feathers to project both secular power and divine sanction. These lords communicated directly with the supernatural residents of the other worlds and with deified royal ancestors through bloodletting rituals and hallucinogenic trances.

The Maya infused warfare with religious meaning and celebrated it in elaborate rituals. Battle scenes and the depiction of the torture and sacrifice of captives were frequent decorative themes. Typically, Maya military forces fought to secure captives rather than territory. The king, his kinsmen, and other ranking nobles actively participated in war. Elite captives were nearly always sacrificed; captured commoners were more likely to be forced to labor for their captors.

Few women directly ruled Maya kingdoms, but Maya women of the ruling lineages did play important political and religious roles. The consorts of male rulers participated in bloodletting rituals and in other important public ceremonies, and their noble blood helped legitimate the rule of their husbands. Although Maya society was patrilineal (tracing descent in the male line), there is clear evidence that some male rulers traced their lineages bilaterally (in both the male and female lines). Others, like Lady Wac-Chanil-Ahau’s son discussed earlier, emphasized the female line if it held higher status. Little is known about the lives of poorer women, but scholars believe that women played a central role in the religious rituals of the home. They were also heal-
Teotihuacan, one of the largest Mesoamerican cities, was ruled by elites who used religious rituals and military power to legitimize their authority over the many laborers who worked the surrounding fields.

Teotihuacan’s impressive urban architecture, complex agriculture, and extensive trade made it a dominating cultural presence throughout Mesoamerica. Its collapse around 750 C.E. resulted from conflicts within the elite and resource mismanagement.

The Maya shared a single culture but never created a single, unified state. Instead the Maya developed numerous powerful city-states. Each city, filled with highly decorated monumental architecture, was a religious and political center for the surrounding region.

Religious architecture dominated the centers of Teotihuacan and Maya cities. Many gods were worshipped and religious ritual, including, human sacrifice, organized collective life.

The Maya devised an elaborate calendar system, the concept of zero, and writing.

After centuries of expansion, the power of the Maya cities declined due to an intensified struggle for resources, leading to class conflict and warfare.

The End of the Classic Era

AP* Exam Tip  It is important to understand the rise and decline of the Maya.

The Postclassic Period in Mesoamerica, 900–1500

The division between the classic and postclassic periods is somewhat arbitrary. Not only is there no single explanation for the collapse of Teotihuacan and many of the major Maya centers, but these events occurred over more than a century and a half. In fact, some important classic-period civilizations survived unscathed while elsewhere the essential cultural characteristics of the classic period survived in the postclassic era.

At the same time, there were some important differences between the periods. There is evidence that the population of Mesoamerica expanded during the postclassic period. Resulting pressures led to an intensification of agricultural practices and to increased warfare. The governing elites of the major postclassic states—the Toltecs and the Aztecs—responded to these
The Toltecs

While modern archaeology has revealed the civilizations of the Maya and Teotihuacan in previously unimaginable detail, the history of the Toltecs (TOLL-tek) remains in dispute. The Aztecs regarded the Toltecs as powerful and influential predecessors, much as the Romans regarded the Greeks. Memories of Toltec military achievements and the violent imagery of their political and religious rituals dominated the Mesoamerican imagination throughout the late postclassic period. The Aztecs and their fifteenth-century contemporaries erroneously believed that the Toltecs were the source of nearly all the great cultural achievements of the Mesoamerican world. As one Aztec source later recalled:

In truth [the Toltecs] invented all the precious and marvelous things. . . . All that now exists was their discovery. . . . And these Toltecs were very wise; they were thinkers, for they originated the year count, the day count. All their discoveries formed the book for interpreting dreams. . . . And so wise were they [that] they understood the stars which were in the heavens.2

In fact, all these contributions to Mesoamerican culture were in place long before Toltec power spread across central Mexico. Some scholars speculate that the Toltecs were originally a satellite population that Teotihuacan had placed on the northern frontier to protect against the incursions of nomads. Others suggest that the Toltecs were migrants from the north who later borrowed from the cultural legacies of Teotihuacan and other cultures. Regardless of their origins, it is clear that the Toltecs created a state based largely on military power, which they used to extend their influence from their political capital at Tula (TOO-la) (also called Tollan; founded in 968 C.E.) north of modern Mexico City to Central America.

Until recently historians relied primarily on sources from the era of European conquests. According to these sources, two chieftains or kings shared power, and this division of responsibility eventually weakened Toltec power. Sometime after 1150 C.E. a struggle between elite groups identified with rival religious cults undermined the Toltecs. Legends that survived among the Aztecs claimed that Topiltzin (tow-PELT-zeen)—one of the two rulers and a priest of the cult of Quetzalcoat—and his followers bitterly accepted exile in the east, “the land of the rising sun.” One of the ancient texts relates these events in the following manner:

Thereupon he [Topiltzin] looked toward Tula, and then wept. . . . And when he had done these things . . . he went to reach the seacoast. Then he fashioned a raft of serpents. When he had arranged the raft, he placed himself as if it were his boat. Then he set off across the sea.3

Similarities in architecture and urban planning in the Toltec heartland and in some Maya postclassic centers, like Chichen Itza (CHEECH-ehn EET-zah) in the Yucatán Peninsula, led some scholars to suggest a Toltec presence in the Maya region. Scholars now dispute this linkage.

We do know that the Toltec state entered a period of steep decline after 1150 C.E. that included internal power struggles and a military threat from the north. By 1175 disaster had befallen the once-great city of Tula. Scholars generally agree that a site north of Mexico City includes the ruins of this once powerful city (see Map 11.2). Its public architecture features colonnaded patios and numerous temples in the Toltec style. Representations of warriors and scenes suggesting human sacrifice decorate nearly all public buildings and temples. Even in ruins, the grandeur, creativity, and power of the Toltecs as celebrated by the Aztecs are visible at Tula.

The Aztecs

The Mexica (meh-SHE-ca) were among the northern peoples who pushed into central Mexico in the wake of the Toltec collapse. As their power grew through political alliances and military conquest, they created a Mexica-dominated regional power called the Aztec Empire (see Map 11.2). At the time of their arrival the Mexica were organized as an altepetl (al-TEH-PEH-tel), an
Costumes of Aztec Warriors
In Mesoamerican warfare individual warriors sought to gain prestige and improve their status by taking captives. An Amerindian artist employed by the Franciscans produced this illustration in the sixteenth-century Codex Mendoza. It shows the Aztecs’ use of distinctive costumes to acknowledge the prowess of warriors. The individual on the bottom right shown without a weapon was a military leader. As was common in Mesoamerican illustrations of military conflict, the captives, held by their hair, are shown kneeling before the victors.

