BY THE BEGINNING of the first millennium C.E., the great states of the ancient world were in decline; some were even at the point of collapse. On the ruins of these ancient empires, new patterns of civilization began to take shape between 400 and 1500 C.E. In some cases, these new societies were built on the political and cultural foundations of their predecessors. The Tang dynasty in China and the Guptas in India both looked back to the ancient period to provide an ideological model for their own time. The Byzantine Empire carried on parts of the Classical Greek tradition while also adopting the powerful creed of Christianity from the Roman Empire. In other cases, new states incorporated some elements of the former classical civilizations while heading in markedly different directions, as in the Arabic states in the Middle East and in the new European civilization of the Middle Ages. In Europe, the Renaissance of the fifteenth century brought an even greater revival of Greco-Roman culture.

During this period, a number of significant forces were at work in human society. The accoutrements of advanced society gradually spread from the heartland regions of the Middle East, the Mediterranean basin, the South Asian subcontinent, and China into new areas of the world—sub-Saharan Africa, central and western Europe, Southeast Asia, and even the islands of Japan, off the eastern edge of the Eurasian landmass. Across the oceans, unique but advanced civilizations began to take shape in isolation in the Americas. In the meantime, the vast migrations of peoples continued, leading not only to bitter conflicts but also to increased interchanges of technology and ideas. The result was the transformation of separate and distinct cultures and civilizations into an increasingly complex and vast world system embracing not only technology and trade but also ideas and religious beliefs.

As had been the case during antiquity, the Middle East was the heart of this activity. The Arab empire, which took shape after the death of Muhammad in the early seventh century, provided the key link in the revived trade routes through the region. Muslim traders—both Arab and Berber—opened contacts with West African societies south of the Sahara, while their ships followed the monsoon winds eastward as far as the Spice Islands in Southeast Asia. Nomads from Central Asia, many of them Muslims, carried goods back and forth along the Silk Road between the Middle East and China. For the next several hundred years, the great cities of the Middle East—Mecca, Damascus, and Baghdad—became among the wealthiest in the known world.

Islam’s contributions to the human experience during this period were cultural and technological as well as economic. Muslim philosophers preserved the works of the ancient Greeks for posterity, Muslim scientists and mathematicians made new discoveries about the nature of the universe and the human body, and Arab cartographers and historians...
mapped the known world and speculated about the fundamental forces in human society.

But the Middle East was not the only or necessarily even the primary contributor to world trade and civilization during this period. While the Arab empire became the linchpin of trade between the Mediterranean and eastern and southern Asia, a new center of primary importance in world trade was emerging in East Asia, focused on China. China had been a major participant in regional trade during the Han dynasty, when its silks were already being transported to Rome via Central Asia, but its role had declined after the fall of the Han. Now, with the rise of the great Tang and Song dynasties, China reemerged as a major commercial power in East Asia, trading by sea with Southeast Asia and Japan and by land with the nomadic peoples of Central Asia.

Like the Middle East, China was also a prime source of new technology. From China came paper, printing, the compass, and gunpowder. The double-hulled Chinese junks that entered the Indian Ocean during the Ming dynasty were slow and cumbersome but extremely seaworthy and capable of carrying substantial quantities of goods over long distances. Many inventions arrived in Europe by way of India or the Middle East, and their Chinese origins were therefore unknown in the West.

Increasing trade on a regional or global basis also led to the exchange of ideas. Buddhism was brought to China by merchants, and Islam first arrived in sub-Saharan Africa and the Indonesian archipelago in the same manner. Merchants were not the only means by which religious and cultural ideas spread, however. Sometimes migration, conquest, or relatively peaceful processes played a part. The case of the Bantu-speaking peoples in Central Africa is apparently an example of peaceful expansion; and while Islam sometimes followed the path of Arab warriors, they rarely imposed their religion by force on the local population. In some instances, as with the Mongols, the conquerors made no effort to convert others to their own religions. By contrast, Christian monks, motivated by missionary fervor, converted many of the peoples of central and eastern Europe. Roman Catholic monks brought Latin Christianity to the Germanic and western Slavic peoples, and monks from the Byzantine Empire largely converted the southern and eastern Slavic populations to Eastern Orthodox Christianity.

Another characteristic of the period between 500 and 1500 C.E. was the almost constant migration of nomadic and semi-nomadic peoples. Dynamic forces in the Gobi Desert, Central Asia, the Arabian peninsula, and Central Africa provoked vast numbers of peoples to abandon their homelands and seek their livelihood elsewhere. Sometimes the migration was peaceful. More often, however, migration produced political instability and sometimes invasion and subjugation. As had been the case during antiquity, the most active source of migrants was Central Asia. The region later gave birth to the fearsome Mongols, whose armies advanced to the gates of central Europe and conquered China in the thirteenth century. Wherever they went, they left a train of enormous destruction and loss of life. Inadvertently, the Mongols were also the source of a new wave of epidemics that swept through much of Europe and the Middle East in the fourteenth century. The spread of the plague—known at the time as the Black Death—took much of the population of Europe to an early grave.

But there was another side to the era of nomadic expansion. Even the invasions of the Mongols—the “scourge of God,” as Europeans of the thirteenth and fourteenth centuries called them—had constructive as well as destructive consequences. After their initial conquests, for a brief period of three generations, the Mongols provided an avenue for trade throughout the most extensive empire (known as the Pax Mongolica) the world had yet seen.
IN THE SUMMER OF 2001, a powerful hurricane swept through Central America, destroying houses and flooding villages all along the Caribbean coast of Belize and Guatemala. Farther inland, at the archaeological site of Dos Pilas (dohs PEE-las), it uncovered new evidence concerning a series of dramatic events that had taken place nearly 1,500 years earlier. Beneath a tree uprooted by the storm, archaeologists discovered a block of stones containing hieroglyphics that described a brutal war between two powerful city-states of the area, a conflict that ultimately contributed to the decline and fall of Mayan civilization, perhaps the most advanced society then in existence throughout Central America.

Mayan civilization, the origins of which can be traced back to about 300 B.C.E., was not as old as some of its counterparts that we have discussed in Part I of this book. But it was the most recent version of a whole series of human societies that had emerged throughout the Western Hemisphere as early as the third millennium B.C.E. Although these early societies are not yet as well known as those of ancient Egypt, Mesopotamia, and India, evidence is accumulating that advanced civilizations had existed in the Americas thousands of years before the arrival of Hernán Cortés and the Spanish conquistadors in 1519.
The Peopling of the Americas

**FOCUS QUESTION:** Who were the first Americans, and when and how did they come?

The Maya (MY-uh) were only the latest in a series of sophisticated societies that had sprung up at various locations in North and South America since human beings first crossed the Bering Strait several millennia earlier. Most of these early peoples, today often referred to as Amerindians, lived by hunting and fishing or by food gathering. But eventually organized societies, based on the cultivation of agriculture, began to take root in Central and South America. One key area of development was on the plateau of central Mexico. Another was in the lowland regions along the Gulf of Mexico area of development was on the plateau of central Mexico. A third was in the central Andes Mountains, adjacent to the Pacific coast of South America. Others were just beginning to emerge in the river valleys and Great Plains of North America.

For two thousand years, these societies developed in isolation from their counterparts elsewhere in the world. This lack of contact with other human populations deprived them of access to technological and cultural developments taking place in Africa, Asia, and Europe. They did not know of the wheel, for example, and their written languages were rudimentary compared to those in complex civilizations elsewhere around the globe. But in other respects, their cultural achievements were the equal of those realized elsewhere. When the first European explorers arrived in the region at the turn of the sixteenth century, they described much that they observed in glowing terms.

The First Americans

When the first human beings arrived in the Western Hemisphere has long been a matter of conjecture. In the centuries following the voyages of Christopher Columbus (1492–1504), speculation centered on the possibility that the first settlers to reach the American continents had crossed the Atlantic Ocean. Were they the lost tribes of Israel? Were they Phoenician seafarers from Carthage? Were they refugees from the legendary lost continent of Atlantis? In all cases, the assumption was that they were relatively recent arrivals.

By the mid-nineteenth century, under the influence of the Darwinian concept of evolution, a new theory developed. It proposed that the peopling of America had taken place much earlier as a result of the migration of small groups across the Bering Strait, at a time when the area was a land bridge uniting the continents of Asia and North America. Recent evidence, including numerous physical similarities between most early Americans and contemporary peoples living in northeastern Asia, has confirmed this hypothesis. The debate on when the migrations began continues, however. The archaeologist Louis Leakey, one of the pioneers in the search for the origins of humankind in Africa, suggested that the first hominids may have arrived in America as long as 100,000 years ago. Most scholars today, however, estimate that the first Americans were Homo sapiens sapiens who crossed from Asia by foot between 10,000 and 15,000 years ago in pursuit of herds of bison and caribou that moved into the area in search of grazing land at the end of the last ice age. Some suggest that early migrants from Asia may have followed a maritime route down the western coast of the Americas, supporting themselves by fishing and feeding on other organisms floating in the sea.

