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WHEN OLD WORLDS COLLIDE: CONTACT, CONQUEST, CATASTROPHE

CHAPTER OUTLINE

- Peoples in Motion • Europe and the World by the 15th Century • Spain, Columbus, and the Americas • The Emergence of Complex Societies in the Americas • Contact and Cultural Misunderstanding • Conquest and Catastrophe • Global Colossus, Global Economy • Explanations: Patterns of Conquest, Submission, and Resistance

WHEN CHRISTOPHER COLUMBUS crossed the Atlantic, he did not know where he was going, and he died without realizing where he had been. Yet he changed history forever. In the 40 years after 1492, European navigators mastered the oceans of the world, joining together societies that had lived in isolation for thousands of years. European invaders conquered the Americas, not just with sails, gunpowder, and steel, but also with their plants and livestock and, most of all, their diseases. They brought staple crops and slavery with them as well. By 1600, they had created the first global economy in the history of humankind and had inflicted upon the native peoples of the Americas—unintentionally, for the most part—the greatest known catastrophe that human societies have ever experienced.

In the 15th century, when all of this started, the Americas were in some ways a more ancient world than Western Europe. For example, the Portuguese, Spanish, French, and English languages were only beginning to assume their modern forms during the century or two before and after Columbus's voyage. Centuries earlier, when Rome was falling into ruins and Paris and London were little more than hamlets, huge cities were thriving in the Andes and Mesoamerica (the area embracing Central America and southern and central Mexico). Which world was old and which was new is a matter of perspective. Each already had its own distinctive past.

CHRONOLOGY

12,000 B.C.E.	Migration to the Americas begins
9000 B.C.E.	Shenandoah Valley occupied
9000–7000 B.C.E.	Most large American mammals become extinct
500 B.C.E.–400 C.E.	Adena-Hopewell mound builders emerge in Ohio River valley
874	Norsemen reach Iceland
900–1250	Toltecs dominate the Valley of Mexico ♦ Cahokia becomes largest Mississippian mound builders' city ♦ Anasazi culture thrives in American Southwest
982	Norse settle Greenland
1001–1014	Norse found Vinland on Newfoundland
1400s	Incas begin to dominate the Andes; Aztecs begin to dominate Mesoamerica (1400–1450) ♦ Cheng Ho makes voyages of exploration for China (1405–1434) ♦ Portuguese begin to master the Atlantic coast of Africa (1434) ♦ First Portuguese slave factory established on African coast (1448) ♦ Dias reaches Cape of Good Hope (1487) ♦ Columbus reaches the Caribbean (1492) ♦ Treaty of Tordesillas divides non-Christian world between Portugal and Spain (1494) ♦ da Gama rounds Cape of Good Hope and reaches India (1497–1499)
1500s	Portuguese discover Brazil (1500) ♦ Balboa crosses Isthmus of Panama to the Pacific (1513) ♦ Magellan's fleet circumnavigates the globe; Cortés conquers the Aztec empire (1519–1522) ♦ de Vaca makes overland journey from Florida to Mexico (1528–1536) ♦ Pizarro conquers the Inca empire (1531–1532) ♦ de Soto's expedition explores the American Southeast (1539–1543) ♦ Coronado explores the American Southwest (1540–1542) ♦ Jesuit mission established at Chesapeake Bay (1570–1571) ♦ Philip II issues Royal Order for New Discoveries (1573) ♦ Philip II unites Spanish and Portuguese empires (1580)

PEOPLES IN MOTION

Like all other countries of North and South America, the United States is a nation of immigrants. Even the native peoples were once migrants who roamed their way through a strange new land.

Long before Europeans discovered and explored the wide world around them, many different peoples had migrated thousands of miles over thousands of years across oceans and continents. Before Christopher Columbus sailed west from Spain in 1492, four distinct waves of immigrants had already swept over the Americas. Three came from Asia. The fourth, from northern Europe, did not stay.

From Beringia to the Americas

Before the most recent Ice Age ended about 12,000 years ago, glaciers covered huge portions of the Americas, Europe, and Asia. The ice captured so much of the world's water that sea level fell drastically and created a land bridge 600 miles wide across the Bering Strait between Siberia and Alaska. For more than 10,000 years after 23,000 B.C.E., this exposed area—geographers call it Beringia—was dry land on which plants, animals, and humans could live. Starting about 14,000 years ago, people drifted in small bands from Asia to North America. No doubt many generations lived on Beringia, although the harsh environment of this land on the edge of the Arctic Circle would have required unusual skills just to survive. These first humans to reach the Americas hunted animals for meat and furs and probably built small fishing vessels that could weather the Arctic storms. Faced with impassable glaciers to the north and east, they made snug homes to keep themselves warm through the fierce winters. Their numbers were, in all likelihood, quite small.

By 12,000 B.C.E., humans definitely were living in eastern Siberia, western Alaska, and Beringia. (Because Beringia is now under water, it cannot be studied easily, although fossils of mammoths have been found on the ocean floor.) As the glaciers receded for the last time, these people spread throughout the Americas. By 8000 B.C.E., they had reached all the way to Tierra del Fuego at the southern tip of South America. Near the eastern coast of North America, the Thunderbird dig in Virginia's Shenandoah Valley shows signs of continuous human occupation from before 9000 B.C.E. until the arrival of Europeans.

These Asians probably came in three waves. Those in the first wave spread over most of the two continents and spoke Amerind, the forerunner of most American Indian languages on both continents. The Algonquian, Iroquoian, Muskogean, Siouan, Nahuatl (Aztec), Mayan, and all South American tongues derive from this source. Those in the middle wave a few thousand years later spoke what linguists call "Na-Déné," which eventually gave rise to the various Athapaskan languages of the Canadian Northwest as well as the Apache, Navajo, and related tongues in the American Southwest. The last to arrive, the ancestors of the Inuits (called Eskimos by other Indians), crossed after 7000 B.C.E., when Beringia was again under water. About 4,000 years ago, these people began to migrate from the Aleutian Islands and Alaska to roughly their present sites in the Americas. Unlike their predecessors, they found the Arctic environment to their liking and migrated across the northern rim of North America and then across the North Atlantic to Greenland, where they encountered the first Europeans migrating westward—the Norsemen. Somehow, the Inuits maintained at least limited contact with one another across 6,000 miles of bleak Arctic tundra. The Thule, or final pre-Columbian phase of Inuit culture, lasted from 1000 C.E. to 1700 and sustained similar folkways from Siberia to Greenland.

The Great Extinction and the Rise of Agriculture

As the glaciers receded and the climate warmed, the people who had wandered south and east found an attractive environment teeming with game. Imperial mammoths, huge mastodons, woolly rhinoceroses, a species of enormous bison, and giant ground sloths roamed the plains and forests, along with camels and herds of small horses. These animals had thrived in a frigid



MAP 1.1 Indian Settlement of America

The probable routes that people followed after they left Beringia and spread throughout the Americas.

climate but they had trouble adjusting to hot weather. They also had no instinctive fear of the two-legged intruders, who became ever more skillful at hunting them. A superior spear point, the **Clovis tip**, appeared in the area of present-day New Mexico and Texas some time before 9000 B.C.E., and within a thousand years its use had spread throughout North and South America. As it spread, the big game died off along with horses, which were small and valued only as food. Overhunting cannot explain the entire extinction, but it was a major factor, along with climate change. Mammoths, for example, survived until 2000 B.C.E. on uninhabited land near Alaska. Most large animals of the Americas disappeared about 9,000 years ago.

Their passing left the hemisphere with a severely depleted number of animal species. Nothing as big as the elephant survived. The largest beasts left were bears, bison, and moose; the biggest cat was the jaguar. The human population had multiplied and spread with ease, as long as the giant species lasted. The extinction of these animal species probably led to a decline in human population as people scrambled for new sources of food. Some Indians raised guinea pigs, turkeys, or ducks, but apart from dogs on both continents, they domesticated no large animals except in South America, where they used llamas to haul light loads in mountainous terrain and raised alpacas for wool. In Eurasia, with its numerous domesticated animals, the killer diseases such as smallpox and bubonic plague took hold first among domestic animals and then spread among humans. Disease by disease, the survivors developed immunities over a long period of time. No comparable process occurred in the Americas, where few animals could be domesticated.

Some native peoples settled down without becoming farmers. Those in the Pacific Northwest sustained themselves through fishing, hunting, and the gathering of nuts, berries, and other edible plants. Men fished and hunted; women gathered. California peoples maintained some of the densest populations north of Mexico by collecting acorns and processing them into meal, which they baked into cakes. In the rain forests of Brazil, in south and central Florida, and in the cold woodlands of northern New England, hunter-gatherers also got along without becoming farmers.

Most North Americans could not depend solely on hunting and gathering food, however. In a few places, some of them, almost certainly women, began to plant and harvest crops instead of simply gathering and eating what they found. In Asia and Africa, this practice—closely linked to the domestication of animals—happened quickly enough to be called the **Neolithic** (new or late Stone Age) revolution. But in the Americas the rise of farming had little to do with animals, occurred gradually, and might better be termed the Neolithic *evolution*. For the first 3,500 years, farming supplemented a diet that still depended mostly on fishing and hunting, now of smaller animals. Somewhere between 4000 and 1500 B.C.E., permanent farm villages began to dominate parts of Peru, south-central Mexico, northeast Mexico, and the southwestern United States. Their crops were different from those of Europe, the Middle East, and East Asia. The first American farmers grew amaranth (a cereal), manioc (we call it tapioca), chili peppers, pumpkins, sweet potatoes, several varieties of beans, and, above all, maize, or Indian corn, which slowly became a staple throughout most of the Americas. Indians also raised white potatoes and tomatoes. The spread of these crops launched another population surge that was great enough to support cities in some areas.