Ethnic State Led by a Tlatoani
The Postclassic Period in Mesoamerica, 900–1500

The ethnic state led by a tlatoani (tlah-toh-AHN-ee) or ruler. The altepetl, the common political building block across the region, directed the collective religious, social, and political obligations of the ethnic group. A group of calpolli (cal-POH-yee), each with up to a hundred families, served as the foundation of the altepetl, controlling land allocation, tax collection, and local religious life.

In their new environment the Mexica began to adopt the political and social practices that they found among the urbanized agriculturalists of the valley. At first, they served their more powerful neighbors as serfs and mercenaries. As their strength grew, they relocated to small islands near the shore of Lake Texcoco, and around 1325 c.e. they began the construction of their twin capitals, Tenochtitlan (teh-noch-TIT-lan) and Tlatelolco (tla-teh-LOHL-coh) (together the foundation for modern Mexico City).

Military successes allowed the Mexica to seize control of additional agricultural land along the lakeshore and to forge military alliances with neighboring altepetl. Once these more complex political and economic arrangements were in place, the Mexica-dominated alliance became the Aztec Empire (see Map 11.2). With increased economic independence, greater political security, and territorial expansion, the Aztecs transformed their political organization by introducing a monarchical system similar to that found in more powerful neighboring states. A council of powerful aristocrats selected new rulers from among male members of the ruling lineage. Once selected, the ruler had to renegotiate the submission of tribute dependencies and then demonstrate his divine mandate by undertaking a new round of military conquests. For the Aztecs war was infused with religious meaning, providing the ruler with legitimacy and increasing the prestige of successful warriors.

The Aztecs succeeded in developing a remarkable urban landscape. The population of Tenochtitlan and Tlatelolco combined with that of the cities and towns of the surrounding lakeshore was approximately 500,000 by 1500 c.e. Three causeways connected this island capital to the lakeshore. Planners laid out the urban center as a grid where canals and streets intersected at right angles to facilitate the movement of people and goods.
Although warfare gave increased power and privilege to males, women held substantial power and exercised broad influence in Aztec society. The roles of women and men were clearly distinguished, but women were held in high esteem. Scholars call this “gender complementarity.” Following the birth of a boy, his umbilical cord was buried on the battlefield and he was given implements to signal his occupation or his role as a warrior. In the case of a girl, her umbilical cord was buried near the hearth and she was given weaving implements and female clothing. Women dominated the household and the markets, and they also served as teachers and priestesses. They were also seen as the founders of lineages, including the royal line.

Aztec military successes and territorial expansion allowed the warrior elite to seize land and peasant labor as spoils of war. In time, the royal family and highest-ranking members of the aristocracy possessed extensive estates that were cultivated by slaves and landless commoners. The lower classes received some material rewards from imperial expansion but lost most of their ability to influence or control decisions. Some commoners were able to achieve some social mobility through success on the battlefield.

However, by 1500 C.E. great inequalities in wealth and privilege characterized Aztec society. One of the Spaniards who participated in the conquest of the Aztec Empire remembered his first meeting with the Aztec ruler Moctezuma [mock-teh-ZU-ma] II (r. 1502–1520): “Many great lords walked before the great Montezuma [Moctezuma II], sweeping the ground on which he was to tread and laying down cloaks so that his feet should not touch the earth. Not one of these chieftains dared look him in the face.” While commoners lived in small dwellings and ate a limited diet of staples, members of the nobility lived in large, well-constructed, two-story houses and consumed a diet rich in animal protein.

A specialized class of merchants controlled long-distance trade. Given the absence of draft animals and wheeled vehicles, lightweight and valuable products like gold, jewels, feathered garments, cacao, and animal skins dominated this commerce. Merchants also provided essential political and military intelligence for the Aztec elite. Although merchants became wealthy and powerful as the Aztecs expanded their empire, they were denied the privileges of the high nobility, which was jealous of its power.
The Aztec state met the challenge of feeding an urban population of approximately 150,000 by efficiently organizing the labor of the calpolli and of additional laborers sent by defeated peoples to expand agricultural land. Aztec chinampas contributed maize, fruits, and vegetables to the markets of Tenochtitlan. The imposition of a tribute system on conquered peoples also helped relieve some of the pressure of Tenochtitlan’s growing population. Unlike the tribute system of Tang China, where tribute had a more symbolic character (see Chapter 10), one-quarter of the Aztec capital’s food requirement was satisfied by tribute payments of maize, beans, and other foods sent by nearby political dependencies.

Like commerce throughout the Mesoamerican world, Aztec commerce was carried on without money and credit. Barter was facilitated by the use of cacao, quills filled with gold, and cotton cloth as standard units of value to compensate for differences in the value of bartered goods. Aztec expansion facilitated the integration of producers and consumers in the central Mexican economy. Hernán Cortés (1485–1547), the Spanish adventurer who eventually conquered the Aztecs, expressed his admiration for the abundance of the Aztec marketplace:

*One square in particular is twice as big as that of Salamanca and completely surrounded by arcades where there are daily more than sixty thousand folk buying and selling. Every kind of merchandise such as may be met with in every land is for sale. . . . There is nothing to be found in all the land which is not sold in these markets, for over and above what I have mentioned there are so many and such various things that on account of their very number . . . I cannot detail them.*

Religious rituals dominated public life in Tenochtitlan. Like the other cultures of the Mesoamerican world, the Aztecs worshiped a large number of gods. Most of these gods had a dual nature—both male and female. The chief god of the Mexica was Huitzilopochtli *(wheat-zeel-oh-POSHT-lee)* or southern hummingbird. Originally associated with war, the Aztecs later identified this god with the Sun. Tenochtitlan was architecturally dominated by a great twin temple devoted to Huitzilopochtli and Tlaloc, the storm-god, symbolizing the two bases of the Aztec economy: war and agriculture.

The Aztecs believed that Huitzilopochtli required a diet of human hearts to sustain him in his daily struggle to bring the Sun’s warmth to the world. Sacrifices were devoted to other gods as well. Although human sacrifice had been practiced since early times in Mesoamerica, the Aztecs and other societies of the late postclassic period transformed this religious ritual by dramatically increasing its scale. Military expansion and conquest had become the basis of empire and sacrifice its ritual center.

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**SECTION REVIEW**

- In the postclassic era, large, professional militaries allowed Mesoamerican elites to create empires through conquest, resulting in increasingly hierarchical societies.
- The Toltecs used military conquest to create a powerful empire with its capital at Tula. Their influence spread across central Mexico.
- After the Toltecs, the Aztecs gradually built an empire from their island center of Tenochtitlan, which became powerful from forced transfers of labor and goods from defeated peoples.
- The Aztec religion, reflecting this permanent state of war, demanded increasing numbers of human sacrifices.
- Aztec merchants controlled long-distance trade, and Aztec women had substantial power.