In recent years, a number of fascinating new possibilities have opened up. A site discovered at Cactus Hill, in central Virginia, shows signs of human habitation as long as 15,000 years ago. Other recent discoveries suggest that some early settlers may have originally come from Africa or from the South Pacific rather than from Asia. The question has not yet been answered definitively.

Nevertheless, it is now generally accepted that human beings were living in the Americas at least 15,000 years ago. They gradually spread throughout the North American continent and had penetrated almost to the southern tip of South America by about 11,000 B.C.E. These first Americans were hunters and food gatherers who lived in small nomadic communities close to the sources of their food supply. Although it is not known when agriculture was first practiced, beans and squash seeds have been found at sites that date back at least 10,000 years, implying that farming arose in America almost as early as in the Middle East. The cultivation of maize (corn), and perhaps other crops as well, appears to have been under way as early as 5000 B.C.E. in the Tehuacán (teh-hwah-KAHN) valley in central Mexico. Archaeologists have traced the ancestry of corn back at least 9,000 years to a wild Mexican grass called teosinte (tay-oh-SIN-tee). Through a lengthy process of experimentation, local farmers transformed it into a highly productive food crop that enabled the rise of the first civilizations in the Americas. A similar process may have occurred in the lowland regions near the modern city of Veracruz and in the Yucatán (yoo-kuh-TAHN) peninsula farther to the east. There, in the region that archaeologists call Mesoamerica, one of the first civilizations in the Americas began to appear.

Early Civilizations in Central America

**FOCUS QUESTION:** What were the main characteristics of religious belief in early Mesoamerica?

The first signs of civilization in Mesoamerica appeared at the end of the second millennium B.C.E., with the emergence of what is called Olmec (AH-lmek or OH-lmek) culture in the hot and swampy lowlands along the coast of the Gulf of Mexico south of Veracruz (see Map 6.1).

The Olmecs: In the Land of Rubber

Olmec civilization was characterized by intensive agriculture along the muddy riverbanks in the area and by the carving of stone ornaments, tools, and monuments at sites such as San
Lorenzo and La Venta contains a ceremonial precinct with a 30-foot-high earthen pyramid, the largest of its date in all Mesoamerica. The Olmec peoples organized a widespread trading network, carried on religious rituals, and devised an as-yet-undeciphered system of hieroglyphics that is similar in some respects to later Mayan writing (see “Mayan Hieroglyphs and Calendars” later in this chapter) and may be the ancestor of the first true writing systems in the Americas.

Olmec society apparently consisted of several classes, including a class of skilled artisans who produced a series of massive stone heads, some of which are more than 10 feet high. The Olmec peoples supported themselves primarily by cultivating crops, such as corn and beans, but also engaged in fishing and hunting. The Olmecs apparently played a ceremonial game on a stone ball court, a ritual that would later be widely practiced throughout the region (see “The Maya” later in this chapter). The ball was made from the sap of a local rubber tree, thus providing the name Olmec: “people of the land of rubber.”

Trade between the Olmecs and their neighbors was apparently quite extensive, and rubber was one of the products most desired by peoples in nearby regions. It was used not only for the manufacture of balls, but also for rubber bands and footwear, as the Olmec learned how to mix the raw latex (the sap of the rubber tree) with other ingredients to make it more supple.

Eventually, Olmec civilization began to decline, and it apparently collapsed around the fourth century B.C.E. During its heyday, however, it extended from Mexico City to El Salvador and perhaps to the shores of the Pacific Ocean.

The Zapotecs

Parallel developments were occurring at Monte Albán (MON-tee ahl-BAHN), on a hillside overlooking the modern city of Oaxaca (wah-HAH-kuh), in central Mexico. Around the middle of the first millennium B.C.E., the Zapotec (zah-puh-TEK) peoples created an extensive civilization that flourished for several hundred years in the highlands. Like the Olmec sites, Monte Albán contains a number of temples and pyramids, but they are located in much more awesome surroundings on a massive stone terrace atop a 1,200-foot-high mountain overlooking the Oaxaca valley. The majority of the population, estimated at about 20,000, dwelled on terraces cut into the sides of the mountain known to local residents as Danibaan, or “sacred mountain.”

The government at Monte Albán was apparently theocratic, with an elite class of nobles and priests ruling over a population composed primarily of farmers and artisans. Like the Olmecs, the Zapotecs devised a written language that has not been deciphered. Zapotec society survived for several centuries following the collapse of the Olmecs, but Monte Albán was abandoned for unknown reasons in the late eighth century C.E.

Teotihuacán: America’s First Metropolis

The first major metropolis in Mesoamerica was the city of Teotihuacán (tay-oh-tee-hwa-KAHN), capital of an early state about 30 miles northeast of Mexico City that arose around the third century B.C.E. and flourished for nearly a millennium until it collapsed under mysterious circumstances about 800 C.E. Along the main thoroughfare were temples and palaces, all dominated by the massive Pyramid of the Sun (see the comparative illustration on p. 162), under which archaeologists have discovered the remains of sacrificial victims, probably put to death during the dedication of the structure. In the vicinity are the remains of a large market where goods from distant regions as well as agricultural produce grown by farmers in the vicinity were exchanged. The products traded included cacao, rubber, feathers, and various types of vegetables and meat. Pulque (POOL-kay), a liquor extracted from the agave (uh-GAH-vay) plant, was used in religious ceremonies. An obsidian mine nearby may explain the location of the city; obsidian is a volcanic glass that was prized in Mesoamerica for use in tools, mirrors, and the blades of sacrificial knives.

Most of the city consisted of one-story stucco apartment compounds; some were as large as 35,000 square feet, sufficient to house more than a hundred people. Each apartment was divided into several rooms, and the compounds were covered by flat roofs made of wooden beams, poles, and stucco. The compounds were separated by wide streets laid out on a rectangular grid and were entered through narrow alleys.

Living in the fertile Valley of Mexico, an upland plateau surrounded by magnificent snowcapped mountains, the inhabitants of Teotihuacán probably obtained the bulk of their wealth from agriculture. At that time, the valley floor...
was filled with swampy lakes containing the water runoff from the surrounding mountains. The combination of fertile soil and adequate water made the valley one of the richest farming areas in Mesoamerica.

Sometime during the eighth century C.E., for unknown reasons, the wealth and power of the city began to decline, and eventually its ruling class departed, with the priests carrying stone images of local deities on their backs. The next two centuries were a time of troubles throughout the region as principalities fought over limited farmland. The problem was later compounded when peoples from surrounding areas, attracted by the rich farmlands, migrated into the Valley of Mexico and began to compete for territory with small city-states already established there. As the local population expanded, farmers began to engage in more intensive agriculture. They drained the lakes to build chinampas (chee-NAM-pahs), swampy islands crisscrossed by canals that provided water for their crops and easy transportation to local markets for their excess produce.

The Olmecs: Mother Culture or First Among Equals?

What were the relations among these early societies in Mesoamerica? Trade contacts were quite active, as the Olmecs exported rubber to their neighbors in exchange for salt and obsidian. During its heyday, Olmec influence extended throughout the region, leading some historians to surmise that it was a “mother culture,” much as the Shang dynasty was once thought to be in ancient China (see Chapter 3).

A seventh century B.C.E. pyramid recently unearthed in the southern Mexican state of Chiapas (chee-AH-pahs) contained tomb objects that bore some resemblance to counterparts in the Olmec site of LaVenta, but also displayed characteristics unique to the Zoque (ZOH-kay) culture that was prevalent in that region at the time. Some scholars point to such indigenous elements to suggest that perhaps the Olmec were merely first among equals. This issue has not yet been resolved.

The Maya

Far to the east of the Valley of Mexico, another major civilization had arisen in what is now the state of Guatemala and the Yucatán peninsula. This was the civilization of the Maya, which was older and just as sophisticated as the society at Teotihuacán.

ORIGINS It is not known when human beings first inhabited the Yucatán peninsula, but peoples contemporaneous with the Olmecs were already cultivating such crops as corn, yams, and manioc in the area during the first millennium B.C.E. As the population increased, an early civilization began to emerge along the Pacific coast directly to the south of the peninsula and in the highlands of modern Guatemala. Contacts were already established with the Olmecs to the west.

Since the area was a source for cacao trees and obsidian, the inhabitants soon developed relations with other early civilizations in the region. Cacao trees (whose name derives from the Mayan word kakaw) were the source of chocolate, which
was drunk as a beverage by the upper classes, while cocoa beans, the fruit of the cacao tree, were used as currency in markets throughout the region. A fermented beer was produced from the pulp of the fruit. The chocolate consumed in ancient Mesoamerican cultures was roasted and had a bitter taste. The flavor survives today in a classic sauce—mole (moh-LAY)—that includes unsweetened chocolate and chili peppers among its ingredients and is served with poultry and other meats. Chocolate did not develop its familiar sweet taste until the seventeenth century when cocoa beans were brought to Europe and sugar and milk were added.