By 900 C.E. the temperature in North America and northern Europe had risen about two or three degrees Fahrenheit. Agriculture, especially due to an improved form of maize, became the primary means of support in most of North America. In the northeastern woodlands, peoples who spoke Algonquian and Iroquoian languages settled into semisedentary communities where they raised and stored their crops and erected dwellings, then dispersed for part of the year to hunt or fish. Population again increased. Climate began to cool again in the 14th century, a trend that became more severe in the 16th and 17th centuries, turning into a little ice age and provoking frequent droughts in both Europe and North America.

The Norsemen Europeans also began trekking long distances. Pushed by fierce invaders from central Asia, various Germanic tribes overran the western provinces of the Roman Empire. The Norse, a Germanic people, occupied Scandinavia. For centuries their Viking warriors raided the coasts of the British Isles and France. Their sleek longboats, propelled by both sails and oars, enabled them to challenge the contrary currents of the north Atlantic. Some of them began to gaze westward across the ocean.

Beginning in 874 C.E., Vikings occupied Iceland. In 982 and 983, Erik the Red, who had been accused of manslaughter in Norway and was later outlawed for committing more mayhem in Iceland, led his Norse followers farther west to Greenland. There the Norse made Europe's first contact with Inuits, and established permanent settlements.

Leif, Erik's son, sailed west from Greenland in 1001 and began to explore the coast of North America. He made three more voyages, the last in 1014, and started a colony that he called "Vinland" on the northern coast of Newfoundland at a place now named L'Anse aux Meadows. The local Indians (called "Skrellings" by the Norse, which means "barbarians" or "weaklings") resisted vigorously, but the Norse soon quarreled among themselves and destroyed the colony by 1014. The Norse abandoned Vinland, but they continued to visit North America for another century, probably to get wood. A 12th-century Norse coin, recovered from an Indian site in Maine, provides proof of their continuing contact with North America.

About 500 years after Erik the Red's settlement, the Norse also lost Greenland. There, not long before Columbus sailed in 1492, the last Norse settler died a lonely death. In the chaos that followed the Black Death in Europe and Greenland after 1350 and the onset of the little ice age, the colony suffered a severe population decline, gradually lost regular contact with the homeland, and slowly withered away. Despite their spectacular exploits, the Norse had no impact on the later course of American history. They had reached a dead end.

EUROPE AND THE WORLD BY THE 15TH CENTURY

Nobody in the year 1400 could have foreseen the course of European expansion that was about to begin. Europe stood at the edge, not the center, of world commerce. It desired much that others possessed but made little that those others wished to acquire.

China: The Rejection of Overseas Expansion

By just about every standard, China under the Ming dynasty was the world's most complex culture. In the 15th century, the government of China, staffed by well-educated bureaucrats, ruled 100 million people, a total half again as large as the combined populations of all European states west of Russia. The Chinese had invented the compass, gunpowder, and early forms of printing and paper money. Foreigners coveted the silks, teas, and other fine products available in China, but they had little to offer in exchange. Most of what Europe knew about China came from *The Travels of Marco Polo*, written by a merchant from the Italian city-state of Venice who, at age 17, journeyed overland

with his father and uncle to the Chinese court, which he reached in 1271; he then served the emperor, Kublai Khan, for the next 20 years. The Khan's capital city (today's Beijing) was the world's largest and grandest, Marco insisted; it received 1,000 cartloads of silk a day. In brief, China outshone Europe and all other cultures.

The Chinese agreed. Between 1405 and 1434, a royal eunuch, Cheng Ho, led six large fleets from China to the East Indies and the coast of East Africa, trading and exploring along the way. His biggest ships, 400 feet long, displaced 1,500 tons and were certainly large enough to sail around the southern tip of Africa and "discover" Europe. Had China thrown its resources and talents into overseas expansion, the subsequent history of the world would have been vastly different, but most of what the Chinese learned about the outside world merely confirmed their belief that other cultures had little to offer their Celestial Kingdom. No one followed Cheng Ho's lead after he died. Instead, the emperor banned the construction of oceangoing ships and later forbade anyone to own a vessel with more than two masts. China turned inward. It did not need the rest of the world.

Christian Europe Challenges Islam

Western Europe was a rather backward place in 1400. Compared with China or the Islamic world, it suffered severe disadvantages. Its location on the Atlantic rim of the Eurasian continent had always made access to Asian trade difficult and costly. Islamic societies controlled overland trade with Asia and the only known seaborne route to Asia through the Persian Gulf. As of 1400, Arab mariners were the world's best.

Europeans desired the fine silks of China and coveted East Indian spices to enliven their food and help preserve it through the long winters. But because Europeans produced little that Asians wished to buy, they had to pay for these imports with silver or gold, both of which were scarce. In fact, while Europe's sphere of influence was shrinking, and while China seemed content with what it already had, Islamic states had embarked on another great phase of expansion. Europe's mounted knights in heavy armor failed to stop the Ottoman Turks, who took Constantinople in 1453, overran the Balkans by the 1520s, and even threatened Vienna. The Safavid Empire in Iran (Persia) rose to new splendor at the same time. Other Moslems carried the Koran to Indonesia and northern India, where their powerful Mogul empire formed the basis for the modern states of Pakistan and Bangladesh.

Yet Europe had its own advantages. Its economy had made impressive gains in the Middle Ages, primarily because of agricultural advances, such as improved plows, that also fostered population growth. By 1300, more than 100 million people were living in Europe. Europe's farms could not sustain further growth, however. As the climate cooled, lean years and famines ensued, leaving people undernourished. In the late 1340s, the Black Death (bubonic plague) reduced the population by more than one-third. Recurring bouts of plague kept population low until about 1500, when vigorous growth resumed. But during the long decline of the 15th century, overworked soil regained its fertility, and per capita income rose considerably among people who now had stronger immunities to disease.

By then, European metallurgy and architecture were quite advanced. The Renaissance, which revived interest in the literature and art of ancient Greece and Rome, also gave a new impetus to European culture, especially after Johannes



MAP 1.2 Expansion of Islam

While Europeans were beginning to move overseas, Islam was also expanding into southeastern Europe, various parts of Africa, the Indian subcontinent, and the East Indies.

Gutenberg invented the printing press and movable type in the 1430s. Soon information began to circulate more rapidly in Europe than anywhere else in the world. This revolution in communications permitted improvements in ship design and navigational techniques to become a self-reinforcing process. The Arabs, by contrast, borrowed block printing from China in the 10th century but gave it up by 1400.

Unlike China, none of Europe's kingdoms was a self-contained economy. All states had to trade with one another and with the non-Christian world. Although in 1400 this need was a drawback, between the 15th and 17th centuries it slowly became an asset. No single state had a monopoly on the manufacture of firearms or on the flow of capital, and European societies began to compete with one another in gaining access to these resources and in mastering new maritime and military techniques. European armies were much more formidable in 1520 than they had been in 1453, and by then European fleets could outsail and outfight all rivals.

The Legacy of the Crusades

Quite apart from the Norse explorers, Europe had a heritage of expansion that derived from the efforts of crusaders to conquer the Holy Land from Islam. Crusaders established their own Kingdom of Jerusalem, which survived for more than a century but was finally retaken in 1244. Thereafter, while a new wave of Islamic expansion seemed

about to engulf much of the world, Christian Europe gained only a few Mediterranean and Atlantic islands before 1492 but learned some important lessons in the process. To make Palestine profitable, the crusaders had taken over sugar plantations already there and had worked them with a combination of free and slave labor. After they were driven from the Holy Land, the crusaders retreated to the Mediterranean islands of Cyprus, Malta, Crete, and Rhodes, where they used slaves to raise sugar cane or grape vines.

Long before Columbus, these planters had created the economic components of overseas expansion. They assumed that colonies should produce a **staple crop**, at least partly through slave labor, for sale in Europe. The first slaves were Moslem captives. In the 14th and 15th centuries, planters turned to pagan Slavs (hence the word *slave*) from the Black Sea area and the Adriatic. Some black Africans were also acquired from Arab merchants who controlled the caravan trade across the Sahara Desert, but these early plantations did not exploit their laborers with the intensity that later became routine in the Americas.

The Unlikely Pioneer: Portugal

It seemed highly improbable in 1400 that Europe was standing on the threshold of a dramatic expansion. That Portugal would lead the way seemed even less likely. A small kingdom of fewer than a million people, Portugal had been united for less than a century. Lisbon, with 40,000 people, was the only city of any size. Portugal's maritime traditions lagged well behind those of the Italian states, France, and England. Its merchant class was tiny, and it had little capital.

Yet Portugal had some advantages. It enjoyed internal peace and an efficient government at a time when its neighbors were beset by war and internal upheaval. Moreover, Portugal's location at the intersection of the Mediterranean and Atlantic worlds prompted its mariners to ask how they could transform the Atlantic from a barrier into a highway.

At first, they were interested in short-term gains, rather than in some all-water route to Asia. The Portuguese knew that Arab caravans crossed the Sahara to bring gold, slaves, and ivory from black Africa to Europe. Arab traders spoke of how King (or *Mansa*) Musa (d. 1332) of the Mandingo empire of Mali controlled more gold than any other ruler in the world and of how he could field an army of 100,000 men. These reports reached Europe, where Musa was described as "the richest and most noble lord of all this region on account of the abundance of gold which is gathered in his kingdom." The Portuguese believed that an Atlantic voyage to coastal points south of the Sahara would undercut Arab traders and bring large profits. The greatest problem they faced in this quest was Cape Bojador, with its treacherous shallows, awesome waves, and strong northerly winds. Several bold captains had sailed around the cape, but none had returned.