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**NORTHERN PEOPLES**

By the end of the classic period in Mesoamerica, around 900 C.E., important cultural centers had appeared in the southwestern desert region and along the Ohio and Mississippi River Valleys of what is now the United States (see Map 11.3). In both regions improved agricultural productivity and population growth led to increased urbanization and more complex social and political structures. In the Ohio Valley Amerindian peoples who depended on locally domesticated seed crops as well as traditional hunting and gathering developed large villages with monumental
Earthworks. The introduction of maize, beans, and squash into this region from Mesoamerica after 1000 B.C.E. played an important role in the development of complex societies.

In both the southwestern desert and the eastern river valleys, growing populations built large-scale irrigation projects as they came to depend on maize as a dietary staple. This development is a sign of increasingly centralized political power and growing social stratification. The two regions, however, evolved different political traditions. The Anasazi (ah-nah-SAHzee) and their neighbors in the southwest maintained a relatively egalitarian social structure and retained collective forms of political organization based on kinship and age. The mound builders of the eastern river valleys evolved more hierarchical political institutions: groups of small
towns were subordinate to a political center ruled by a hereditary chief who wielded both secular and religious authority.

Southwestern Desert Cultures

Around 300 B.C.E. in what is today Arizona, contacts with Mexico led to the introduction of agriculture based on irrigation. Because irrigation allowed the planting of two crops per year, the population grew and settled village life soon appeared. Of all the southwestern cultures, the Hohokam of the Salt and Gila River Valleys show the strongest Mexican influence. Hohokam sites have platform mounds and ball courts similar to those of Mesoamerica. Hohokam pottery, clay figurines, cast copper bells, and turquoise mosaics also reflect Mexican influence. By 1000 C.E. the Hohokam had constructed an elaborate irrigation system. Hohokam agricultural and ceramic technology spread over the centuries to neighboring peoples, but it was the Anasazi to the north who left the most vivid legacy of these desert cultures.

Archaeologists use Anasazi, a Navajo word meaning “ancient ones,” to identify a number of dispersed, though similar, desert cultures located in what is now the Four Corners region of Arizona, New Mexico, Colorado, and Utah (see Map 11.3). Between 450 and 750 C.E. the Anasazi developed an economy based on maize, beans, and squash. Their successful adaptation of these crops permitted the formation of larger villages and led to an enriched cultural life centered in underground buildings called kivas. They produced pottery decorated with geometric patterns,
learned to weave cotton cloth, and, after 900 C.E., began to construct large multistory residential and ritual centers.

One of the largest Anasazi communities was located in Chaco Canyon in what is now northwestern New Mexico. There were eight large towns in the canyon and four more on surrounding mesas, suggesting a regional population of 15,000. Pueblo Bonito (founded in 915 C.E.) had more than 650 rooms arranged in a four-story block of residences and storage rooms; it also had thirty-eight kivas, including a great kiva more than 65 feet (20 meters) in diameter. Hunting, trade, and the need to maintain irrigation works often drew men away from the village. Women shared in agricultural tasks, were specialists in many crafts, and were responsible for food preparation and childcare. If the practice of the modern Pueblos, cultural descendants of the Anasazi, is a guide, houses and furnishings may have belonged to the women, who formed extended families with their mothers and sisters.

At Chaco Canyon the high-quality construction, the size and number of kivas, and the system of roads linking the canyon to outlying towns all suggest that Pueblo Bonito and its nearest neighbors exerted some kind of political and religious dominance over a large region. Some archaeologists have suggested that the Chaco Canyon culture originated as a colonial appendage of Mesoamerica, but the archaeological record provides little evidence for this theory. Merchants from Chaco did provide Toltec-period peoples of northern Mexico with turquoise in exchange for shell jewelry, copper bells, macaws, and trumpets, but these exchanges occurred late in Chaco’s development. More importantly, the signature elements of Mesoamerican influence, such as pyramid-shaped mounds and ball courts, are missing at Chaco.

The abandonment of the major sites in Chaco Canyon in the twelfth century most likely resulted from a long drought that undermined the culture’s fragile agricultural economy. Nevertheless, the Anasazi continued in the Four Corners region for more than a century after the abandonment of Chaco Canyon. There were major centers at Mesa Verde in present-day Colorado and at Canyon de Chelly and Kiet Siel in Arizona. Anasazi constructed these settlements in large natural caves high above valley floors. These hard-to-reach locations suggest increased levels of warfare, probably provoked by population pressure on limited arable land.

### Mound Builders: The Hopewell and Mississippian Cultures

From around 100 C.E., the Hopewell culture spread through the Ohio River Valley. Hopewell people constructed large villages and monumental earthworks. Once established, Hopewell influence spread west to Illinois, Michigan, and Wisconsin, east to New York and Ontario, and south to Alabama, Louisiana, Mississippi, and even Florida (see Map 11.3). For the necessities of daily life Hopewell depended on hunting and gathering and a limited agriculture. Hopewell is an early example of a North American chieftain—populations as large as 10,000 and rule by a chief, a hereditary leader with both religious and secular responsibilities. Chiefs organized periodic rituals of feasting and gift giving to link diverse kinship groups and guarantee access to specialized crops and craft goods. They also managed long-distance trade for luxury goods and additional food supplies.

The largest Hopewell towns in the Ohio River Valley had several thousand inhabitants and served as ceremonial and political centers. Large mounds built to house burials and serve as platforms for religious rituals dominated major Hopewell centers. Some mounds were oriented to reflect sunrise and moonrise patterns. They buried deceased leaders in vaults surrounded by valuable goods such as river pearls, copper jewelry, and, in some cases, women and retainers who may have been sacrificed to accompany a dead chief into the afterlife. The abandonment of major sites around 400 C.E. marked the decline of Hopewell culture.

Hopewell culture influenced the later development of Mississippian culture (800–1500 C.E.). As in the case of the Anasazi, some experts have suggested that contacts with Mesoamerica influenced Mississippian culture, but there is no convincing evidence to support this theory. It is true that maize, beans, and squash, all first domesticated in Mesoamerica, were crucial to the urbanized Mississippian culture. But these plants and related technologies were most likely acquired via intervening cultures.

The development of urbanized Mississippian chiefdoms resulted instead from the accumulated effects of small increases in agricultural productivity, the adoption of the bow and arrow, and the expansion of trade networks. An improved economy led to population growth, the build-
Environmental changes probably undermined both Anasazi and its largest city, Cahokia, at the site of East St. Louis. The political organization, trade practices, and mound building were continued by the Mississippian culture, with ritual life centered on large mounds.

The political organization, trade practices, and mound building of Hopewell were continued by the Mississippian culture, with its largest city, Cahokia, at the site of East St. Louis.

Environmental changes probably undermined both Anasazi and Mississippian cultures.