As the population in the area increased, the inhabitants began to migrate into the central Yucatán peninsula and farther to the north. The overcrowding forced farmers in the lowland areas to shift from slash-and-burn cultivation to swamp agriculture of the type practiced in the lake region of the Valley of Mexico. By the middle of the first millennium C.E., the entire area was honeycombed with a patchwork of small city-states competing for land and resources. The largest urban centers such as Tikal (tee-KAHL) may have had 100,000 inhabitants at their height and displayed a level of technological and cultural achievement that was unsurpassed in the region. By the end of the third century C.E., Mayan civilization had begun to enter its classical phase.

**POLITICAL STRUCTURES** The power of Mayan rulers was impressive. One of the monarchs at Copán (koh-PAHN)—known to scholars as “18 Rabbit” from the hieroglyphs composing his name—ordered the construction of a grand palace requiring more than 30,000 person-days of labor. Around the ruler was a class of aristocrats whose wealth was probably based on the ownership of land farmed by their poorer relatives. Eventually, many of the nobles became priests or scribes at the royal court or adopted honored professions as sculptors or painters. As the society’s wealth grew, so did the role of artisans and traders, who began to form a small middle class.

The majority of the population on the peninsula, however (estimated at roughly 3 million at the height of Mayan prosperity), were farmers. They lived on their chinampa plots or on terraced hills in the highlands. Houses were built of adobe...
and thatch and probably resembled the houses of the majority of the population in the area today. There was a fairly clear-cut division of labor along gender lines. The men were responsible for fighting and hunting, the women for home-making and the preparation of cornmeal, the staple food of much of the population.

Some noblewomen, however, seem to have played important roles in both political and religious life. In the seventh century C.E., for example, Pacal (pa-KAL) became king of Palenque (pah-LEN-kay), one of the most powerful of the Mayan city-states, through the royal line of his mother and grandmother, thereby breaking the patrilineal descent twice. His mother ruled Palenque for three years and was the power behind the throne for her son’s first twenty-five years of rule. Pacal legitimized his kingship by transforming his mother into a divine representation of the “first mother” goddess.

**MAYAN RELIGION** Like some of the early religious beliefs in Asia and the Mediterranean, Mayan religion was polytheistic. Although the names were different, Mayan gods shared many of the characteristics of deities of nearby cultures. The supreme god was named Itzamna (eeet-SAHM-nuh) (“Lizard House”). Viewed as the creator of all things, he was credited with bringing the knowledge of maize, cacao, medicine, and writing to the Mayan people.

Deities were ranked in order of importance and had human characteristics, as in ancient Greece and India. Some, like the jaguar god of night, were evil rather than good. Many of the nature deities may have been viewed as manifestations of one supreme godhead (see the box on p. 164). As at Teotihuacán, human sacrifice (normally by decapitation) was practiced to propitiate the heavenly forces.

Mayan cities were built around a ceremonial core dominated by a central pyramid surmounted by a shrine to the gods. Nearby were other temples, palaces, and a sacred ball court. Like many of their modern counterparts, Mayan cities suffered from urban sprawl, with separate suburbs for the poor and the middle class, and even strip malls stretched along transportation routes, where merchants hawked their wares to pedestrians passing by.

The ball court was a rectangular space surrounded by vertical walls with metal rings through which the contestants attempted to drive a hard rubber ball. Although the rules of the game are only imperfectly understood, it apparently had religious significance, and the vanquished players were sacrificed in ceremonies held after the close of the game. Most of the players were men, although there may have been some women’s teams. Similar courts have been found at sites throughout Central and South America, with the earliest, located near Veracruz, dating back to around 1500 B.C.E.

**MAYAN HIEROGLYPHS AND CALENDARS** The Mayan writing system, developed during the mid-first millennium B.C.E., was based on hieroglyphs that remained undeciphered until scholars recognized that symbols appearing in many passages represented dates in the Mayan calendar (see the box on p. 165). This elaborate calendar, which measures time back to a particular date in August 3114 B.C.E., required a sophisticated understanding of astronomical events and mathematics and the complex mathematics of the Mayan people.
Popul Vuh (puh-PUL VOO), a sacred work of the ancient Maya, is an account of Mayan history and religious beliefs. No written version in the original Mayan script is extant, but shortly after the Spanish conquest, it was written down in Quiche (kee-CHAY) (the spoken language of the Maya), using the Latin script, apparently from memory. This version was later translated into Spanish. The following excerpt from the opening lines of Popul Vuh recounts the Mayan myth of the creation.

**Popul Vuh: The Sacred Book of the Maya**

This is the account of how all was in suspense, all calm, in silence; all motionless, still, and the expanse of the sky was empty.

This is the first account, the first narrative. There was neither man, nor animal, birds, fishes, crabs, trees, stones, caves, ravines, grasses, nor forests; there was only the sky.

The surface of the earth had not appeared. There was only the calm sea and the great expanse of the sky.

There was nothing brought together, nothing which could make a noise, nor anything which might move, or tremble, or could make noise in the sky.

There was nothing standing; only the calm water, the placid sea, alone and tranquil. Nothing existed.

There was only immobility and silence in the darkness, in the night. Only the Creator, the Maker, Tepeu, Gucumatz, the Forefathers, were in the water surrounded with light. They were hidden under green and blue feathers, and were therefore called Gucumatz. By nature they were great sages and great thinkers. In this manner the sky existed and also the Heart of Heaven, which is the name of God and thus He is called.

Then came the word. Tepeu and Gucumatz came together in the darkness, in the night, and Tepeu and Gucumatz talked together. They talked then, discussing and deliberating; they agreed, they united their words and their thoughts.

Then while they meditated, it became clear to them that when dawn would break, man must appear. Then they planned the creation, and the growth of the trees and the thickets and the birth of life and the creation of man. Thus it was arranged in the darkness and in the night by the Heart of Heaven who is called Huracan.

The first is called Caculha Huracan. The second is Chipi-Caculha. The third is Raxa-Caculha. And these three are the Heart of Heaven.

So it was that they made perfect the work, when they did it after thinking and meditating upon it.

What similarities and differences do you see between this account of the beginning of the world and those of other ancient civilizations?

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**A Ball Court.** Throughout Mesoamerica, a dangerous game was played on ball courts such as this one. A large ball of solid rubber was propelled from the hip at such tremendous speed that players had to wear extensive padding. The game had religious significance and was not just an athletic contest. The court is thought to have represented the cosmos and the ball the sun, and the losers were sacrificed to the gods in postgame ceremonies. The game is still played today in parts of Mexico (without the sacrifice, of course).
The Maya were the only Mesoamerican people to devise a complete written language. Although the origins of the Mayan writing system are unknown, many specialists believe that it may have emerged from scripts invented earlier by the neighboring Zapotecs or Olmecs and that the Maya learned of these experiments through contacts with these peoples in the first millennium B.C.E.

Like the Sumerian and Egyptian scripts, the Mayan system was composed of a mixture of ideographs and phonetic symbols, which were written in double columns to be read from left to right and top to bottom. The language was rudimentary in many ways. It had few adjectives or adverbs, and the numbering system used only three symbols: a shell for zero, a dot for one, and a bar for five.

During the classical era from 300 to 900 C.E., the Maya used the script to record dynastic statistics with deliberate precision, listing the date of the ruler’s birth, his accession to power, and his marriage and death while highlighting victories in battle, the capture of prisoners, and ritual ceremonies. The symbols were carved on stone panels, stelae, and funerary urns or were painted with a brush on folding-screen books made of bark paper; only four of these books from the late period remain extant today. A sample of Mayan hieroglyphs is shown below.

How do Mayan glyphs compare with the early forms of writing in Egypt, China, and Mesopotamia? Consider purpose, ease of writing, and potential for development into a purely phonetic system.
after their arrival in the sixteenth century. As one Spanish bishop remarked at the time, “We found a large number of books in these characters and, as they contained nothing in which there were not to be seen superstition and lies of the devil, we burned them all, which they regretted to an amazing degree, and which caused them much affliction.”

As a result, almost the only surviving written records dating from the classical Mayan era are those that were carved in stone. One of the most important repositories of Mayan hieroglyphs is at Palenque, an archaeological site deep in the jungles in the neck of the Mexican peninsula, considerably to the west of the Yucatán (see Map 6.2). In a chamber located under the Temple of Inscriptions, archaeologists discovered a royal tomb and a massive limestone slab covered with hieroglyphs. By deciphering the message on the slab, archaeologists for the first time identified a historical figure in Mayan history. He was the ruler named Pacal, known from his glyph as “The Shield”; Pacal ordered the construction of the Temple of Inscriptions in the mid-seventh century, and it was his body that was buried in the tomb at the foot of the staircase leading down into the crypt.