A member of the Portuguese royal family, Prince Henry, challenged this barrier. In 1420, he became head of the crusading Order of Christ and used its revenues to sponsor 15 voyages along the African coast. In 1434, one of his captains, Gil Eannes, finally succeeded. After passing the cape and exploring the coastline, Eannes sailed west into the Atlantic beyond the sight of land until he met favorable winds and currents that carried him back to Europe. Having launched Portugal's

**The Caravel: A Swift
Oceangoing Vessel.**

This caravel is a modern reconstruction of the 15th-century Niña, which crossed the Atlantic with Columbus in 1492.



© Jon Adkins/National Geographic Image Collection

era of expansion, Henry soon lost interest in it. While he indulged in costly and futile crusades against Morocco, less exalted men kept exploring the African coast. Only after they made it beyond the Sahara did their efforts begin to pay off.

During the 15th century, Portugal vaulted past all rivals in two major areas—the ability to navigate the high seas beyond sight of land, and the capacity to defeat any non-European fleet on the world’s oceans. Portuguese (and later Spanish) navigators mapped the prevailing winds and currents on the high seas over most of the globe. They collected geographic information from classical sources, foreigners, and modern navigators. They studied the superior designs of Arab vessels, copied them, and improved on them. They increased the ratio of length to beam (width at the broadest point of the hull) from 2:1 to 3:1, borrowed the lateen (triangular) sail from the Arabs, and combined it with square rigging in the right proportion to produce a superb oceangoing vessel, the caravel. A **caravel** could achieve speeds from 3 to 12 knots and could beat closer to a head wind than any other sailing ship. Portuguese captains also used the compass and adopted the Arabs’ astrolabe, a device that permits accurate calculation of latitude, or distances north and south. (The calculation of longitude—distances east and west—is much more difficult and was not mastered until the 18th century.) As they skirted the African coast, these Portuguese sailors made precise charts and maps that later mariners could follow.

The Portuguese also learned how to mount heavy cannon on the decks of their ships—a formidable advantage in an age when others fought naval battles by grappling and boarding enemy vessels. Portuguese ships were able to stand farther off and literally blow their opponents out of the water. As the 15th century advanced, Portuguese mariners explored ever farther along the African coast, looking for wealth and eventually a direct, cheap route to Asia. South of the Sahara they found the wealth they had been seeking—gold, ivory, and slaves. These riches kept the enterprise alive.

**Africa, Colonies,
and the Slave
Trade**

The mostly agricultural population that inhabited West Africa also included skilled craftsmen. West Africans probably learned how to use iron long before Europeans did, and they had been supplying Europe with most of its gold for



MAP 1.3 Africa and the Mediterranean in the 15th Century

The Mediterranean islands held by Europeans in the late Middle Ages, the Atlantic islands colonized by Portugal and Spain in the 15th century, the part of West Africa from Cape Blanco to Angola that provided the main suppliers of the Atlantic slave trade, and the Portuguese all-water route to India after 1497.

hundreds of years through indirect trade across the desert. West Africa's political history had been marked by the rise and fall of a series of large inland states. The most recent of these, the empire of Mali, was already in decline by 1450. As the Portuguese advanced past the Sahara, their commerce began to pull trade away from the desert caravans, which further weakened Mali and other interior states. By 1550, the empire had fallen apart.

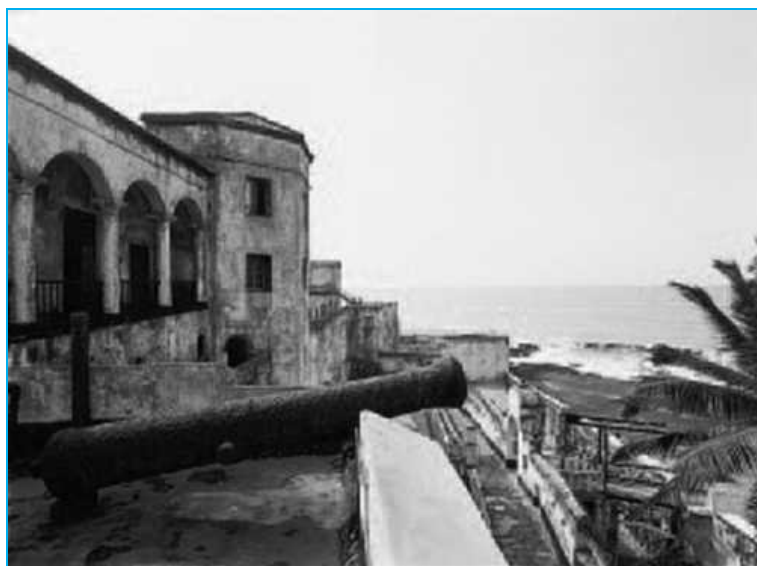
The Portuguese also founded offshore colonies along the way. They began to settle the uninhabited Madeira Islands in 1418, took possession of the Azores between 1427 and 1450, occupied the Cape Verde group in the 1450s, and took over São Tomé in 1470. Like exploration, colonization turned a profit. Lacking investment capital and experience in overseas settlement, the Portuguese drew on Italian merchants for both. In this way, the plantation complex of staple crops and slavery migrated from the Mediterranean to the Atlantic. Beginning in the 1440s, Portuguese island planters produced sugar or wine, increasingly with slave labor imported from nearby Africa. Some plantations, particularly on São Tomé, kept several hundred slaves at work growing and processing sugar.

At first, the Portuguese acquired their slaves by landing on the African coast, attacking agricultural villages, and carrying off everyone they could catch; but these raids enraged coastal peoples and made other forms of trade more difficult. In the decades after 1450, the slave trade assumed its classic form. The Portuguese established small posts, or **factories**, along the coast or ideally, on small offshore islands, such as Arguin Island near Cape Blanco, where they built their first African fort in 1448. Operating out of these bases, traders would buy slaves from the local rulers, who usually acquired their victims by waging war. During the long history of the **Atlantic slave trade**, nearly every African shipped overseas had first been enslaved by other Africans.

Slavery had long existed in Africa, but in a form less brutal than that which the Europeans would impose. When the Atlantic slave trade began, no African middleman could have foreseen how the enslavement of Africans by Europeans would differ from the enslavement of Africans by Africans. In Africa, slaves were not forced to toil endlessly to produce staple crops, and their descendants often became fully assimilated into the captors' society. Slaves were not isolated as a separate caste. By the time African middlemen learned about the cruel conditions of slavery under European rule, the trade had become too lucrative to stop, although several African societies tried. They discovered, however, that those who refused to participate in the trade were likely to become its victims. When the rulers of the Kongo embraced Catholicism in the 16th century, they protested against the Atlantic slave trade, only to see their own people become vulnerable to enslavement by others. The non-Christian kingdom of Benin learned the same lesson.

The Portuguese Slave-Trading Fortress of Elmina.

*Located on the Gold
Coast of West Africa, the
fortress was built in 1481.*



The Portuguese made the slave trade profitable by exploiting rivalries among the more than 200 small states of West and Central Africa, an area that was divided into more languages and small states than Europeans would find anywhere else in the world. Despite many cultural similarities among these groups, West Africans had never thought of themselves as a single people. Nor did they share a universal religion that might have restrained them from selling other Africans into slavery. Moslems believed it sinful to enslave a fellow believer. Western Europeans, although quite capable of waging destructive wars against one another, believed that enslaving fellow Christians was immoral. Enslaving pagan or Moslem Africans was another matter. Some Europeans even believed that they were doing these people a favor by making their souls eligible for salvation.

Portugal's Asian Empire

Portuguese exploration continued, paying for itself through gold, ivory, and slaves. The government finally decided to support the quest for an all-water route to Asia. In 1487, Bartolomeu Dias reached the Cape of Good Hope at the southern tip of Africa and headed east toward the Indian Ocean, but his crew rebelled in those stormy waters, and he turned back. Ten years later, Vasco da Gama led a small fleet around the Cape of Good Hope and sailed on to the southwestern coast of India. In a voyage that lasted more than two years (1497–1499), da Gama bargained and fought for spices that yielded a 20-to-1 profit.

Da Gama opened the way for Portugal's empire in the East. To secure their Asian trade, the Portuguese established a chain of naval bases that extended from East Africa to the mouth of the Persian Gulf, then to Goa on the west coast of India, and from there to the Moluccas, or East Indies. Portuguese missionaries even penetrated Japan. The Moluccas became the Asian center of the Portuguese seaborne empire, with their spices yielding most of the wealth that Portugal extracted from its eastern holdings. As early as 1515, African and Asian trade was providing two-thirds of Portugal's state revenues.

Beyond assuring its continued access to spices, Portugal made little effort to govern its holdings, and thus its eastern empire never became colonies of settlement. In all of their Asian holdings, the Portuguese remained heavily outnumbered by native peoples. Only in the Western Hemisphere—in Brazil, which was discovered accidentally by Pedro Álvares Cabral in 1500 when he was blown off course while trying to round the Cape of Good Hope—had settlement become a major goal by the late 16th century.

Early Lessons

As the Norse failure showed, the ability to navigate the high seas, although an impressive feat, gave no guarantee of lasting success. Sustained expansion overseas required the support of a home government and ready access to what other states had learned. The lessons learned there were then relayed to distant Brazil. The Portuguese drew on Italian capital and maritime skills, as well as on Arab learning and technology, in launching their ventures. Spaniards, in turn, would learn much from the Portuguese. The French, Dutch, and English would borrow from Italians, Portuguese, and Spaniards.

The economic impulse behind colonization was thus in place long before Columbus sailed west. The desire for precious metals provided the initial stimulus, but staple crops and slavery kept that impetus alive. Before the 19th century, more than two-thirds of the people who crossed the Atlantic were slaves who were brought to America to grow sugar or other staples. The Atlantic slave trade was not some unfortunate exception to a larger story of liberty. For three and a half centuries, it was the norm.