Cultural Response to Environmental Challenge

From the time of Chavín (see Chapter 2) all of the great Andean civilizations succeeded in connecting the distinctive resources of the coastal region, with its abundant fisheries and irrigated maize fields, to the mountainous interior with its herds of llamas and rich mix of grains and tubers. Both regions faced significant environmental challenges. Droughts and shifting sands that clogged irrigation works periodically overwhelmed the coastal region’s fields and the mountainous interior presented enormous environmental challenges, since it averaged between 250 and 300 frosts per year.

The development of compensating technologies required an accurate calendar to time planting and harvests and the domestication of frost-resistant varieties of potatoes and grains. Native peoples learned to practice dispersed farming at different altitudes to reduce risks from frosts.
Andean lineage group or kin-based community.

mit'a Andean labor system based on shared obligations to help kinsmen and work on behalf of the ruler and religious organizations.

MAP 11.4 Andean Civilizations, 200 B.C.E.–1532 C.E.

In response to environmental challenges posed by an arid coastal plain and high interior mountain ranges, Andean peoples made complex social and technological adaptations. Irrigation systems, the domestication of the llama, metallurgy, and shared labor obligations helped provide a firm economic foundation for powerful, centralized states. In 1532 the Inca Empire’s vast territory stretched from modern Chile in the south to Colombia in the north.

and they terraced hillsides to create micro environments within a single area. They also discovered how to use the cold, dry climate to produce freeze-dried vegetable and meat products that prevented famine when crops failed. The domestication of the llama and alpaca also proved crucial, providing meat, wool, and long-distance transportation that linked coastal and mountain economies.

It was the clan, or ayllu (ay-LOO), that provided the foundation for Andean achievement. Members of an ayllu held land communally. Ayllu members thought of each other as brothers and sisters and were obligated to aid each other in tasks that required more labor than a single household could provide. These reciprocal obligations provided the model for the organization of labor and the distribution of goods at every level of Andean society. Just as individuals and families were expected to provide labor to kinsmen, members of an ayllu were expected to provide labor and goods to their hereditary chief.

With the development of territorial states ruled by hereditary aristocracies and kings after 1000 B.C.E., these obligations were organized on a larger scale. The mit’a (MEET-ah) was a rotational labor draft that organized members of ayllus to work the fields and care for the llama and alpaca herds owned by religious establishments, the royal court, and the aristocracy. Each ayllu contributed a set number of workers for specific tasks each year. Mit’a laborers built and maintained roads, bridges, temples, palaces, and large irrigation and drainage projects. They produced textiles and goods essential to ritual life, such as beer made from maize and cocoa (dried leaves chewed as a stimulant and now also the source of cocaine).

Andeans divided work along gender lines, but the work of men and women was interdependent. Hunting, military service, and government were largely reserved for men. Women had numerous responsibilities in textile production, agriculture, and the home. One early Spanish commentator described the responsibilities of Andean women in terms that emphasize the importance of their labor power:

"[T]hey did not just perform domestic tasks, but also [labored] in the fields, in the cultivation of their lands, in building houses, and carrying burdens... [A]nd more than once I heard that while women were carrying these burdens, they would feel labor pains, and giving birth, they would go to a place where there was water and wash the baby and themselves. Putting the baby on top of the load they were carrying, they would then continue walking as before they gave birth. In sum, there was nothing their husbands did where their wives did not help."

The ayllu was intimately tied to a uniquely Andean system of production and exchange. Because the region’s mountain ranges created a multitude of small ecological areas with specialized resources, each community sought to control a variety of environments so as to guarantee access to essential goods. Coastal regions produced maize, fish, and cotton. Mountain valleys contributed quinoa (the local grain) as well as potatoes and other tubers. Higher elevations contributed the wool and meat of llamas and alpacas, and the Amazonian region provided coca...
and fruits. Ayllus sent out colonists to exploit the resources of these distinct ecological niches, retaining the loyalty of the colonists by arranging marriages and coming together for rituals. Historians commonly refer to this system of controlled exchange across ecological boundaries as vertical integration, or verticality.

Moche

Around 200 C.E., some four centuries after the collapse of Chavín (see Chapter 2), the Moche (MO-che) developed cultural and political tools that allowed them to dominate the north coastal region of Peru. Although they did not establish a formal empire or create unified political structures, they exercised authority over a broad region. The most powerful of the Moche urban centers, such as Cerro Blanco located near the modern Peruvian city of Trujillo (see Map 11.4), established hegemony over smaller towns and villages and then extended political and economic control over more distant neighbors militarily.

Archaeological evidence indicates that the Moche cultivated maize, quinoa, beans, manioc, and sweet potatoes with the aid of massive irrigation works, a complex network of canals and aqueducts that connected fields with water sources as far away as 75 miles (121 kilometers). Moche rulers forced commoners and subject peoples to build and maintain these hydraulic works. The Moche relied on large herds of alpacas and llamas to transport goods across the region’s difficult terrain. Their wool, along with cotton provided by farmers, provided the raw material for the thriving Moche textile production. Their meat provided an important part of the diet.

Evidence from surviving murals and decorated ceramics suggests that Moche society was highly stratified and theocratic. Wealth and power was concentrated, along with political control, in the hands of priests and military leaders. The military conquest of neighboring regions reinforced hierarchy. Because the elite constructed their residences atop large platforms at Moche ceremonial centers, the powerful literally looked down on commoners. Their power was also apparent in their rich clothing and jewelry, which confirmed their divine status and set them farther apart from commoners. Moche rulers and other members of the elite wore tall headdresses and rich garments. The use of gold jewelry also marked high social position.

Moche burial practices reflected these deep social distinctions. A recent excavation in the Lambayeque Valley discovered the tomb of a warrior-priest buried with a rich treasure of gold, silver, and copper jewelry, textiles, feather ornaments, and shells (see Diversity and Dominance: Burials as Historical Texts). A group of retainers and servants were executed and then buried with this powerful man in order to serve him in the afterlife.

Most commoners, on the other hand, devoted their time to subsistence farming and to the payment of labor dues owed to their ayllu and to the elite. Both men and women were involved in agriculture, care of llama herds, and the household economy. They lived with their families in one-room buildings clustered in the outlying areas of cities and in surrounding agricultural zones.

The high quality of Moche textiles, ceramics, and metallurgy indicates the presence of numerous skilled artisans. Women had a special role in the production of textiles, and even elite women devoted time to weaving. Moche culture developed a brilliant representational art. Craftsmen produced highly individualized portrait vases and decorated other ceramics with...
Efforts to reveal the history of the Americas before the arrival of Europeans depend on the work of archaeologists. The burials of rulers and other members of elites can be viewed as historical texts that describe how textiles, precious metals, beautifully decorated ceramics, and other commodities were used to reinforce the political and cultural power of ruling lineages. In public, members of the elite were always surrounded by the most desirable goods and rarest products as well as by elaborate rituals and ceremonies. The effect was to create an aura of godlike power. The material elements of political and cultural power were also integrated into the experience of death and burial as members of the elite were sent into the afterlife.