As befits their intense interest in the passage of time, the Maya also had a sophisticated knowledge of astronomy and kept voluminous records of the movements of the heavenly bodies. There were practical reasons for their concern. The arrival of the planet Venus in the evening sky, for example, was a traditional time to prepare for war. The Maya also devised the so-called Long Count, a system of calculating time based on a lunar calendar that calls for the end of the current cycle of 5,200 years in the year 2012 of the Western solar-based Gregorian calendar.

Scholars once believed that the Maya were a peaceful people who rarely engaged in violence. Now, however, it is thought that rivalry among Mayan city-states was endemic and often involved bloody clashes. Scenes from paintings and rock carvings depict a society preoccupied with war and the

The Role of Jade. To many early peoples, the beautiful stone we know as jade possessed magical spiritual qualities, which undoubtedly inspired the two objects shown here. The funeral mask of Lord Pacal (right), a seventh-century ruler of Palenque, was placed in his tomb in the hope that its spiritual energy would propel Pacal into the afterlife, thereby merging him with the divine in the Mayan cosmos. In China, members of the Han ruling family were buried in jade body suits, such as the one shown below. The suit was composed of jade squares sewn together with gold thread. Because of the expense, such practices were eventually banned as extravagant.

What factors appear to have brought an end to classical Mayan civilization?
seizure of captives for sacrifice. The conflict mentioned at the beginning of this chapter is but a recent example. During the seventh century C.E., two powerful city-states, Tikal and Calakmul (kah-lahk-MOOL), competed for dominance throughout the region, setting up puppet regimes and waging bloody wars that wavered back and forth for years but ultimately resulted in the total destruction of Calakmul at the end of the century.

THE MYSTERY OF MAYAN DECLINE Sometime in the eighth or ninth century, the classical Mayan civilization in the central Yucatán peninsula began to decline. At Copán, for example, it ended abruptly in 822 C.E., when work on various stone sculptures ordered by the ruler suddenly ceased. The end of Palenque soon followed, and the city of Tikal was abandoned by 870 C.E. Whether the decline was caused by overuse of the land, incessant warfare, internal revolt, or a natural disaster such as a volcanic eruption is a question that has puzzled archaeologists for decades. Recent evidence supports the theory that overcultivation of the land due to a growing population gradually reduced crop yields. A long drought, which lasted throughout most of the ninth and tenth centuries C.E., may have played a major role, although the city-state of Tikal, blessed with fertile soil and the presence of nearby Lake Petén, does not appear to have suffered from a lack of water. In general, though, as arable land and water became increasingly scarce, conflict among the various mini-states in the region may have intensified, accelerating the process leading to a final collapse.

Whatever the case, cities such as Tikal and Palenque were abandoned to the jungles. In their place, newer urban centers in the northern part of the peninsula, such as Uxmal (oosh-MAHL) and Chichén Itzá (chee-CHEN eet-SAH), continued to prosper, although the level of cultural achievement in this postclassical era did not match that of previous years. According to local history, this latter area was taken over by peoples known as the Toltecs (TOHL-teks), led by a man known as Kukulcan (koo-kul-KAHN), who migrated to the peninsula from Teotihuacán in central Mexico sometime in the tenth century. Some scholars believe this flight was associated with the legend of the departure from that city of Quetzalcoatl (KWET-sul-koh-AHT-ul), a deity in the form of a feathered serpent who promised that he would someday return to reclaim his homeland.

The Toltecs apparently controlled the upper peninsula from their capital at Chichén Itzá for several centuries, but this area was less fertile and more susceptible to drought than the earlier regions of Mayan settlement, and eventually they too declined. By the early sixteenth century, the area was divided into a number of small principalities, and the cities, including Uxmal and Chichén Itzá, had been abandoned.

The Aztecs Among the groups moving into the Valley of Mexico after the fall of Teotihuacán were the Mexica (meh-SHEE-kuh). No one knows their origins, although folk legend held that their original homeland was an island in a lake called Aztlan. From that legendary homeland comes the name Aztec, by which they are known to the modern world. Sometime during the early twelfth century, the Aztecs left their original habitat and, carrying an image of their patron deity, Huitzilopochtli (WEET-see-loh-POHSHT-lee), began a lengthy migration that climaxed with their arrival in the Valley of Mexico sometime late in the century.

Less sophisticated than many of their neighbors, the Aztecs were at first forced to seek alliances with stronger city-states. They were excellent warriors, however, and (like Sparta in ancient Greece and the state of Qin in Zhou dynasty China) theirs had become the dominant city-state in the lake
region by the early fifteen century. Establishing their capital at Tenochtitlán (teh-nahch-teet-LAHN), on an island in the middle of Lake Texcoco (tess-KOH-koh), they set out to bring the entire region under their domination (see Map 6.3). For the remainder of the fifteenth century, the Aztecs consolidated their control over much of what is modern Mexico, from the Atlantic to the Pacific Ocean and as far south as the Guatemalan border. The new kingdom was not a centralized state but a collection of semiautonomous territories. To provide a unifying focus for the kingdom, the Aztecs promoted their patron god, Huitzilopochtli, as the guiding deity of the entire population, which now numbered several million.

**POLITICS** Like all great empires in ancient times, the Aztec state was authoritarian. Power was vested in the monarch, whose authority had both a divine and a secular character. The Aztec ruler claimed descent from the gods and served as an intermediary between the material and the metaphysical worlds. Unlike many of his counterparts in other ancient civilizations, however, the monarch did not obtain his position by a rigid law of succession. On the death of the ruler, his successor was selected from within the royal family by a small group of senior officials, who were also members of the family and were therefore eligible for the position. Once placed on the throne, the Aztec ruler was advised by a small council of lords, headed by a prime minister who served as the chief executive of the government, and a bureaucracy. Beyond the capital, the power of the central government was limited. Rulers of territories subject to the Aztecs were allowed considerable autonomy in return for paying tribute, in the form of goods or captives, to the central government. The most important government officials in the provinces were the tax collectors, who collected the tribute. They used the threat of military action against those who failed to carry out their tribute obligations and therefore, understandably, were not popular with the taxpayers. According to Bernal Diaz, a Spaniard who recorded his impressions of Aztec society during a visit in the early sixteenth century:

> All these towns complained about Montezuma [Moctezuma, the Aztec ruler] and his tax collectors, speaking in private so that the Mexican ambassadors should not hear them, however. They said these officials robbed them of all they possessed, and that if their wives and daughters were pretty they would violate them in front of their fathers and husbands and carry them away. They also said that the Mexicans [that is, the representatives from the capital] made the men work like slaves, compelling them to carry pine trunks and stone and firewood and maize overland and in canoes, and to perform other tasks, such as planting maize fields, and that they took away the people’s lands as well for the service of their idols.²

**SOCIAL STRUCTURES** Positions in the government bureaucracy were the exclusive privilege of the hereditary nobility, all of whom traced their lineage to the founding family of the Aztec clan. Male children in noble families were sent to temple schools, where they were exposed to a harsh regimen of manual labor, military training, and memorization of information about Aztec society and religion. On reaching adulthood, they would select a career in the military service, the government bureaucracy, or the priesthood. As a reward for their services, senior officials received large estates from the government, and they alone had the right to hire communal labor.

The remainder of the population consisted of commoners, indentured workers, and slaves. Most indentured workers
Markets and Merchandise in Aztec Mexico

One of our most valuable descriptions of Aztec civilization is The Conquest of New Spain, written by Bernal Díaz, a Spaniard who visited Mexico in 1519. In the following passage, Díaz describes the great market at Tenochtitlán.

**Bernal Díaz, The Conquest of New Spain**

Let us begin with the dealers in gold, silver, and precious stones, feathers, cloaks, and embroidered goods, and male and female slaves who are also sold there. They bring as many slaves to be sold in that market as the Portuguese bring Negroes from Guinea. Some are brought there attached to long poles by means of collars round their necks to prevent them from escaping, but others are left loose. Next there were those who sold coarser cloth, and cotton goods and fabrics made of twisted thread, and there were chocolate merchants with their chocolate. In this way you could see every kind of merchandise to be found anywhere in New Spain, laid out in the same way as goods are laid out in my own district of Medina del Campo, a center for fairs, where each line of stalls has its own particular sort. So it was in this great market. There were those who sold sisal cloth and ropes and the sandals they wear on their feet, which are made from the same plant. All these were kept in one part of the market, in the place assigned to them, and in another part were skins of tigers and lions, otters, jackals, and deer, badgers, mountain cats, and other wild animals, some tanned and some untanned, and other classes of merchandise.

There were sellers of kidney beans and sage and other vegetables and herbs in another place, and in yet another they were selling fowls, and birds with great dewlaps, also rabbits, hares, deer, young ducks, little dogs, and other such creatures. Then there were the fruitiers; and the women who sold cooked food, flour and honey cake, and tripe, had their part of the market. Then came pottery of all kinds, from big water jars to little jugs, displayed in its own place, also honey, honey paste, and other sweets like nougat. Elsewhere they sold timber too, boards, cradles, beams, blocks, and benches, all in a quarter of their own.