SPAIN, COLUMBUS, AND THE AMERICAS

While the Portuguese surged east, Spaniards more sluggishly moved west. Shortly after 1400, as Portugal gained experience by colonizing Madeira and the Azores, the Spanish kingdom of Castile sent its first settlers to the Canary Islands. The Spaniards spent the last third of the 15th century conquering the local inhabitants, the Guanches, a Berber people who had left North Africa before the rise of Islam and had been living almost completely cut off from Africa and Europe for a thousand years. By the 1490s, the Spanish had all but exterminated them, the first people to face virtual extinction in the wake of European expansion.

Except for seizing the Canaries, the Spaniards devoted little attention to exploration or colonization. Instead, for most of the 15th century, the Iberian kingdoms of Aragon and Castile warred against other powers, quarreled with each other, or dealt with internal unrest. But in 1469 Prince Ferdinand of Aragon married Princess Isabella of Castile. They soon inherited their respective thrones to form the kingdom of Spain, which had a population of about 4.9 million by 1500. Aragon, a Mediterranean society, had made good on an old claim to the Kingdom of Naples and Sicily and thus possessed a small imperial bureaucracy with experience in administering overseas possessions. Castile was larger than Aragon and in many ways more parochial. Its people, although suspicious of foreigners, had turned over much of their small overseas trade to merchants and mariners from Genoa in northern Italy, who had settled in the port of Seville. Crusading Castilians, not traders, had taken the lead in expelling the Moors from the Iberian Peninsula. More likely than the Portuguese to identify expansion with conquest instead of trade, Castilians led Spain overseas.

In January 1492, Isabella and Ferdinand completed the reconquest of Spain by taking Granada, the last outpost of Islam on the Iberian Peninsula. Flush with victory, they gave unconverted Jews six months to become Christians or be expelled from Spain. Just over half of Spain's 80,000 Jews fled, mostly to nearby Christian lands, including Portugal, that were more tolerant than Spain. A decade later, Ferdinand and Isabella also evicted all unconverted Moors. Castile entered the 16th century as Europe's most fiercely Catholic society, and this attitude accompanied the Spanish overseas.

Columbus

A talented navigator from Genoa named Christopher Columbus sought to benefit from the victory at Granada. He had served the Portuguese Crown for several years, engaged in the slave trade between Africa and the Atlantic islands, married the daughter of a prominent

Madeira planter, and may even have sailed to Iceland. He had been pleading for years with the courts of Portugal, England, France, and Spain to give him the ships and men to attempt an unprecedented feat: He planned to reach East Asia by sailing west across the Atlantic.

Columbus's proposed voyage was controversial, but not because he assumed the earth was round. Learned men agreed on that point, but they disagreed about the earth's size. Columbus put its circumference at only 16,000 miles. He proposed to reach Japan or China by sailing west a mere 3,000 miles. The Portuguese scoffed at his reasoning. They put the planet's circumference at about 26,000 miles, and they warned Columbus that he would perish on the vast ocean if he tried his mad scheme. Their calculations were, of course, far more accurate than those of Columbus; the circumference of the earth is about 25,000 miles at the equator. Even so, the fall of Granada gave Columbus another chance to plead his case. Isabella, who now had men and resources to spare, grew more receptive to his request. She put him in charge of a fleet of two caravels, the *Niña* and the *Pinta*, together with a larger, square-rigged vessel, the *Santa María*, which Columbus made his flagship.

Columbus's motives were both religious and practical. Like many contemporaries, he believed that the world was going to end soon but that God would make the Gospel available to all humankind before the last days. As the "Christ-bearer" (the literal meaning of his first name), Columbus was convinced that he had a role to play in bringing on the Millennium, the period at the end of history when Jesus would return and rule with his saints for 1,000 years; however, he was not at all averse to acquiring wealth and glory along the way.

Embarking in August 1492, Columbus headed south to the Canaries, picked up provisions, and sailed west across the Atlantic. He promised a prize to the first sailor to sight land. Despite his assurances that they had not sailed far, the crews grew restless in early October. Columbus pushed on. When land was spotted, on October 12, he claimed the prize for himself. He said he had seen a light in the distance the previous night.

The Spaniards splashed ashore on San Salvador, now Watling's Island in the Bahamas. (A few historians argue for Samana Cay, 60 miles south of San Salvador, as the site of the first landfall.) Convinced that he was somewhere in the East Indies, near Japan or China, Columbus called the local inhabitants "Indians," a word that meant nothing to them but one that has endured. When the peaceful Tainos (or Arawaks) claimed that the Carib Indians on nearby islands were cannibals, Columbus interpreted their word for "Carib" to mean the great "Khan" or emperor of China, known to him through Marco Polo's *Travels*. Columbus set out to find the Caribs. For several months he poked about the Caribbean, mostly along the coasts of Cuba and Hispaniola. Then, on Christmas, the *Santa María* ran onto rocks and had to be abandoned. A few weeks later, Columbus sailed for Spain on the *Niña*. Some historians speculate that he had arranged the Christmas disaster as a way of forcing some of the crew to remain as a garrison on Hispaniola, but by then even the gentle Tainos had seen enough. Before Columbus returned on his second voyage in late 1493, they had killed all of them.

The voyage had immediate consequences. In 1493, Pope Alexander VI (a Spaniard) issued a bull, *Inter Caeteras*, which divided all non-Christian lands between Spain and Portugal. A year later, in the Treaty of Tordesillas, the two

kingdoms adjusted the dividing line, with Spain eventually claiming most of the Western Hemisphere, plus the Philippines, and Portugal most of the Eastern Hemisphere, including the African coast, plus Brazil. As a result, Spain never acquired direct access to the African slave trade.

Columbus made three more voyages in quest of China and served as governor of the Spanish Indies. But Castilians never really trusted this Genoese opportunist, who spoke their language with a foreign accent and was a poor and cruel administrator to boot. The colonists often defied him and in 1500, after his third voyage, they shipped him back to Spain in chains. Although later restored to royal favor, he died in 1506 a bitter, disappointed man.

Spain and the Caribbean

By then, overseas settlement had acquired a momentum of its own as thousands of ex-soldiers, bored *hidalgos* (minor nobles with little wealth), and assorted adventurers drifted across the Atlantic. They carried with them seeds for Europe's cereal crops and livestock, including horses, cows, sheep, goats, and pigs. On islands without fences, the animals roamed freely, eating everything in sight, and soon threatened the Tainos' food supply. Unconcerned, the Spaniards forced the increasingly malnourished Indians to work for them, mostly panning for gold. Under these pressures, even before the onset of major infectious diseases, the native population fell catastrophically throughout the Caribbean. By 1514 only 22,000 able-bodied adults remained on Hispaniola, from an initial population of perhaps one million. The native people died even more rapidly than the meager supply of placer gold disappeared. This story was soon repeated on Cuba, Jamaica, and other islands. A whole way of life all but vanished from the earth to be replaced by sugar, slaves, and livestock as the Spaniards despaired of finding other forms of wealth. African slaves, acquired from the Portuguese, soon arrived to replace the dead Indians as a labor force.

The Spaniards continued their New World explorations. Juan Ponce de León tramped through Florida in quest of a legendary fountain of youth, shrewdly calculating that such an elixir would bring a handsome price in Europe. Vasco Núñez de Balboa became the first European to reach the Pacific Ocean after he crossed the Isthmus of Panama in 1513. Even so, as late as 1519—a full generation after Columbus's first voyage—Spain had gained little wealth from these new possessions—whatever and wherever they turned out to be. One geographer concluded that Spain had found a whole new continent, which he named “America” in honor of his informant, the explorer Amerigo Vespucci. For those who doubted this claim, Ferdinand Magellan, a Portuguese mariner serving the king of Spain, settled the issue when his fleet sailed around the world between 1519 and 1522. Magellan never completed the voyage. He was killed during the Battle of Mactan in the Philippines.

During the same three years, **Hernán Cortés** sailed from Cuba, invaded Mexico, and found the treasure that Spaniards had been seeking. In 1519, he landed at a place he named Veracruz (The True Cross), and over the next several months he succeeded in tracking down the fabulous empire of the **Aztecs** high in the Valley of Mexico. When his small army of 400 men first laid eyes on the Aztec capital of **Tenochtitlán** (a metropolis of 200,000, much larger than any city in

Western Europe), they wondered if they were dreaming, but they marched on. Moctezuma (or Montezuma II), the Aztec “speaker,” or ruler, sent rich presents to persuade the Spaniards to leave, but the gesture had the opposite effect. “They picked up the gold and fingered it like monkeys,” an Aztec later recalled. “... Their bodies swelled with greed, and their hunger was ravenous.... They snatched at the golden ensigns, waved them from side to side and examined every inch of them.” Cortés had stumbled upon a wholly different world in the Americas, one with its own long and varied past.

THE EMERGENCE OF COMPLEX SOCIETIES IN THE AMERICAS

The high cultures of the Americas had been developing for thousands of years before Europeans arrived. Their ways were ancient, and they were proud of their past. Their wealth fired the imagination of Europe and aroused the envy of Spain’s enemies. The fabulous Aztec and Inca empires became the magnets that turned European exploration into rival empires of permanent settlement.

The Rise of Sedentary Cultures

After 4000 B.C.E., agriculture began to transform the lives of most Indians. As farming slowly became the principal source of food in the Americas, settled villages in a few locations grew into large cities. Most of these cities appeared in the Valley of Mexico, Central America, or the Andes. For centuries, however, dense settlements also thrived in Chaco Canyon in present-day New Mexico and in the Mississippi River valley. Meanwhile, farming continued to spread. As the North American climate continued to warm, it permitted the cultivation of superior strands of maize, or Indian corn, which spread from Mexico first to the Southwest, then the Mississippi and Ohio valleys, and even the northeastern seaboard by the 10th century C.E. By the time Columbus sailed, most Indians were raising crops.