The first photograph is of an excavated Moche tomb in Sipán, Peru. The Moche (200–ca. 700 C.E.) were one of the most important of the pre-Inca civilizations of the Andean region. They were masters of metallurgy, ceramics, and textiles. The excavations at Sipán revealed a “warrior-priest” buried with an amazing array of gold ornaments, jewels, textiles, and ceramics. Also buried with him were five human sacrifices, two women, perhaps wives or concubines, two male servants, and a warrior. Three of these victims—the warrior, one woman, and a male servant—are each missing a foot, perhaps cut off to guarantee their continued faithfulness to the deceased ruler in the afterlife.

The second photograph shows the excavation of a classic-era (250–ca. 800 C.E.) Maya burial at Río Azul in Guatemala. After death this elite male was laid out on a carved wooden platform and cotton mattress and his body was painted with decorations. Mourners covered his body in rich textiles and surrounded him with valuable goods. These included a necklace of individual stones carved in the shape of heads, perhaps a symbol of his prowess in battle, and high-quality ceramics, some filled with foods consumed by the elite like cacao. The careful preparation of the burial chamber had required the work of numerous artisans and laborers, as was the case in the burial of the Moche warrior-priest. In death, as in life, these early American civilizations acknowledged the high status, political power, and religious authority of their elites.

**QUESTIONS FOR ANALYSIS**

1. If these burials are texts, what are stories?
2. Are there any visible differences in the two burials?
3. What questions might historians ask of these burials that cannot be answered?
4. Can modern burials be read as texts in similar ways to these ancient burials?

The archaeological record makes clear that the rapid decline of major Moche centers coincided with a succession of natural disasters in the sixth century and with the rise of a new military power in the Andean highlands. Long-term climate changes also threatened the Moche region. A thirty-year drought expanded the area of coastal sand dunes during the sixth century, and powerful winds pushed sand onto fragile agricultural lands, overwhelming the irrigation system. As the land dried, periodic heavy rains caused erosion that damaged fields and weakened the economy that had sustained ceremonial and residential centers. Despite massive efforts to keep the irrigation canals open and despite the construction of new urban centers in less vulnerable valleys to the north, Moche civilization never recovered. In the eighth century, the rise of a new military power, the Wari (WAH-ree), also contributed to the disappearance of the Moche by putting pressure on trade routes that linked the coastal region with the highlands.

**Environmental Crisis and Decline of the Moche**

**Wari** Andean civilization culturally linked to Tiwanaku, perhaps beginning as a colony of Tiwanaku.

**Tiwanaku** Name of capital city and empire centered on the region near Lake Titicaca in modern Bolivia (375–1000 C.E.).

**Tiwanaku and Wari**

After 500 C.E. two powerful civilizations developed in the Andean highlands. The ruins of Tiwanaku (tee-wah-NA-coo) (see Map 11.4) still stand at nearly 13,000 feet (3,962 meters) near Lake Titicaca in modern Bolivia. Tiwanaku’s expansion after 200 C.E. depended on the adoption of technologies that increased agricultural productivity. Modern excavations provide the out-

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line of vast drainage projects that reclaimed nearly 200,000 acres (80,000 hectares) of rich lakeside marshes for agriculture. This system of raised fields and ditches permitted intensive cultivation similar to that achieved by the use of chinampas in Mesoamerica. Fish from the nearby lake and llamas added protein to a diet largely dependent on potatoes and grains. Llamas were also crucial for the maintenance of long-distance trade relationships that brought in corn, coca, tropical fruits, and medicinal plants.

Tiwanaku was distinguished by the scale of its construction and by the high quality of its stone masonry. Thousands of laborers were mobilized to cut and move the large stones used to construct a large terraced pyramid, walled enclosures, and a reservoir. Despite a limited metallurgy that produced only tools of copper alloy, Tiwanaku’s artisans built large structures of finely cut stone that required little mortar to fit the blocks. They also produced gigantic human statuary. The largest example, a stern figure with a military bearing, was cut from a single block of stone that measures 24 feet (7 meters) high.

It is clear that Tiwanaku was a highly stratified society ruled by a hereditary elite. This elite controlled a large, disciplined labor force in the surrounding region. Military conquests and the establishment of colonial populations provided dependable supplies of products from ecologically distinct zones. Tiwanaku cultural influence extended eastward to the jungles and southward to the coastal regions and oases of the Atacama Desert in Chile. But archaeological evidence suggests that Tiwanaku, in comparison with contemporary Teotihuacan in central Mexico, had a relatively small full-time population of around 30,000. It was not a metropolis like the largest Mesoamerican cities; it was a ceremonial and political center for a large regional population.

**Burials Reveal Ancient Civilizations**  (Left) Buried around 300 C.E., this Moche warrior-priest was buried amid rich tribute at Sipán in Peru. Also buried were the bodies of retainers or kinsmen probably sacrificed to accompany this powerful man. The body lies with the head on the right and the feet on the left. (Right) Similarly, the burial of a member of the Maya elite at Río Azul in northern Guatemala indicates the care taken to surround the powerful with fine ceramics, jewelry, and other valuable goods.
The contemporary site of Wari was located about 450 miles (751 kilometers) to the northwest of Tiwanaku, near the modern Peruvian city of Ayacucho. Wari clearly shared elements of the culture and technology of Tiwanaku, but the exact nature of this relationship remains unclear. Some scholars argue that Wari began as a dependency of Tiwanaku, while others suggest that they were joint capitals of a single empire. Wari was larger than Tiwanaku, measuring nearly 4 square miles (10 square kilometers). A massive wall surrounded the city center, which was dominated by a large temple and multifamily housing for elites and artisans. Housing for commoners was located in a sprawling suburban zone. The small scale of its monumental architecture relative to Tiwanaku and the near absence of cut stone masonry in public and private buildings suggest either the weakness of the elite or the absence of specialized construction crafts compared with other Andean centers. A distinctive Wari ceramic style allows experts to trace Wari's influence to the coastal area and to the northern highlands. This expansion occurred at a time of increasing warfare throughout the Andes that led to the eclipse of both Tiwanaku and Wari by about 1000 C.E. The Inca inherited their political legacies.