Then there were the sellers of pitch pine for torches, and other things of that kind, and I must also mention, with all apologies, that they sold many canoe loads of human excrement, which they kept in the creeks near the market. This was for the manufacture of salt and the curing of skins, which they say cannot be done without it. I know that many gentlemen will laugh at this, but I assure them it is true. I may add that on all the roads they have shelters made of reeds or straw or grass so that they can retire when they wish to do so, and purge their bowels unseen by passersby, and also in order that their excrement shall not be lost.

**Q Which of the items offered for sale in this account might also have been available in a market in Asia, Egypt, or Europe? What types of goods mentioned here appear to be unique to the Americas?**

were landless laborers who contracted to work on the nobles’ estates, while slaves served in the households of the wealthy. Slavery was not an inherited status, and the children of slaves were considered free citizens. Commoners might sell themselves into slavery when in debt and then later purchase their freedom.

The vast majority of the population consisted of commoners. All commoners were members of large kinship groups called *calpuli* (kal-PUL-eez). Each *calpulli*, often consisting of as many as a thousand members, was headed by an elected chief, who ran its day-to-day affairs and served as an intermediary with the central government. Each *calpulli* was responsible for providing taxes (usually in the form of goods) and conscript labor to the state.

Each *calpulli* maintained its own temples and schools and administered the land held by the community. Farmland within the *calpulli* was held in common and could not be sold, although it could be passed down within the family. In the cities, each *calpulli* occupied a separate neighborhood, where its members often performed a particular function, such as metalworking, stonemasonry, weaving, carpentry, or commerce. Apparently, a large proportion of the population engaged in some form of trade, at least in the densely populated Valley of Mexico, where an estimated half of the people lived in an urban environment. Many farmers, who cultivated their crops in *chinampas* as their predecessors had for centuries, brought their goods to the markets via the canals and sold them directly to retailers (see the box above).

The *calpulli* compounds themselves were divided into smaller family units. Individual families lived in small flat-roofed dwellings containing one or two rooms. Each house was separate from its neighbors and had direct access to the surrounding streets and canals. The houses of farmers living on the *chinampas* were set on raised dirt platforms built above the surrounding fields to prevent flooding.

Gender roles within the family were rigidly stratified. Male children were trained for war and were expected to serve in the army on reaching adulthood. Women were expected to work in the home, weave textiles, and raise children, although, like their brothers, they were permitted to enter the priesthood. According to Bernal Díaz, a female deity presided over the rites of marriage. As in most traditional societies, chastity and obedience were desirable female characteristics. Although women in Aztec society enjoyed more...
Aztec Midwife Ritual Chants

Most Aztec women were burdened with time-consuming family chores, such as grinding corn into flour for tortillas and carrying heavy containers of water from local springs. Like their brothers, Aztec girls went to school, but rather than training for war, they learned spinning, weaving, and how to carry out family rituals. In the sixteenth century c.e., a Spanish priest, Bernardino de Sahagún (ber-nar-DEE-noh duh sah-ah-GOON), interviewed Aztec informants to compile a substantial account of traditional Aztec society. Here we read his narration of ritual chants used by midwives during childhood. For a boy, the highest honor was to shed blood in battle. For a girl, it was to offer herself to the work of domestic life. If a woman died in childbirth, however, she would be glorified as a “warrior woman.”

Bernardino de Sahagún, The Florentine Codex

My precious son, my youngest one. . . . Heed, hearken: Thy home is not here, for thou art an eagle, thou art an ocelot. . . . Thou art the serpent, the bird of the lord of the near, of the nigh. Here is only the place of thy nest. Thou hast only been hatched here; thou hast only come, arrived. . . . Thou belongest out there. . . . Thou hast been sent into warfare. War is the desert, thy task. Thou shalt give drink, nourishment, food to the sun, the lord of the earth. . . . Perhaps thou wilt receive the gift, perhaps thou wilt merit death by the obsidian knife, the flowered death by the obsidian knife.

My beloved maiden. . . . Thou wilt be in the heart of the home, thou wilt go nowhere, thou wilt nowhere become a wanderer, thou becomest the banked fire, the hearth stones. Here our Lord planteth thee, burieth thee. And thou wilt become fatigued, thou wilt become tired, thou art to provide water, to grind maize, to drudge; thou art to sweat by the ashes, by the hearth.

Q What does this document suggest was the proper role to be played by a woman in Aztec society? How did gender roles in Mesoamerica compare with those that we have seen in other societies around the world?

legal rights than women in some other traditional civilizations, they were still not equal to men (see the box above). Women were permitted to own and inherit property and to enter into contracts. Marriage was usually monogamous, although noble families sometimes practiced polygyny (having more than one wife at a time). Wedding partners were normally selected from within the lineage group but not the immediate family. As in most societies at the time, parents usually selected their child’s spouse, often for purposes of political or social advancement.

Classes in Aztec society were rigidly stratified. Commoners were not permitted to enter the nobility, although some occasionally rose to senior positions in the army or the priesthood as the result of exemplary service. As in medieval Europe, such occupations often provided a route of upward mobility for ambitious commoners. A woman of noble standing would sometimes marry a commoner because the children of such a union would inherit her higher status, and she could expect to be treated better by her husband’s family, who would be proud of the marriage relationship.

LAND OF THE FEATHERED SERPENT: AZTEC RELIGION AND CULTURE The Aztecs, like their contemporaries throughout Mesoamerica, lived in an environment populated by a multitude of gods. Scholars have identified more than a hundred deities in the Aztec pantheon; some of them were nature spirits, like the rain god, Tlaloc (tuh-lah-LOHK), and some were patron deities, like the symbol of the Aztecs themselves, Huitzilopochtli. A supreme deity, called Ometeotl (oh-met tee-AH-tul), represented the all-powerful and omnipresent forces of the heavens, but he was rather remote, and other gods, notably the feathered serpent Quetzalcoatl, had a more direct impact on the lives of the people. Representing the forces of creation, virtue, and learning and culture, Quetzalcoatl bears a distinct similarity to Shiva in Hindu belief. According to Aztec tradition, this godlike being had left his homeland in the Valley of Mexico in the tenth century, promising to return in triumph (see “The Mystery of Mayan Decline” earlier in this chapter).

Aztec cosmology was based on a belief in the existence of two worlds, the material and the divine. The earth was the material world and took the form of a flat disk surrounded by water on all sides. The divine world, which consisted of both heaven and hell, was the abode of the gods. Human beings could aspire to a form of heavenly salvation but first had to pass through a transitional stage, somewhat like Christian purgatory, before reaching their final destination, where the soul was finally freed from the body. To prepare for the final day of judgment, as well as to help them engage in proper behavior through life, all citizens underwent religious training at temple schools during adolescence and took part in various rituals throughout their lives. The most devout were encouraged to study for the priesthood. Once accepted, they served at temples ranging from local branches at the calpulli level to the highest shrines in the ceremonial precinct at Tenochtitlan. In some respects, however, Aztec society may have been
undergoing a process of secularization. By late Aztec times, athletic contests at the ball court had apparently lost some of their religious significance. Gambling was increasingly common, and wagering on the results of the matches was widespread. One province reportedly sent 16,000 rubber balls to the capital city of Tenochtitlán as its annual tribute to the royal court.

Aztec religion contained a distinct element of fatalism that was inherent in the creation myth, which described an unceasing struggle between the forces of good and evil throughout the universe. This struggle led to the creation and destruction of four worlds, or suns. The world was now living in the time of the fifth sun. But that world, too, was destined to end with the destruction of this earth and all that is within it:

Even jade is shattered,
Even gold is crushed,
Even quetzal plumes are torn . . .
One does not live forever on this earth:
We endure only for an instant?

In an effort to postpone the day of reckoning, the Aztecs practiced human sacrifice. The Aztecs believed that by appeasing the sun god, Huitzilopochtli, with sacrifices, they could delay the final destruction of their world. Victims were prepared for the ceremony through elaborate rituals and then brought to the holy shrine, where their hearts were ripped out of their chests and presented to the gods as a holy offering. It was an honor to be chosen for sacrifice, and captives were often used as sacrificial victims, since they represented valor, the trait the Aztecs prized most.

**ART AND CULTURE** Like the art of the Olmecs, most Aztec architecture, art, and sculpture had religious significance. At the center of the capital city of Tenochtitlán was the sacred precinct, dominated by the massive pyramid dedicated to Huitzilopochtli and the rain god, Tlaloc. According to Bernal Díaz, at its base the pyramid was equal to the plots of six large European town houses and tapered from there to the top, which was surmounted by a platform containing shrines to the gods and an altar for performing human sacrifices. The entire pyramid was covered with brightly colored paintings and sculptures.