Indians became completely sedentary (nonmigratory) only in the most advanced cultures. Most of those north of Mexico lived a semisedentary life—that is, they were migratory for part of each year. After a tribe chose a site, the men chopped down some trees, girded others, burned away the underbrush, and often planted tobacco, a mood-altering sacred crop grown exclusively by men. Burning the underbrush fertilized the soil with ash and gave the community years of high productivity. Meanwhile, women erected the dwellings (longhouse, wigwam, tepee) and planted and harvested food crops, especially corn. Planting beans among the corn helped maintain good crop yields. In the fall, either the men alone or entire family groups went off hunting or fishing.

Under this slash and burn system of agriculture, farming became women’s work, beneath the dignity of men, whose role was to hunt, fish, and make war—a pattern that characterized nearly all of the peoples in the eastern woodlands. Because this system slowly depleted the soil, the whole tribe had to move to new fields after a decade or two, often because accessible firewood had been exhausted. In this semisedentary way of life, few Indians cared to acquire more personal property than the women could carry from one place to another, either during the annual hunt or when the whole community had to move. This limited interest in

consumption would profoundly condition their response to capitalism after contact with Europeans.

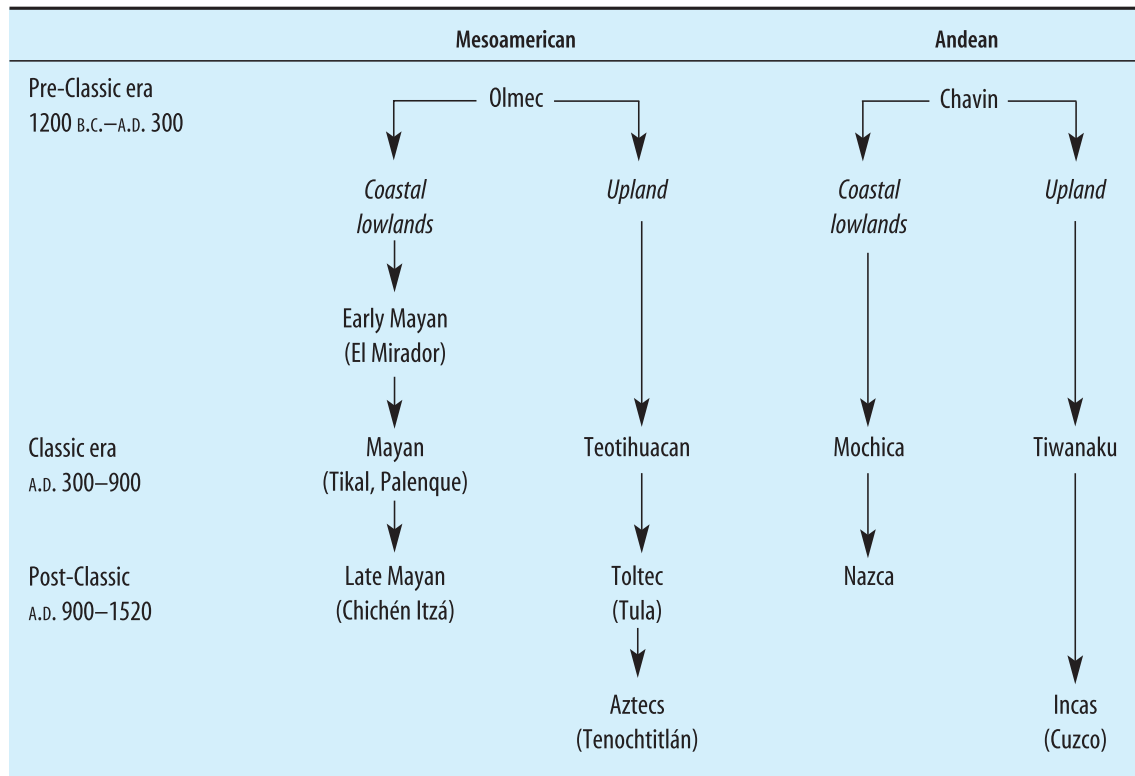
Even sedentary Indians did not own land as individuals. Clans or families guarded their “use rights” to land that had been allocated to them by their chiefs. In sedentary societies, both men and women worked in the fields, and families accumulated surpluses for trade. Not all sedentary peoples developed monumental architecture and elaborate state forms. The Tainos of the Greater Antilles in the Caribbean were fully sedentary, for example, but they never erected massive temples or created powerful states. With a few striking exceptions, such examples of cultural complexity emerged primarily among sedentary populations. In Mesoamerica and the Andes, intensive farming, cities, states, and monumental architecture came together at several different times to produce distinctive high cultures.

The spread of farming produced another population surge among both sedentary and semisedentary peoples. Estimates vary greatly, but according to the more moderate ones, at least 50 million people were living in the Western Hemisphere by 1492—and perhaps as many as 70 million, or one seventh of the world’s population. The Valley of Mexico in 1500 was one of the most densely inhabited regions on Earth.

Despite their large populations, even the most complex societies in the Americas remained Stone-Age cultures in their basic technology. The urban societies of Mesoamerica and the Andes became the largest and most complex Stone-Age cultures in the history of the world. The Indians made some use of metals, although more for decorative than practical purposes. Most metalworking skills originated in South America and spread to Mesoamerica a few centuries before Columbus. By 1520, Indians had amassed enough gold and silver to provide dozens of plundering Europeans with princely fortunes. Yet as far north as the Great Lakes, copper had been discovered and fashioned into fishing tools and art objects since the first millennium B.C.E. Copper was traded over large areas of North America, but Indians had neither learned how to make bronze (a compound of copper and tin) nor found any use for iron. Nearly all of their tools were made of stone or bone, and their sharpest weapons were made from obsidian, a hard, glassy, volcanic rock. And they did not use the wheel or devices based on the wheel, such as pulleys or gears. Some of them knew how to make a wheel—they had wheeled toys—but they never found a practical purpose for this invention, probably because North America had no draft animals, and South Americans used llamas mostly in steep, mountainous areas where wheeled vehicles would have made no sense.

The Andes: Cycles of Complex Cultures

Despite these technological limitations, Indians accomplished a great deal. During the second millennium B.C.E., elaborate urban societies began to take shape both in the Andes and along Mexico’s gulf coast. Because no Andean culture had a written language before the Europeans arrived, we know much less about events there than we do about Mesoamerica, but we do know that ancient Andean societies devised extremely productive agricultural systems at 12,000 feet above sea level, far above the altitude at which anyone else has ever been able to raise crops. In the 1980s, when archaeologists rebuilt part of the



Complex Cultures of Pre-Columbian America

prehistoric Andean irrigation system according to ancient specifications, they discovered that it was far more productive than a system using modern fertilizers and machines. Some Andean peoples could produce 10 metric tons of potatoes per hectare (about 2.4 acres), as opposed to 1 to 4 tons on nearby modern fields. Lands using the Andean canal system never had to lie fallow. This type of irrigation took hold around Lake Titicaca about 1000 B.C.E. and spread throughout the region. It was abandoned around 1000 C.E., apparently in response to a monster drought that endured, with only brief intermissions, for two centuries.

Monumental architecture and urbanization appeared in the Andes even before the canal system at Lake Titicaca was created. Between 3000 and 2100 B.C.E., both took hold along the Peruvian coast and in the interior. The new communities were built around a U-shaped temple about three stories high. Some of the earliest temples were pyramids, the oldest of which are as ancient as those of Egypt. In later centuries, as more people moved into the mountains, some pyramids became immense. The one at Sechin Alto near Lima, more than 10 stories high, was built between 1800 and 1500 B.C.E. These accomplishments gradually merged into what archaeologists call the Pre-Classic Chavin culture, which was well established by 1000 B.C.E., only to collapse suddenly about 300 B.C.E. In all probability, no single state ever dominated this culture.

Chavin culture had two offshoots: one on the coast and one in the mountains. Together they constitute the Classic phase of pre-Columbian history in South America. The Mochica culture, which emerged about 300 C.E. on the northwest coast of Peru, produced finely detailed pottery, much of it erotic, and built

pyramids as centers of worship. At about the same time, another Classic culture arose in the mountains around the city of Tiwanaku, 12,000 feet above sea level. The people of this society grew a great variety of food plants both tropical and temperate. Terraces, laid out at various altitudes on the mountainside, enabled the community to raise crops from different climatic zones, all a few hours distant from one another. At the lowest levels, Tiwanakans planted cotton in the hot, humid air. Farther up the mountain, they raised maize (corn) and other crops suitable to a temperate zone. At still higher elevations, they grew potatoes and grazed their alpacas and llamas. They even invented freeze-dried food by carrying it far up the mountains to take advantage of the frost that formed most nights of the year.

The Tiwanaku Empire, with its capital on the southern shores of Lake Titicaca, flourished until even its sophisticated irrigation system could not survive the horrendous drought that began at the end of the 10th century C.E. The Classic Andean cultures collapsed between the 6th and 11th centuries, possibly after a conquest of the Mochica region by the Tiwanakans, who, until they too were overwhelmed by the drought, provided water to the coastal peoples. The disruption that followed this decline was temporary because complex Post-Classic cultures soon thrived both north and west of Tiwanaku.



MAP 1.4 Inca Empire and Principal Earlier Cultures

The Pacific coast of South America showing the location of the Mochica, Chavin, Tiwanaku, and Nazca cultures and finally the Inca empire, which covered a much larger area.