**The Inca**

In little more than a hundred years, the Inca developed a vast imperial state, which they called "Land of Four Corners." By 1525 the empire had a population of more than 6 million and stretched from the Maule River in Chile to northern Ecuador and from the Pacific coast across the Andes to the upper Amazon and, in the south, into Argentina (see Map 11.4). In the early fifteenth century the Inca were one of many competing military powers in the southern highlands, an area of limited political significance after the collapse of Wari. Centered in the valley of Cuzco, the Inca were initially organized as a chiefdom based on reciprocal gift giving and the redistribution of food and textiles. Strong and resourceful leaders consolidated political authority in the 1430s and undertook an ambitious campaign of military expansion.

The Inca state, like earlier highland powers, utilized traditional Andean social customs and economic practices. Tiwanaku had relied in part on the use of colonists to provide supplies of resources from distant, ecologically distinct zones. The Inca built on this legacy by conquering additional distant territories and increasing the scale of forced exchanges. Crucial to this process was the development of a large military. Unlike the peoples of Mesoamerica, who distributed specialized goods through markets and tribute relationships, Andean peoples used state power to broaden and expand the vertical exchange system that had permitted ayllus to exploit a range of ecological niches. The Inca were pastoralists as earlier highland civilizations had been. Inca prosperity and military strength depended on vast herds of llamas and alpacas, which provided food and clothing as well as transport for goods, but they gained access to corn, cotton, and other goods from the coastal region via forced exchanges.

Collective efforts by mit’a laborers made the Inca Empire possible. Cuzco, the imperial capital, and the provincial cities, the royal court, the imperial armies, and the state’s religious cults all rested on this foundation. The mit’a system also created the material surplus that provided the bare necessities for the old, weak, and ill of Inca society. Each ayllu contributed approximately one-seventh of its adult male population to meet these collective obligations. These draft laborers served as soldiers, construction workers, craftsmen, and runners to carry messages along post roads. They also drained swamps, terraced mountainsides, filled in valley floors, built and maintained irrigation works, and built storage facilities and roads. Inca laborers constructed 13,000 miles (20,930 kilometers) of road, facilitating military troop movements, administration, and trade (see Environment and Technology: Inca Roads).

The hereditary chiefs of ayllus, a group that included women, carried out local administrative and judicial functions. As the Inca expanded, they generally left local rulers in place. By doing so they risked rebellion, but they controlled these risks by means of a thinly veiled system of hostage taking and the use of military garrisons. The rulers of defeated regions were required to send their heirs to live at the Inca royal court in Cuzco. Inca leaders even required that defeated peoples send representations of important local gods to Cuzco to be included in the imperial pantheon. These measures promoted imperial integration while at the same time providing hostages to ensure the good behavior of subject peoples.
Inca Roads

From the time of Chavin (900–250 B.C.E.), Andean peoples have built roads to facilitate trade across ecological boundaries and to project political power over conquered peoples. In the fifteenth and sixteenth centuries, the Inca extended and improved the networks of roads constructed in earlier eras. Roads were crucially important to Inca efforts to collect and redistribute tribute paid in food, textiles, and chicha (corn liquor).

Two roads connected Cuzco, the Inca capital in southern Peru, to Quito, Ecuador, in the north and to Chile farther south. One ran along the flat and arid coastal plain, the other through the mountainous interior. Shorter east-west roads connected important coastal and interior cities. The Inca placed regional administrative centers along these routes to expedite rapid communication with the capital. They built rest stops at convenient distances to provide shelter and food to traveling officials and runners who carried messages between Cuzco and the empire’s cities and towns. Food and military supplies were also collected at large warehouses along the roads to provide food and military supplies for passing Inca armies or to supply local laborers who worked on construction projects or cultivated the ruler’s fields.

Because communication with regional administrative centers and the movement of troops were the central objectives of the Inca leadership, they selected routes to avoid natural obstacles and to reduce travel time. Mit’a laborers recruited from nearby towns and villages built and maintained the roads, taking care to repair damage caused by rain runoff or other drainage problems. Roads were commonly paved with stone or packed earth and often were bordered by stone or adobe walls to keep soldiers or pack trains of llamas from straying into farmers’ fields. Whenever possible, roadbeds were made level, but in mountainous terrain some roads were little more than improved paths. In flat country three or four people could walk abreast.

The achievement of Inca road builders is clearest in the mountainous terrain of the interior, where they built suspension bridges across high gorges and cut roadbeds into the face of cliffs. A Spanish priest living in Peru in the seventeenth century commented that the Inca roads “were magnificent constructions, which could be compared favorably with the most superb roads of the Romans.”

Conquests magnified the authority of the Inca ruler and led to the creation of an imperial bureaucracy drawn from among his kinsmen. The royal family claimed descent from the Sun, the primary Inca god. Members of the royal family lived in palaces maintained by armies of servants. The lives of the ruler and members of the royal family were dominated by political and religious rituals that helped legitimize their authority. Among the many obligations associated with kingship was the requirement to extend imperial boundaries by warfare. Thus each new ruler began his reign with conquest.

Tenochtitlan, the Aztec capital, had a population of about 150,000 in 1520. At the height of Inca power in 1530, Cuzco had a population of less than 30,000. Nevertheless, Cuzco was a remarkable place. The Inca were highly skilled stone craftsmen and constructed their most impressive buildings of carefully cut stones fitted together without mortar. Planners laid the city out in the shape of a giant puma (a mountain lion). At the city center were the palaces of rulers as
Andean societies developed by devising solutions to their complex environment of arid coastlands, cold highlands, and tropical forests.

The ayllu and mit’a provided the social base for Andean social and political organization.

The Moche developed a powerful state based on irrigated agriculture, exchange between ecological regions, and a powerful religious elite.

Tiwanaku and Wari used their powerful militaries to extend their power over large regions and create long-distance networks of trade.

The Inca developed from a chiefdom to a formal empire based on military conquest and the forced transfer of food and other products from defeated peoples through tribute.

The Inca used roads, irrigation networks, terracing, and other technologies to provide material in a region with a difficult climate and topography.

Civil war weakened the Inca on the eve of European arrival.

**SECTION REVIEW**

- Andean societies developed by devising solutions to their complex environment of arid coastlands, cold highlands, and tropical forests.
- The ayllu and mit’a provided the social base for Andean social and political organization.
- The Moche developed a powerful state based on irrigated agriculture, exchange between ecological regions, and a powerful religious elite.
- Tiwanaku and Wari used their powerful militaries to extend their power over large regions and create long-distance networks of trade.
- The Inca developed from a chiefdom to a formal empire based on military conquest and the forced transfer of food and other products from defeated peoples through tribute.
- The Inca used roads, irrigation networks, terracing, and other technologies to provide material in a region with a difficult climate and topography.
- Civil war weakened the Inca on the eve of European arrival.

**khipus** System of knotted colored cords used by preliterate Andean peoples to transmit information.

**Inca Tunic** Andean weavers produced beautiful textiles from cotton and from the wool of llamas and alpacas. The Inca inherited this rich craft tradition and produced some of the world’s most remarkable textiles. The quality and design of each garment indicated the weaver’s rank and power in this society. This tunic was an outer garment for a powerful male.