Although little Aztec painting survives, it was evidently of high quality. Díaz compared the best work with that of Michelangelo. Artisans worked with stone and with soft metals such as gold and silver, which they cast using the lost-wax technique. They did not have the knowledge for making implements in bronze or iron, however. Stoneworking consisted primarily of representations of the gods and bas-reliefs depicting religious ceremonies. Among the most famous is

**Quetzalcoatl.** Quetzalcoatl was one of the favorite deities of the Central American peoples. His visage of a plumed serpent, as shown here, was prominent in the royal capital of Teotihuacán. According to legend, Quetzalcoatl, the leader of the Toltecs, was tricked into drunkenness and humiliated by a rival god. In disgrace, he left his homeland but promised to return. In 1519, the Aztec monarch Moctezuma welcomed Hernán Cortés, the leader of the Spanish expedition, believing that he was a representative of Quetzalcoatl.
the massive disk called the Stone of the Fifth Sun, carved for use at the central pyramid at Tenochtitlán.

The Aztecs had devised a form of writing based on hieroglyphs that represented an object or a concept. The symbols had no phonetic significance and did not constitute a writing system as such but could give the sense of a message and were probably used by civilian or religious officials as notes or memoranda for their orations. Although many of the notes simply recorded dates in the complex calendar that had evolved since Olmec times, others provide insight into the daily lives of the Aztec peoples. A trained class of scribes carefully painted the notes on paper made from the inner bark of fig trees. Unfortunately, many of these notes were destroyed by the Spaniards as part of their effort to eradicate all aspects of Aztec religion and culture.

The First Civilizations in South America

**FOCUS QUESTION:** What role did the environment play in the evolution of societies in the Americas?

South America is a vast continent, characterized by extremes in climate and geography. The north is dominated by the mighty Amazon River, which flows through dense tropical rain forests carrying a larger flow of water than any other river system in the world (see Map 6.4). Farther to the south, the forests are replaced by prairies and steppes stretching westward to the Andes Mountains, which extend the entire length of the continent, from the Isthmus of Panama to the Strait of Magellan. Along the Pacific coast, on the western slopes of the mountains, are some of the driest desert regions in the world.

South America has been inhabited by human beings for more than 12,000 years. Wall paintings discovered at the so-called Cavern of the Painted Rock in the Amazon region suggest that Stone Age peoples were living in the area at least 11,000 years ago, and a site at Monte Verde, along the central coast of Chile, has been dated to 10,500 B.C.E. Early peoples lived by hunting, fishing, and food gathering, but there are indications that irrigated farming was being practiced on the western slopes of the Andes Mountains more than 5,000 years ago.

**Caral**

By the third millennium B.C.E., complex societies had begun to emerge in the coastal regions of modern-day Peru and Ecuador. Some settlements were located along the coast, but the remnants of farming communities watered by canals have also been found in the valleys of rivers flowing down from the Andes Mountains. Fish and agricultural products were traded to highland peoples for wool and salt.

By 3500 B.C.E.—more than a thousand years earlier than the earliest known cities in Mesoamerica—the first urban settlements appeared in the region. At Caral, a highly publicized site located 14 miles inland from the coast, the remnants of a 4,500-year-old city sit on the crest of a 60-foot-high pyramid. The inhabitants raised squash, beans, and tomatoes but also provided cotton to fishing communities along the coast, where it was used to make fishnets. Land was divided in a manner similar to the well-field system in ancient China (see Chapter 3).

This culture reached its height during the first millennium B.C.E. with the emergence of the Chavin style, named for a site near the modern city of Chavin de Huantar (chah-VEEN day HWAHN-tahr). The ceremonial precinct at the site contained an imposing stone temple complete with interior galleries, a stone-block ceiling, and a system of underground canals that probably channeled water into the temple complex for ceremonial purposes. The structure was surrounded by stone figures depicting various deities and two pyramids. Evidence of metallurgy has also been found, with objects made of copper and gold. Another impressive technological achievement was the building in 300 B.C.E. of the first solar observatory.
in the Americas in the form of thirteen stone towers on a hillside north of Lima, Peru. There are even signs of a rudimentary writing system (see “Inka Culture” later in this chapter).

**Moche**

Chavín society had broken down by 200 B.C.E., but early in the first millennium C.E., another advanced civilization appeared in northern Peru, in the valley of the Moche River, which flows from the foothills of the Andes into the Pacific Ocean. It occupied an area of more than 2,500 square miles, and its capital city, large enough to contain more than 10,000 people, was dominated by two massive adobe pyramids nearly 100 feet high. The larger one, known today as the Pyramid of the Sun, covered a total of 15 acres. The other, built on the side of a mountain, was adorned with painted murals depicting battles, ritual sacrifices, and various local deities.

Artifacts found at Moche (moh-CHAY), especially the metalwork and stone and ceramic figures, exhibit a high quality of artisanship. They were imitated at river valley sites throughout the surrounding area, which suggests that the influence of the Moche rulers may have extended as far as 400 miles along the coast. The artifacts also indicate that the people at Moche, like those in Central America, were preoccupied with warfare. Paintings and pottery as well as other artifacts in stone, metal, and ceramics frequently portray warriors, prisoners, and sacrificial victims. The Moche were also fascinated by the heavens, and much of their art consisted of celestial symbols and astronomical constellations.

**ENVIRONMENTAL PROBLEMS** The Moche River valley is extremely arid, normally receiving less than an inch of rain annually. The peoples in the area compensated by building a sophisticated irrigation system to carry water from the river to the parched fields. At its zenith, Moche culture was spectacular. By the eighth century C.E., however, the civilization was in a state of collapse, the irrigation canals had been abandoned, and the remaining population had left the area and moved farther inland or suffered from severe malnutrition.

What had happened to bring Moche culture to this untimely end?

Archaeologists speculate that environmental disruptions, perhaps brought on by changes in the temperature of the Pacific Ocean known as El Niño, led to alternating periods of drought and flooding of coastal regions, which caused the irrigated fields to silt up (see the comparative essay “History and the Environment” on p. 174). The warm water created by El Niño conditions also killed local marine life, severely damaging the local fishing industry.

**WARI AND CHIMOR** A few hundred miles to the south of Moche, a people known as the Wari (WAH-ree) culture began to expand from their former home in the Andes foothills and established communities along the coast in the vicinity of modern Lima, Peru. As the state of Moche declined, the Wari gradually spread northward in the eighth century and began to occupy many of the urban sites in the Moche valley. According to some scholars, they may even have made use of the Moche’s sacred buildings and appropriated their religious symbolism. In the process, the Wari created the most extensive land empire yet seen in South America. In the end, however, they too succumbed to the challenge posed by unstable environmental conditions.

Around 1100, a new power, the kingdom of Chimor (chee-MAWR), with its capital at Chan Chan (CHAHN CHAHN), at the mouth of the Moche River, emerged in the area. Built almost entirely of adobe, Chan Chan housed an estimated 30,000 inhabitants.

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**CHRONOLOGY**

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
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<tbody>
<tr>
<td>Monte Verde</td>
<td>10,500 B.C.E.</td>
</tr>
<tr>
<td>Founding of Caral</td>
<td>c. 2500 B.C.E.</td>
</tr>
<tr>
<td>Agriculture first widely practiced</td>
<td>c. 3200 B.C.E.</td>
</tr>
<tr>
<td>Inka takeover in central Andes</td>
<td>1400s</td>
</tr>
<tr>
<td>Moche civilization</td>
<td>c. 150–800 C.E.</td>
</tr>
<tr>
<td>Wari culture</td>
<td>c. 500–1000 C.E.</td>
</tr>
<tr>
<td>Civilization of Chimor</td>
<td>c. 1100–1450</td>
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**A Mind-Changing Experience.** For thousands of years, peoples living in the Andes Mountains have chewed the leaf of the coca plant to relieve hunger, restore energy, and cure bodily ailments. At ceremonies held in local temples throughout the region, shamans often engaged in this practice to communicate with the spirits or with the ancestors of their constituents. This terra-cotta object, dating from the first millennium C.E. and unearthed in present-day Ecuador, shows a user entering a trance and having an “out-of-body” experience, as his alter ego emerges full-blown from the top of his head. The concentrated paste of the coca plant is used today in the manufacture of cocaine.
residents in an area of more than 12 square miles that included a number of palace compounds surrounded by walls nearly 30 feet high. One compound contained an intricate labyrinth that wound its way progressively inward until it ended in a central chamber, probably occupied by the ruler. Like the Moche before them, the people of Chimor—the Chimu (chee-MOO)—relied on irrigation to funnel the water from the river into their fields. An elaborate system of canals brought the water through hundreds of miles of hilly terrain to the fields near the coast. Nevertheless, by the fifteenth century, Chimor, too, had disappeared, a victim of floods and a series of earthquakes that destroyed the intricate irrigation system that had been the basis of its survival.