Inca Civilization Around 1400 C.E., the **Inca** (the word applied both to the ruler and to the empire's dominant nation) emerged as the new imperial power in the Andes. They built their capital at Cuzco, high in the mountains. From that upland center, the Incas controlled an empire that eventually extended more than 2,000 miles from south to north, and they bound it together with an efficient network of roads and suspension bridges. Along these roads, the Incas maintained numerous storehouses for grain. They had no written language, but high-altitude runners, who memorized the Inca's oral commands, raced along the roads to relay their ruler's decrees over vast distances. The Incas also invented a decimal system and used it to keep records of the tribute they levied upon subject peoples. They used a device they called a *quipu*. By 1500, the Inca Empire ruled perhaps 8 to 12 million people. No other nonliterate culture has ever matched that feat.

Mesoamerica: Cycles of Complex Cultures Mesoamerica experienced a similar cycle of change, but over a somewhat shorter period. Its own Pre-Classic, Classic, and Post-Classic cultures also comprised both upland and low-land societies.

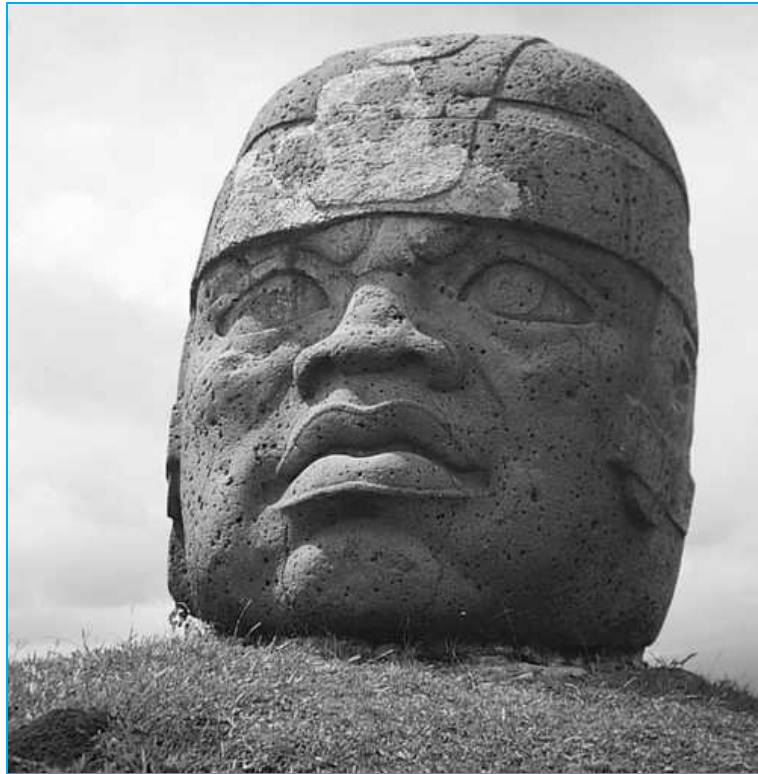
The Olmecs, who appeared along the Gulf Coast about 1200 B.C.E., became the parent culture for the region. It centered on three cities. The oldest, San Lorenzo (names are modern, as is **Olmec**, which means "people of rubber," for the rubber trees that thrive in this tropical region), flourished from 1200 to 900 B.C.E., when invaders conquered it. Olmec influence reached its zenith during the domination of La Venta, which became an urban center about 1100 B.C.E., reached its peak 300 years later, and declined. After La Venta was demolished between 500 and 400 B.C.E., leadership passed to the city of Tres Zapotes, which thrived for another four centuries.

These three Olmec centers, with permanent populations of only about 1,000, were too small to sustain large armies. The colossal stone heads that honored their rulers were the most distinctive Olmec artifacts, but they appeared only in the homeland. Other aspects of Olmec culture became widely diffused throughout Mesoamerica. The Olmecs built the first pyramids and the first ballparks in the region. Their game, played with a heavy rubber ball, spread into what is now the southwestern United States. The losers were, at least on certain religious occasions, beheaded.

The Olmecs also learned how to write and developed a dual calendar system that endured through the Aztec era. At the end of a 52-year cycle, the first day of the "short" calendar would again coincide with the first day of the "long" one. Olmecs faced the closing days of each cycle with dread, lest the gods allow the sun and all life on earth to be destroyed—something that, Olmecs warned, had already happened several times. They believed that the sacrifice of a god had been necessary to set the sun in motion in each new creation cycle and that only the blood of human sacrifice could placate the gods and keep the sun moving. These beliefs endured in Mesoamerica for perhaps 3,000 years, regardless of the rise and fall of empires and cities. The arrival of the Spaniards would create a religious as well as a political crisis, because 1519 marked the end of a 52-year cycle.

Olmec Stone Head.

This giant head of stone is 9 feet 4 inches tall.



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The Olmecs were succeeded by two Classic cultures, both of which created great cities and studied the heavens. The city and empire of Teotihuacan emerged in the mountains not far from modern Mexico City. **Mayan** culture took shape mostly in the southern lowlands of Yucatán. By year 1 C.E., Teotihuacan was already a city of 40,000 and it grew to five times that size over the next three centuries. Some of its temples were enormous pyramids, but its most impressive art form was its brightly painted murals, of which only a few survive. Teotihuacan invested resources in comfortable apartment dwellings for ordinary residents, not in monuments or inscriptions to rulers. It probably had a form of senate government, not a monarchy. The city extended its influence throughout Mesoamerica and remained a powerful force until its sudden destruction in about 750 C.E., apparently by conquest, because its shrines were toppled and the city was abandoned. In all likelihood, Teotihuacan's growth had so depleted the resources of the area that the city could not have sustained itself much longer. Despite modern beliefs, Indians enjoyed no mystical protection from ecological disasters.

In the lowlands, Classic Mayan culture went through a similar cycle from expansion to ecological crisis. It was also urban but less centralized than that of Teotihuacan, although some Mayan temples were just as monumental. For more than 1,000 years, Mayan culture rested on a network of competing city-states, which, as in ancient Greece, shared similar values. One of the largest Mayan cities, Tikal, arose on the plateau separating rivers flowing into the Caribbean from those emptying into the Gulf of Mexico. It controlled commerce with Teotihuacan. Tikal housed 100,000 at its peak before 800 C.E. Twenty other cities, most about one-fourth the size of Tikal, flourished throughout the region. Mayan engineers built



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The Temple of the Sun at Teotihuacan. *The giant, stepped pyramid shown here is one of pre-Columbian America's most elegant pyramids.*

canals to water the crops needed to support this urban system, which was well established by the first century B.C.E.

The earliest Mayan writings date to 50 B.C.E., but few survive from the next 300 years. About 300 C.E., Mayans began to record their history in considerable detail. Since 1960, scholars have deciphered most Mayan inscriptions, which means that the Classic phase of Mayan culture is completing a shift from a prehistoric to a historic (or written) past. Mayan texts are now studied much like those of Europe. Mayan art and writings reveal the religious beliefs of these people, including the place of human sacrifice in their cosmos and the role of ritual self-mutilation in their worship, particularly among the elite. Scholars have learned, for example, about the long reign of Pacal the Great, king (or “Great Sun”) of the elegant city of Palenque, who was born on March 26, 603, and died on August 31, 683. His sarcophagus lists his ancestors through six generations. Other monuments tell of the Great Suns of other cities whom Pacal vanquished and sacrificed to the gods.

Classic Mayan culture began to collapse about 50 years after the fall of Teotihuacan, which disrupted Mayan trade with the Valley of Mexico. The crisis spread rapidly. Palenque and a half-dozen other cities were abandoned between 800 and 820. The last date recorded at Tikal was in 869; the last in the southern lowlands was some 40 years later. The Mayan aristocracy had grown faster than commoners could support it, until population outstripped local resources and generated irreversible ecological decay. Frequent wars hastened the decline. Trade with the Valley of Mexico, although diminished, shifted north to other cities. With the collapse of



MAP 1.5 Ancient Mesoamerica

The location of the three principal Olmec cities, Teotihuacan, several major Mayan cities, and the Toltec capital of Tula.

the southern cities, the population of the region fell drastically, partly through emigration northward.

After 900 C.E., the Post-Classic era saw a kind of Mayan renaissance in the northern lowlands of the Yucatán, where many refugees from the south had fled. Chichén Itzá, a city that had existed for centuries, preserved many distinctive Mayan traits but merged them with new influences from the Valley of Mexico, where the Toltecs had become dominant in the high country and may even have conquered Chichén Itzá. The Toltecs were a fierce warrior people whose capital at Tula, with 40,000 people, was one-fifth the size of Teotihuacan at its peak. They prospered from the cocoa trade with tropical lowlands but otherwise did nothing to expand the region's food supply. They controlled the Valley of Mexico for almost three centuries, until about 1200 C.E., when they too declined. They left a legacy of conquest to later rulers in the valley, who all claimed descent from Toltec kings.

The Aztecs and Tenochtitlán

By 1400, power in the Valley of Mexico was passing to the Aztecs, a warrior people who had migrated from the north about two centuries earlier and had settled, with the bare sufferance of their neighbors, on the shore of Lake Texcoco. They built a great city, Tenochtitlán, out on the lake. Its only connection with the mainland was by several broad causeways. The Aztecs raised their agricultural productivity by creating highly productive *chinampas*, or floating gardens, right on the lake. Yet their mounting population strained the food supply. In the 1450s, the threat of famine was severe.

Tenochtitlán, with a population of something over 200,000, had forged an alliance with Texcoco and Tlacopan, two smaller lakeside cities. Together they dominated the area, but by the second quarter of the 15th century, leadership was clearly passing to the Aztecs. As newcomers to the region, the Aztecs felt a need to prove themselves worthy heirs to Tula, Teotihuacan, and the ancient culture of the Valley of Mexico. They adopted the old religion but practiced it with a terrifying intensity. They waged perpetual war, usually with neighboring cities, to gain captives for their ceremonies. They built and constantly rebuilt and enlarged their Great Pyramid of the Sun. At its dedication in 1487, they sacrificed about 14,000 people in a ritual that went on for four days until the priests dropped from exhaustion. Each captive climbed the steep steps of the pyramid and was held by his wrists and ankles over the sacrificial slab while a priest cut open his breast, ripped out his heart, held it up to the sun, placed it inside the statue of a god, and then rolled the carcass down the steps so that parts of the body could be eaten, mostly by members of the captor's family, but never by the captor. He fasted instead and mourned the death of a worthy foe.