Well as the major temples. The richest was the Temple of the Sun, its interior lined with sheets of gold and its patio decorated with golden representations of llamas and corn. The ruler made every effort to awe and intimidate visitors and residents alike with a nearly continuous series of rituals, feasts, and sacrifices. Sacrifices of textiles, animals, and other goods sent as tribute dominated the city’s calendar. The destruction of these valuable commodities, and a small number of human sacrifices, helped give the impression of splendor and sumptuous abundance that appeared to demonstrate the ruler’s claimed descent from the Sun.

Inca cultural achievement rested on the strong foundation of earlier Andean civilizations. We know that astronomical observation was a central concern of the priestly class, as in Mesoamerica. The collective achievements of Andean peoples were accomplished with a limited recordkeeping system adapted from earlier Andean civilizations. Administrators used knotted colored cords, called **khipus** (KEY-pooz), for public administration, population counts, and tribute obligations. Inca weaving and metallurgy, also based on earlier regional development, was more advanced than in Mesoamerica. Inca craftsmen produced utilitarian tools and weapons of copper and bronze as well as decorative objects of gold and silver. Inca women produced textiles of extraordinary beauty from cotton and the wool of llamas and alpacas.

Although the Inca did not introduce new technologies, they increased economic output and added to the region’s prosperity. The conquest of large populations in environmentally distinct regions allowed the Inca to multiply the yields produced by the traditional exchanges between distinct ecological niches. This expansion of imperial economic and political power was purchased at the cost of reduced equality and diminished local autonomy. Members of the imperial elite, living in richly decorated palaces in Cuzco and other...
CONCLUSION

The Aztec and Inca Empires represent the culmination of long historical development in Mesoamerica and the Andes, respectively. Each empire was created militarily, its survival depending as much on the power of its armies as on the productivity of its economy or the wisdom of its rulers. Both depended on political institutions, economic forms and technologies, and religious practices inherited from their predecessors. Both Mesoamerica and the Andes were also ethnically and environmentally diverse regions. Rulers in both regions legitimized their authority religiously, serving as priestly intermediaries with the gods. Major cities operated as religious as well as political centers and were dominated by religious architecture. Both regions had long depended on the mobilization of ever-larger work forces to meet growing needs rather than on rapid technological innovation.

There were important differences as well. Mesoamerican cultures had developed elementary markets to distribute specialized regional production, although the forced payment of goods as tribute remained important to sustain cities like Tenochtitlan. In the Andes reciprocal labor obligations and managed exchange relationships were used to allocate goods. The Aztecs used their military to force defeated peoples to provide food, textiles, and even sacrificial captives as tribute, but they left local hereditary elites in place. The Inca, in contrast, created a more centralized imperial administrative structure managed by a trained bureaucracy and used reciprocal labor obligations to produce and distribute goods.

We can find similar patterns in North America. The transfer of agricultural technology from Mesoamerica, with its dependence on corn, beans, and squash, influenced the mound-building cultures of the Ohio and Mississippi River Valleys and the desert cultures of the southwest. In the desert region of what is now the southwest of the United States, the Anasazi and other peoples also utilized irrigated agriculture, a technology crucial to both Mesoamerican and Andean cultures. Both the desert and mound-building cultures of North America experienced cycles when powerful new political centers expanded the territories they controlled and consolidated their power until overwhelmed by environmental challenges or displaced by military rivals.

As the Western Hemisphere’s long isolation drew to a close in the late fifteenth century, the Aztecs and Incas, the most powerful civilizations of Mesoamerica and the Andean region, respectively, were challenged by powerful neighbors and by internal revolts. In earlier periods similar threats had contributed to the decline of great civilizations in both Mesoamerica and the Andean region as well as in the less powerful cultures of the desert southwest and the Ohio and Mississippi River Valleys. In all these cases, a long period of cultural and political adjustment led eventually to the creation of new indigenous institutions, the adoption of new technologies, and the appearance of new centers of power in new locations. With the arrival of Europeans, this cycle of crisis and adjustment would be transformed, and the future of Amerindian peoples would become linked to the cultures of the Old World.
KEY TERMS

Teotihuacan p. 310
chinampas p. 312
Maya p. 312
Toltecs p. 316
altepetl p. 316

calpolli p. 317
Tenochtitlan p. 317
Aztecs p. 317
tribute system p. 319
Anasazi p. 321
chiefdom p. 322
ayllu p. 324
mit’a p. 324
Moche p. 325
Wari p. 326

Tiwanaku p. 326
Inca p. 328
khipus p. 330

EBOOK AND WEBSITE RESOURCES

Primary Source
Chronicles

Interactive Maps
Map 11.1 Maya Civilization, 250–1400 C.E.
Map 11.2 Major Mesoamerican Civilizations, 1000 B.C.E.–1519 C.E.
Map 11.3 Culture Areas of North America
Map 11.4 Andean Civilizations, 200 B.C.E.–1532 C.E.

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SUGGESTED READING

Bawden, Garth. The Moche. 1996. Among the best studies of this early culture in Peru.
Davies, Nigel. The Aztec Empire: The Toltec Resurgence. 1987. The best summary of Aztec history.

Schele, Linda, and David Freidel. A Forest of Kings. 1990. An excellent summary of recent research on the classic-period Maya.
NOTES

1. This summary closely follows the historical narrative and translation of names offered by Linda Schele and David Freidel in *A Forest of Kings: The Untold Story of the Ancient Maya* (New York: Morrow, 1990), 182–186.


6. Which was true of Maya writing?
(A) It was derived from the system used by the Olmec.
(B) It was used only for telling stories about creation.
(C) The Maya used it to record only trade relations, tax collection, and government business transactions.
(D) It was a form of hieroglyphic writing that included whole words, concepts, phonetic cues, and syllables.

7. The Toltec state was
(A) built on military power and conquest.
(B) a farming state that incorporated trade in Mesoamerica.
(C) created by nomads who moved into Mexico from what today is California.
(D) relatively weak due to a lack of central governmental control.

8. Aztec rule was based on
(A) primogeniture.
(B) a council of aristocrats selecting new rulers.
(C) matrilineal heritage.
(D) two nobles competing in combat with the winner becoming the leader.

9. Besides enslaving captives, the Aztecs also
(A) allowed for the assimilation of conquered people.
(B) developed a tribute system to increase food supplies and trade goods.
(C) allowed captives to barter for their freedom.
(D) encouraged intermarriage with conquered groups to expand the nobility.

10. In general, public life in Tenochtitlan was dominated by
(A) agricultural pursuits.
(B) bureaucratic duties.
(C) religious rituals.
(D) family concerns.