These early civilizations in the Andes were by no means isolated from other societies in the region. As early as 2000 B.C.E., local peoples had been venturing into the Pacific Ocean on wind-powered rafts constructed of balsa wood. By the late first millennium C.E., seafarers from the coast of Ecuador had established a vast trading network that extended southward to central Peru and as far north as western Mexico, more than 2,000 miles away. Items transported included jewelry, beads, and metal goods. In all likelihood, technological exchanges were an important by-product of the relationship.
Transportation by land, however, was more difficult. Although roads were constructed to facilitate communication between communities, the forbidding terrain in the mountains was a serious obstacle, and the only draft animal on the entire continent was the llama, which is considerably less hardy than the cattle, horses, and water buffalo used in much of Asia. Such problems undoubtedly hampered the development of regular contacts with distant societies in the Americas, as well as the exchange of goods and ideas that had lubricated the rise of civilizations from China to the Mediterranean Sea.

The Inka

The Chimor kingdom was eventually succeeded in the late fifteenth century by an invading force from the mountains far to the south. In the late fourteenth century, the Inka were a small community in the area of Cuzco (KOOS-koh), a city located at an altitude of 10,000 feet in the mountains of southern Peru. In the 1440s, however, under the leadership of their powerful ruler Pachakuti (pah-chah-KOO-tee) (sometimes called Pachacutec, or “he who transforms the world”), the Inka launched a campaign of conquest that eventually brought the entire region under their authority. Under Pachakuti and his immediate successors, Topa Inka (TOH-puh INK-uh) and Huayna Inka (WY-nuh INK-uh) (the word Inka means “ruler”), the boundaries of the empire were extended as far as Ecuador, central Chile, and the edge of the Amazon basin.
THE FOUR QUARTERS: INKA POLITICS AND SOCIETY  Pachakuti created a highly centralized state (see Map 6.5). With a stunning concern for mathematical precision, he divided his empire, called Tahuantinsuyu (tuh-HWAHN-tin-SOO-yoo), or “the world of the four quarters,” into provinces and districts. Each province contained about ten thousand residents (at least in theory) and was ruled by a governor related to the royal family. Excess inhabitants were transferred to other locations. The capital of Cuzco was divided into four quarters, or residential areas, and the social status and economic functions of the residents of each quarter were rigidly defined.

The state was built on forced labor. Often entire communities of workers were moved from one part of the country to another to open virgin lands or engage in massive construction projects. Under Pachakuti, Cuzco was transformed from a city of mud and thatch into an imposing metropolis of stone. The walls, built of close-fitting stones without the use of mortar, were a wonder to early European visitors. The most impressive structure in the city was a temple dedicated to the sun. According to a Spanish observer, “All four walls of the temple were covered from top to bottom with plates and slabs of gold.” Equally impressive are the ruins of the abandoned city of Machu Picchu (MAH-choo PEE-choo), built on a lofty hilltop far above the Urubamba River.

Another major construction project was a system of 24,800 miles of highways and roads that extended from the border of modern Colombia to a point south of modern Santiago, Chile. Two major roadways extended in a north-south direction, one through the Andes Mountains and the other along the coast, with connecting routes between them. Rest houses and storage depots were placed along the roads. Suspension bridges made of braided fiber and fastened to stone abutments on opposite banks were built over ravines and waterways. Use of the highways was restricted to official and military purposes. Trained runners carried messages rapidly from one way station to another, enabling information to travel up to 140 miles in a single day.

In rural areas, the population lived mainly by farming. In the mountains, the most common form was terraced agriculture, watered by irrigation systems that carried precise amounts of water into the fields, which were planted with maize, potatoes, and other crops. The plots were tilled by collective labor regulated by the state. Like other aspects of Inkan society, marriage was strictly regulated, and men and women were required to select a marriage partner from...
Inka authority, the local inhabitants were instructed in the carried on the backs of llamas. Once an area was placed under side. Because the Inka had no wheeled vehicles, supplies were bivouacked in the rest houses located along the road-
tary units were moved rapidly along the highway system and for the 200,000-man Inka army, the largest and best armed in bian Latin America, the Inka state was built on war. Soldiers

The virgins of the Inca’s own shrine of Huanacauri were known for their beauty as well as their chastity. The other principal shrines had similar girls in attendance. At the less important shrines there were the older virgins who occupied themselves with spinning and weaving the silklike clothes worn by their idols. There was a still lower class of virgins, over forty years of age and no longer very beautiful, who performed unimportant religious duties and worked in the fields or as ordinary seamstresses.

Daughters of noble families who had grown into old maids were adept at making girdles, headbands, string bags, and similar articles in the intervals of their pious observances.

Girls who had musical talent were selected to sing or play the flute and drum at Court, weddings and other ceremonies, and all the innumerable festivals of the Inca year.

There was yet another class of acla or “chosen,” only some of whom kept their virginity and others not. These were the Inca’s beautiful attendants and concubines, who were drawn from noble families and lived in his palaces. They made clothing for him out of material finer than taffeta or silk. They also prepared a maize spirit of extraordinary richness, which was matured for an entire month, and they cooked delicious dishes for the Inca. They also lay with him, but never with any other man.

According to this selection, one of the chief duties of a woman in Inkan society was to spin and weave. In what other traditional societies was textile making a woman’s work? Why do you think this was the case?

within the immediate tribal group. For women, there was one escape from a life of domestic servitude: fortunate maidens were selected to serve as “chosen virgins” in temples throughout the country (see the box above). Noblewomen were eligible to compete for service in the Temple of the Sun at Cuzco, while commoners might hope to serve in temples in the provincial capitals. Punishment for breaking the vow of chastity was harsh, and few evidently took the risk.

INKA CULTURE Like many other civilizations in pre-Columbian Latin America, the Inka state was built on war. Soldiers for the 200,000-man Inka army, the largest and best armed in the region, were raised by universal male conscription. Military units were moved rapidly along the highway system and were bivouacked in the rest houses located along the road-
side. Because the Inka had no wheeled vehicles, supplies were carried on the backs of llamas. Once an area was placed under Inka authority, the local inhabitants were instructed in the Quechua (KEH-chuh-wuh) language, which became the lingua franca of the state, and were introduced to the state religion. The Inka had no writing system but kept records using a system of knotted strings called quipu (KEE-poo), main-
tained by professionally trained officials, that were able to re-
cord all data of a numerical nature. What could not be recorded in such a manner was committed to memory and then recited when needed. The practice was apparently not invented by the Inka. Fragments of quipu have been found at Caral and dated at approximately five thousand years ago. Nor apparently was the experiment limited to the Americas. A passage in the Chinese classic The Way of the Tao declares, “Let the people revert to communication by knotted cords.”

As in the case of the Aztecs and the Maya, the lack of a fully developed writing system did not prevent the Inka from realizing a high level of cultural achievement. Most of what survives was recorded by the Spanish and consists of enter-
tainment for the elites. The Inka had a highly developed
tradition of court theater, including both tragic and comic works. There was also some poetry, composed in blank verse and often accompanied by music played on reed instruments.

Stateless Societies in the Americas

FOCUS QUESTION: What were the main characteristics of stateless societies in the Americas, and how did they resemble and differ from the civilizations that arose there?

Beyond Central America and the high ridges of the Andes Mountains, on the Great Plains of North America, along the Amazon River in South America, and on the islands of the Caribbean Sea, other communities of Amerindians were also beginning to master the art of agriculture and to build organized societies.

Although human beings had occupied much of the continent of North America during the early phase of human settlement, the switch to farming as a means of survival did not occur until the third millennium B.C.E. at the earliest, and much later in most areas of the continent. Until that time, most Amerindian communities lived by hunting, fishing, or foraging. As the supply of large animals began to diminish, they turned to smaller game and to fishing and foraging for wild plants, fruits, and nuts.

The Eastern Woodlands

It was probably during the third millennium B.C.E. that peoples in the Eastern Woodlands (the land in eastern North America from the Great Lakes to the Gulf of Mexico) began to cultivate indigenous plants for food in a systematic way. As wild game and food became scarce, some communities began to place more emphasis on cultivating crops. This shift first occurred in the Mississippi River valley from Ohio, Indiana, and Illinois down to the Gulf of Mexico (see Map 6.6). Among the most commonly cultivated crops were maize, squash, beans, and various grasses.

As the population in the area increased, people began to congregate in villages, and sedentary communities began to develop in the alluvial lowlands, where the soil could be cultivated for many years at a time because of the nutrients deposited by the river water.

Village councils were established to adjudicate disputes, and in a few cases, several villages banded together under the authority of a local chieftain. Urban centers began to appear, some of them inhabited by ten thousand people or more. At the same time, regional trade increased. The people of the Hopewell culture in Ohio ranged from the shores of Lake Superior to the Appalachian Mountains and the Gulf of

Machu Picchu. Situated in the Andes in modern Peru, Machu Picchu reflects the glory of Inka civilization. To farm such rugged terrain, the Inka constructed terraces and stone aqueducts. To span vast ravines, they built suspension bridges made of braided fiber and fastened them to stone abutments on the opposite banks. The most revered of the many temples and stone altars at Machu Picchu was the throne-like “hitching post of the sun,” so called because of its close proximity to the sun god.