Human sacrifice was an ancient ritual in Mesoamerica, familiar to everyone, but the Aztecs practiced it on a scale that was unparalleled anywhere else in the world. The need for thousands of victims each year created potential enemies everywhere. Although neighboring peoples shared the religious beliefs of the Aztecs, they nevertheless hated these conquerors from the north. After 1519, many Indians in Mesoamerica would help the Spaniards bring down the Aztecs. By contrast, the Spanish would find few allies in the Andes, where resistance in the name of the Inca would persist for most of the 16th century and would even revive in the late 18th century—250 years after the conquest.

North American Mound Builders

North of Mexico, from 3000 B.C.E. to about 1700 C.E., two distinct cultures of “mound builders” succeeded each other and exerted a powerful influence over the interior of North America. Named for the huge earthen mounds they erected, these cultures arose near the Ohio and Mississippi rivers and their tributaries. The earliest mound builders became semisedentary even before learning to grow crops. Fish, game, and the lush vegetation of the river valleys sustained them for most of the year and enabled them to erect permanent dwellings.

The older mound-building culture, the Adena-Hopewell, emerged between 500 B.C.E. and 400 C.E. in the Ohio River valley. Its mounds were increasingly elaborate burial sites, indicating belief in an afterlife. Mound-building communities participated in a commerce that spanned most of the continent between the Appalachians

and the Rockies, the Great Lakes and the Gulf of Mexico. Obsidian from the Yellowstone Valley in the Far West, copper from the Great Lakes basin, and shells from the Gulf of Mexico have all been found buried in the Adena-Hopewell mounds. Both the mound building and the long-distance trade largely ceased after 400 C.E., for reasons that remain unclear. The people even stopped growing corn for a few centuries. Yet the mounds were so impressive that when American settlers found them after the Revolution, they refused to believe that “savages” could have built them.

Mound building revived in a final Mississippian phase between 1000 and 1700 C.E. This culture dominated the Mississippi River valley from modern St. Louis to Natchez, with the largest center at Cahokia in present-day Illinois and another important one at Moundville in Alabama. Ordinary people became “stinkards” in this culture, while some families had elite status. The “Great Sun” ruled with authority and was transported by litter from place to place. When he died, some of his wives, relatives, and retainers even volunteered to be sacrificed at his funeral and join him in the afterlife. Burial mounds thus became much grander in Mississippian communities. Atop the mounds in which their rulers were interred, the Indians built elaborate places of worship and residences for the priests and Great Suns of their highly stratified society.

The city of **Cahokia**, near modern St. Louis, flourished from 900 to 1250 C.E. and may have had 20,000 or more residents at its peak, making it the largest city north of Mexico and half as populous as the contemporary Toltec capital at Tula. Cahokia’s enormous central mound, 100 feet high, is the world’s largest earthenwork.



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The Great Serpent Mound. *Located near Chillicothe, Ohio, this mound is about 1,200 feet long and is one of the most spectacular mounds to survive from the Adena-Hopewell era.*

Modern Restoration of an Anasazi Kiva.

This great kiva, or meeting room of the Anasazi, was located underground and was accessed by a ladder through a hole in the ceiling.



© David Muench

Urban Cultures of the Southwest

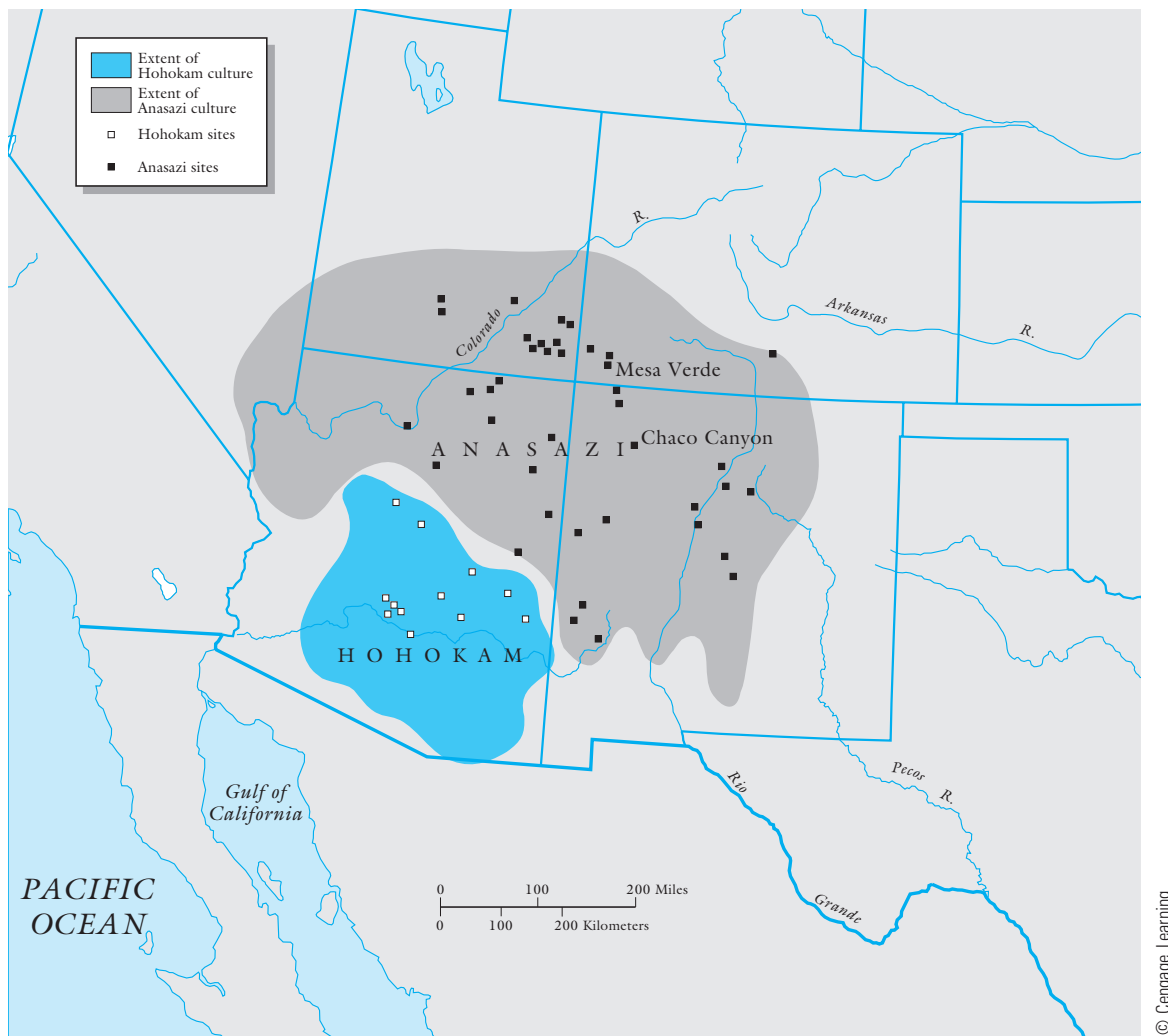
Other complex societies emerged in North America's semi-arid Southwest—among them the Mogollan (perhaps best known for their beautifully painted pottery) and especially the Hohokam, the **Anasazi**, and the Pueblo. The Hohokam Indians settled in what is now central Arizona during the 600 years after 300 B.C.E. Their irrigation system, consisting of several hundred miles of canals, produced two harvests per year. They wove cotton cloth and made pottery with a distinctive red color. They traded with places as distant as California and Mesoamerica and even imported a version of the Mesoamerican ball game. Perhaps because unceasing irrigation increased the salinity of the soil, this culture, after enduring for more than 1,000 years, went into irreversible decline by 1450.

Even more tantalizing and mysterious is the brief flowering of the Anasazi (a Navajo word meaning “the ancient ones”), a cliff-dwelling people who have left behind some remarkable artifacts at Chaco Canyon in New Mexico, at Mesa Verde in Colorado, and at other sites. In their caves and cliffs, they constructed apartment houses five stories high with as many as 500 dwellings and with elegant and spacious *kivas*, or meeting rooms for religious functions. The Anasazi were superb astronomers. Through an arrangement of rock slabs, open to the sun and moon at the mouth of a cave, and of spirals on the interior wall that plotted the movement of the sun and moon, they created a calendar that could track the summer and winter solstices and even the 19-year cycles of the moon, an astronomical refinement Europeans had not yet achieved. They traveled to their fields and brought in lumber and other distant supplies on a network of roads that ran for scores of miles in several directions. They achieved most of these feats over a period of about two

centuries, although Anasazi pottery has been found that dates from much earlier times. In the last quarter of the 13th century, apparently overwhelmed by a prolonged drought and by hostile invaders, they abandoned their principal sites. Pueblo architecture is a direct successor of that of the Anasazi, and the Pueblo Indians are descended from them.