1. Ancient Mesoamerican and Andean cities
(A) were scattered along the coastline and not of great importance to their society.
(B) were very large and rivaled those of Han China and Rome.
(C) were built on the style of the Aztecs.
(D) appeared only about 100 years prior to contact with the Spanish and Portuguese.

2. In the city of Teotihuacan, in central Mexico,
(A) rulers appeared in statues and public art celebrating their deeds.
(B) people lived in egalitarian communities with no divisions based on rank.
(C) more than two-thirds of the population made their living from agriculture.
(D) there is no evidence of a strong military.

3. Teotihuacan’s long-distance trade is evidenced by
(A) archaeological evidence of a large military designed to protect trade.
(B) Inca goods in trash pits.
(C) pictorial evidence of trade with Indian tribes in what today is Texas.
(D) similar food crops being grown throughout Central America.

4. While the Maya shared a single culture,
(A) they had different religious beliefs.
(B) women were treated in different ways by different tribes.
(C) they were never united politically.
(D) each city grew different crops and produced different finished goods.

5. The Maya “long count” calendar is most likely
(A) one they adopted from the Inca.
(B) associated with their understanding of their creation.
(C) linked to their planting and harvesting cycles.
(D) the calendar used to trace family lineage among Maya rulers.
11. Cahokia is an example of
   (A) an urban settlement in the Ohio River Valley area.
   (B) a mound-building culture.
   (C) one of the most distant of the Aztec satellite kingdoms.
   (D) Chaco Canyon turquoise culture.

12. The Inca, unlike the native groups of Mesoamerica and Mexico,
   (A) practiced human sacrifice.
   (B) had no nobility or political hierarchy.
   (C) were pastoralists.
   (D) did not have an army.

13. Andean civilizations
   (A) undertook large-scale irrigation projects and built terraces to control erosion.
   (B) intermarried and developed a clan-based culture.
   (C) practiced polytheism, whereas the Aztecs did not.
   (D) never adopted the practice of any divine mandate of rule.
Religious conversion has two meanings that often get confused. The term can refer to the inner transformation an individual may feel on joining a new religious community or becoming revitalized in his or her religious belief. Conversions of this sort are often sudden and deeply emotional. In historical terms, they may be important when they transform the lives of prominent individuals.

In its other meaning, religious conversion refers to a change in the religious identity of an entire population, or a large portion of a population. This generally occurs slowly and is hard to trace in historical documents. As a result, historians have sometimes used superficial indicators to trace the spread of a religion. Doing so can result in misleading conclusions, such as considering the spread of the Islamic faith to be the result of forced conversion by Arab conquerors, or taking the routes traveled by Christian or Buddhist missionaries as evidence that the people they encountered adopted their spiritual message, or assuming that a king or chieftain’s adherence to a new religion immediately resulted in a religious change among subjects or followers.

In addition to being difficult to document, religious conversion in the broad societal sense has followed different patterns according to changing circumstances of time and place. Historians have devised several models to explain the different conversion patterns. According to one model, religious labels in a society change quickly, through mass baptism, for example, but devotional practices remain largely the same. Evidence for this can be found in the continuation of old religious customs among people who identify themselves as belonging to a new religion. Another model sees religious change as primarily a function of economic benefit or escape from persecution. Taking this approach makes it difficult to explain the endurance of certain religious communities in the face of hardship and discrimination. Nevertheless, most historians pay attention to economic advantage in their assessments of mass conversion. A third model associates a society’s religious conversion with its desire to adopt a more sophisticated way of life, by shifting, for example, from a religion that does not use written texts to one that does.

One final conceptual approach to explaining the process of mass religious change draws on the quantitative models of innovation diffusion that were originally developed to analyze the spread of new technologies in the twentieth century. According to this approach, new ideas, whether in the material or religious realm, depend on the spread of information. A few early adopters—missionaries, pilgrims, or conquerors, perhaps—spread word of the new faith to the people they come in contact with, some of whom follow their example and convert. Those converts in turn spread the word to others, and a chain reaction picks up speed in what might be called a bandwagon effect. The period of bandwagon conversion tapers off when the number of people who have not yet been offered an opportunity to convert diminishes. The entire process can be graphed as a logistic or S-shaped curve. Figure 1, the graph of conversion to Islam in Iran based on changes from Persian (non-Islamic) to Arabic (Islamic) names in family genealogies, shows such a curve over a period of almost four centuries.

In societies that were largely illiterate, like those in which Buddhism, Christianity, and Islam slowly achieved spiritual dominance, information spread primarily by word of mouth. The proponents of the new religious views did not always speak the same language as the people they hoped to bring into the faith. Under these circumstances, significant conversion, that is, conversion that involved some understanding of the new religion, as opposed to forced baptism or imposed mouthing of a profession of faith, must surely have started with fairly small numbers.

Language was crucial. Chinese pilgrims undertook lengthy travels to visit early Buddhist sites in India. There they acquired Sanskrit texts, which they translated into Chinese. These translations became the core texts of Chinese Buddhism. In early Christendom, the presence of bilingual (Greek-Aramaic) Jewish communities in the eastern parts of the Roman Empire facilitated the early spread of the religion beyond its Aramaic-speaking homeland. By contrast, Arabic, the language of Islam, was spoken only in the Arabian peninsula and the desert borderlands that extended northwards from Arabia between Syria, Jordan, and Iraq. This initial impediment to the spread of knowledge about Islam dissolved only when intermarriage with non-Muslim, non-Arab women, many of them taken captive and distributed as booty during the conquests, produced bilingual offspring. Bilingual preachers of the Christian faith were similarly needed in the Celtic-, Germanic-, and Slavic-language areas of western and eastern Europe.

This slow process of information diffusion, which varied from region to region, made changing demands on religious leaders and institutions. When a faith was professed primarily by a ruler, his army, and his dependents, religious leaders gave the highest priority to servicing the needs of the ruling minority and perhaps discrediting, denigrating, or exterminating the practices of the majority. Once a few
centuries had passed and the new faith had become the religion of the great majority of the population, religious leaders turned to establishing popular institutions and reaching out to the common people. Historical interpretation can benefit from knowing where a society is in a long-term process of conversion.

These various models reinforce the importance of distinguishing between emotional individual conversion experiences and broad changes in a society’s religious identity. New converts are commonly thought of as especially zealous in their faith, and that description is often apt in instances of individual conversion experiences. It is less appropriate, however, to broader episodes of conversion. In a conversion wave that starts slowly, builds momentum in the bandwagon phase, and then tapers off, the first individuals to convert are likely to be more spiritually motivated than those who join the movement toward its end. Religious growth depends as much on making the faith attractive to late converts as to ecstatic early converts.

**FIGURE 1** Conversion to Islam in Iran

![Conversion to Islam in Iran graph](image)