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CHAPTER 6 The Americas
Mexico in search of metals, shells, obsidian, and manufactured items to support their economic needs and religious beliefs.

Cahokia

At the site of Cahokia, near the modern city of East Saint Louis, Illinois, archaeologists found a burial mound more than 98 feet high with a base larger than that of the Great Pyramid in Egypt. A hundred smaller mounds were also found in the vicinity. The town itself, which covered almost 300 acres and was surrounded by a wooden stockade, was apparently the administrative capital of much of the surrounding territory until its decline in the 1200s. With a population of more than 20,000, it was reportedly the largest city in North America until Philadelphia surpassed that number in the early nineteenth century. Cahokia carried on extensive trade with other communities throughout the region, and there are some signs of regular contacts with the civilizations in Mesoamerica, such as the presence of ball courts in the Central American style. But wars were not uncommon, leading the Iroquois, who inhabited much of the modern states of Pennsylvania and New York as well as parts of southern Canada, to create a tribal alliance called the League of Iroquois.

The Ancient Pueblo Peoples

West of the Mississippi River basin, most Amerindian peoples lived by hunting or food gathering. During the first millennium C.E., knowledge of agriculture gradually spread up the rivers to the Great Plains, and farming was practiced as far west as southwestern Colorado, where an agricultural community was established in an area extending from northern New Mexico and Arizona to southwestern Colorado and parts of southern Utah. Although they apparently never discovered the wheel or used beasts of burden, these Ancient Pueblo peoples (formerly known by the Navajo name “Anasazi,” or “alien ancient ones”) created a system of roads that facilitated an extensive exchange of technology, products, and ideas throughout the region. By the ninth century, they had mastered the art of irrigation, which allowed them to expand their productive efforts to squash and beans, and had established an important urban center at Chaco Canyon, in southern New Mexico, where they built a walled city with dozens of three-story adobe communal houses, today called pueblos, with timbered roofs. Community religious functions were carried out in two large circular chambers called kivas (KEE-vuh-s). Clothing was made from hides or cotton cloth. At its height, Pueblo Bonito contained several hundred compounds housing several thousand residents.

In the mid-twelfth century, the Ancient Pueblo peoples moved north to Mesa Verde, in southwestern Colorado. At first, they settled on top of the mesa, but eventually they expanded onto the cliffs of surrounding canyons.

Sometime during the late thirteenth century, however, Mesa Verde was also abandoned, and the inhabitants migrated southward. Their descendants, the Zuni and the Hopi, now occupy pueblos in central Arizona and New Mexico (thus leading them to adopt their new name). For years, archaeologists surmised that a severe drought was the cause of the migration, but new evidence has raised doubts that decreasing rainfall, by itself, was a sufficient explanation. An
increase in internecine warfare, perhaps brought about by climatic changes, may also have played a role in the decision to relocate. Some archaeologists point to evidence that cannibalism was practiced at Pueblo Bonito and suggest that migrants from the south may have arrived in the area, provoking bitter rivalries within Ancient Pueblo society. In any event, with increasing aridity and the importation of the horse by the Spanish in the sixteenth century, hunting revived, and mounted nomads like the Apache and the Navajo came to dominate much of the Southwest. Prior to their relocation, however, the Pueblo Bonito peoples maintained commercial contacts with their counterparts in Mexico and even as far south as the Pacific Coast of South America.

South America: The Arawak

East of the Andes Mountains in South America, other Amerindian societies were beginning to make the transition to agriculture. Perhaps the most prominent were the Arawak (ÁR-uh-wahk), a people living along the Orinoco River in modern Venezuela. Having begun to cultivate manioc (a tuber also known as cassava or yaca, the source of tapioca) along the banks of the river, they gradually migrated down to the coast and then proceeded to move eastward along the northern coast of the continent. Some occupied the islands of the Caribbean Sea. In their new island habitat, they lived by a mixture of fishing, hunting, and cultivating maize, beans, manioc, and squash, as well as other crops such as peanuts, peppers, and pineapples. As the population increased, a pattern of political organization above the village level appeared, along with recognizable social classes headed by a chieftain whose authority included control over the economy. The Arawak practiced human sacrifice, and some urban centers contained ball courts, suggesting the possibility of contacts with Mesoamerica.

In most such societies, where clear-cut class stratifications had not as yet taken place, men and women were considered of equal status. Men were responsible for hunting, warfare, and dealing with outsiders, while women were accountable for the crops, the distribution of food, maintaining the household, and bearing and raising the children. Their roles were complementary and were often viewed as a divine division of labor. In such cases, women in the stateless societies of North America held positions of greater respect than their counterparts in the river valley civilizations of the ancient world.

Amazonia

Substantial human activity was also apparently taking place in the Amazon River valley. Scholars have been skeptical that advanced societies could take shape in the region because the soil was believed to lack adequate nutrients to support a large population. Recent archaeological evidence, however, suggests that in some areas where decaying organic matter produces a rich soil suitable for farming—such as the region near the modern river port of Santarem—large agricultural societies may once have existed. More information about this previously unknown culture must await further archaeological evidence.
The first human beings did not arrive in the Americas until quite late in the prehistorical period. For the next several millennia, their descendants were forced to respond to the challenges of the environment in total isolation from other parts of the world. Nevertheless, around 5000 B.C.E., farming settlements began to appear in river valleys and upland areas in both Central and South America. Not long afterward—as measured in historical time—organized communities embarked on the long march toward creating advanced technological societies. Although the total number of people living in the Americas is a matter of debate, estimates range from 10 million to as many as 90 million people.

What is perhaps most striking about the developments in the Western Hemisphere is how closely they paralleled those of other civilizations. Irrigated agriculture, long-distance trade, urbanization, and the development of a writing system were all hallmarks of the emergence of advanced societies of the classical type.

Some of the parallels, of course, were less appealing. States in the Western Hemisphere were every bit as addicted to warfare as their counterparts elsewhere. The widespread use of human sacrifice is reminiscent of similar practices in other ancient societies. Not much is yet known about relations between men and women in the Americas, but it appears that gender roles were as sharply delineated there as in much of Asia and the Mediterranean world.

In some respects, the societies that emerged in the Americas were not as advanced technologically as their counterparts elsewhere. They were not familiar with the process of smelting iron, for example, and they had not yet invented wheeled vehicles. Their writing systems were still in their infancy. Several possible reasons have been advanced to explain this technological gap. Geographic isolation—not only from people of other continents but also, in some cases, from each other—deprived them of the diffusion of ideas that had enabled other societies to learn from their neighbors. Contacts among societies in the Americas were made much more difficult because of the topography and the diversity of the environment.

In some ways, too, they were not as blessed by nature. As the sociologist Jared Diamond has pointed out, the Americas did not possess many indigenous varieties of edible grasses that could encourage hunter-gatherers to take up farming. Nor were there abundant large mammals that could easily be domesticated for food and transport (horses had disappeared from the Western Hemisphere before the arrival of *Homo sapiens sapiens* at the end of the last ice age). It was not until the arrival of the Europeans that such familiar attributes of civilization became widely available for human use in the Americas.5

These disadvantages can help explain some of the problems that the early peoples of the Americas encountered in their efforts to master their environments. It is interesting to note that the spread of agriculture and increasing urbanization had already begun to produce a rising incidence of infectious diseases. It is also significant that in the Americas, as elsewhere, many of the first civilizations formed by the human species appear to have been brought to an end as much by environmental changes and disease as by war. In the next chapter, we shall return to Asia, where new civilizations were in the process of replacing the ancient empires.
CHAPTER REVIEW

Upon Reflection

Q How did geographic and climatic factors affect the rise and fall of early societies in the Americas? Were similar factors at work among contemporary societies in other parts of the world?

Q What are some of the reasons advanced for the collapse of Mayan civilization in the late first millennium C.E.? Which do archaeologists find the most persuasive?

Q What common features linked the emerging societies in the Americas during the pre-Columbian period? Does it appear that technological and cultural achievements passed from one society to another as frequently as in other parts of the world?

Key Terms
Amerindians (p. 159)
chinampas (p. 161)
calpullis (p. 169)
polygyny (p. 170)
El Niño (p. 173)
quipu (p. 177)
Hopewell Culture (p. 178)
pueblos (p. 179)
Pueblo Bonito (p. 179)

Suggested Reading

**EARLY CIVILIZATIONS OF THE AMERICAS** For a profusely illustrated and informative overview of the early civilizations of the Americas, see M. D. Coe and R. Koontz, Mexico: From the Olmecs to the Aztecs, 6th ed. (New York, 2008). A fascinating recent account that covers the entire pre-Columbian era is C. Mann, 1491: New Revelations of the Americas Before Columbus (New York, 2006). Also see W. Polk, The Birth of America (New York, 2006).


For a treatment of the role of the environment, see B. Fagan, Floods, Famine, and Emperors: El Niño and the Fate of Civilizations (New York, 1999), and J. Diamond, Collapse: How Societies Choose to Fail or Succeed (New York 2005).

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