CONTACT AND CULTURAL MISUNDERSTANDING

After the voyage of Columbus, the peoples of Europe and America, both with ancient pasts, confronted each other. Mutual understanding was unlikely except on a superficial level. Nothing in the histories of Europeans or Indians had prepared either of them for the encounter. The humanists of Renaissance Europe, avidly studying ancient Greece and Rome, were uncovering the huge differences between those pagan cultures and the Christian values of the Middle Ages and were developing a strong sense of history—an awareness that their past had been quite different from



MAP 1.6 Hohokam and Anasazi Sites

These cultures in the Southwest combined irrigation and road building with sophisticated architecture.

their present. They were also used to dealing with Moslem “infidels,” whom they regarded as terribly alien but whose monotheistic beliefs were not all that different from their own. They also understood that East Asia was neither classical nor Christian, neither Islamic nor “barbaric.” Even so, none of this experience prepared them for what they found in America.

Religious Dilemmas

Christians had trouble understanding how Indians could exist at all. The Bible, they were certain, recorded the creation of all humankind, but it never mentioned the Indians. From which of the sons of Noah had they descended? Were they the “lost 10 tribes” of Israel, perhaps? This idea was first suggested by Spanish missionaries and would later appeal to British Protestants. Some theologians, such as Spaniard Juan Ginés de Sepúlveda, tried to resolve this dilemma by arguing that Indians were animals without souls, not human beings at all. The Pope and the royal courts of Portugal and Spain listened instead to a Dominican missionary, Fray Bartolomé de Las Casas, who insisted on the Indians’ humanity. But, asked Europeans, if Indians (and Asians) did possess immortal souls, would a compassionate God have left them in utter darkness for centuries without making the Gospel known to them? Rejecting that possibility, some early Catholic missionaries concluded that one of the apostles must have visited America (and India) and that the Indians must have rejected his message. The Portuguese announced in the 1520s that they had discovered the tomb of St. Thomas the Doubter in India, and then in 1549, a Jesuit claimed to have found Thomas’s footprint in Brazil. If only to satisfy the spiritual yearnings of Europeans overseas, St. Thomas got around!

To Europeans, the sacrificial temples, skull racks, and snake motifs of Mesoamerica led to only one conclusion: The Aztecs worshiped Satan. Their statues and even their writings had to be destroyed. Human sacrifice and ritual cannibalism were widespread throughout the Americas, although nowhere else on the two continents did the scale approach that practiced by the Aztecs. The Incas, whose creation myth resembled that of Mesoamerica, offered an occasional victim to the sun or to some other god. The Indians of eastern North America frequently tortured to death their adult male captives, and every Indian warrior learned from boyhood how to endure such torments. Christians were shocked by human sacrifice and found cannibalism revolting, but Indians regarded certain European practices with equal horror. Between 1500 and 1700, Europeans burned or hanged perhaps 50,000 to 100,000 people, usually old women, for conversing with the wrong spirits—that is, for witchcraft. The Spanish Inquisition burned thousands of heretics and blasphemers. Although Indians were exempt from its jurisdiction in the Americas, they did witness many executions of Europeans. To the Indians, these incinerations looked like human sacrifices to placate an angry Christian God.

The dilemma that Indians posed for Europeans emerged almost at once. On his second voyage, Columbus brought the first missionaries to the Americas. After one of them preached to a group of Tainos and presented them with some holy images, the Indians “left the chapel, ... flung the images to the ground, covered them with a heap of earth, and pissed upon it.” The governor, a brother of Columbus, had them burned alive. The Indians probably saw this punishment as

a form of human sacrifice to a vengeful god. They had no context for understanding the Christian distinction between human sacrifice and punishment for desecration.

Even the Christians' moral message was ambiguous. Missionaries eagerly brought news of the Christ, how he had died to save humankind from sin. Catholic worship, then as now, centered on the Mass and the Eucharist, in which a priest transforms bread and wine into the literal body and blood of Christ. Most Protestants also accepted this sacrament but interpreted it symbolically, not literally. To Indians, Christians seemed to be people who ate their god but grew outraged at the lesser matter of sacrificing a human being to please an Indian god.

When Europeans tried to convert Indians to Christianity, the Indians concluded that the converts would spend the afterlife with the souls of Europeans, separated forever from their own ancestors, whose memory they revered. Neither side fully recognized these obstacles to mutual understanding. Although early Catholic missionaries converted thousands of Indians, the results were mixed at best. Most converts adopted some Christian rites but continued many of their old rituals, often in secret.

War as Cultural Misunderstanding

Such misunderstandings multiplied as Indians and Europeans came into closer contact. Both waged war, but with different objectives. Europeans tried to settle matters on the battlefield and expected to kill many enemies. Indians fought mostly to obtain captives, whether for sacrifice (as with the Aztecs) or to replace tribal losses through adoption (as with the Iroquois). To them, massive deaths on the battlefield were almost a blasphemy, an appalling waste of life that could in no way appease the gods. Europeans and Indians also differed profoundly on what acts constituted atrocities. The torture and ritual sacrifice of captives horrified Europeans; the slaughter of women and children, which Europeans brought to America, appalled Indians.

Gender and Cultural Misunderstanding

Indian social organization also differed fundamentally from that of Europeans. European men owned almost all property, set the rules of inheritance, farmed the land, and performed nearly all public functions. Among many Indian peoples, especially those first encountered by Europeans north of Mexico, descent was **matrilineal** (traced through the maternal line), and women owned nearly all movable property. European men felt incomplete unless they acquired authority over other people, especially the other members of their households. They also expected social inferiors to obey superiors. Indian men had none of these patriarchal ambitions. Chiefs governed more through persuasion, example, and gift giving than through command. Women did the farming in semisedentary Indian cultures, and they often could demand a war or try to prevent one, although the final decision rested with men. When Europeans tried to change warriors into farmers, Indian males protested that they were being turned into women. Only over fully sedentary peoples could Europeans impose direct rule by building on the existing social hierarchy, division of labor, and system of tribute.

CONQUEST AND CATASTROPHE

Spanish **conquistadores**, or conquerors, led small armies that rarely exceeded 1,000 men. Yet, because they were also able to raise large Indian armies as allies, they subdued two empires much larger than Spain and then looked around for more worlds to overrun. There, beyond the great empires, Indians had more success in resisting them.

The Conquest of Mexico and Peru

When Cortés entered Tenochtitlán in 1519, he seized Moctezuma, the Aztec ruler, as prisoner and hostage. Although overwhelmingly outnumbered, Cortés and his men began to destroy Aztec religious objects, replacing them with images of the Virgin Mary or other Catholic saints. In response, while Cortés was away, the Aztecs rose against the intruders, Moctezuma was killed, and the Spaniards were driven out with heavy losses. But then smallpox, which the Spaniards left behind, began killing Aztecs by the thousands. Cortés found refuge with the nearby Tlaxcalans, a proudly independent people who had never submitted to Aztec rule. With thousands of their warriors, he returned the next year, built several warships armed with cannons to dominate Lake Texcoco, and destroyed Tenochtitlán. He had hoped to leave the great city intact, not wreck it, but he and the Aztecs found no common understanding that would enable them to stop fighting before the city lay in ruins. With royal support from Spain, the *conquistadores* established themselves as new imperial rulers in Mesoamerica, looted all the silver and gold they could find, and built Mexico City on the ruins of Tenochtitlán.

Rumors abounded about an even richer civilization far to the south, and in 1531 and 1532, Francisco Pizarro finally located the Inca Empire high in the Andes. Smallpox had preceded him and killed the reigning Inca. In the civil war that followed, Atahualpa had defeated his brother to become the new Inca. Pizarro captured Atahualpa, held him hostage, massacred his followers, but managed to win a few allies from among the Inca's recent enemies. Atahualpa filled his throne room with precious metals as a truly royal ransom, but Pizarro had him strangled anyway. Tens of thousands of angry Indians besieged the Spaniards for months in Cuzco, the Inca capital, but Pizarro, although vastly outnumbered, managed to hold out and finally prevailed. After subduing the insurgents, the Spanish established a new capital at Lima on the coast.

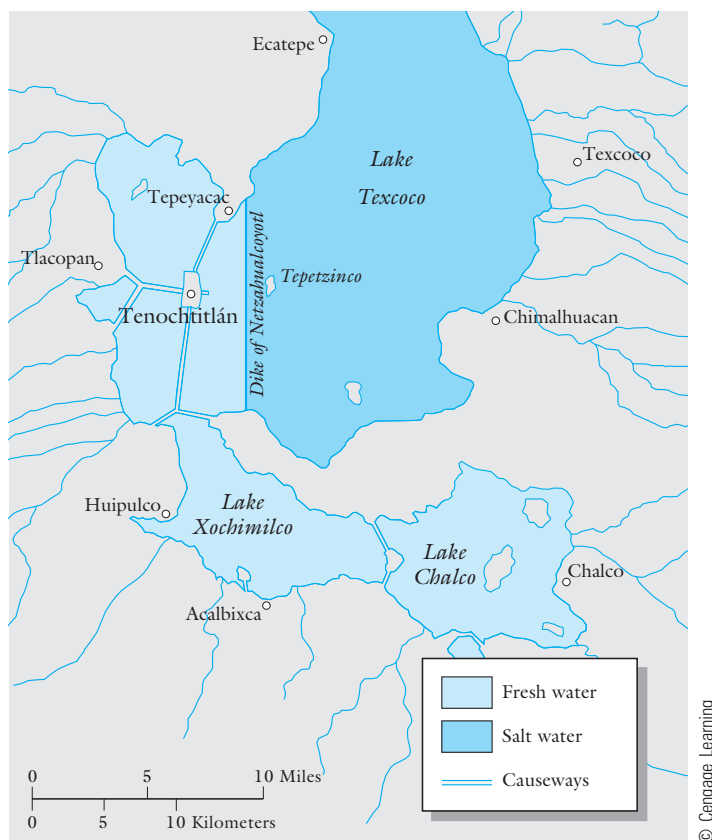
In a little more than 10 years, some hundreds of Spanish soldiers with thousands of Indian allies had conquered two enormous empires with a combined population perhaps five times greater than that of all Spain. But only in the 1540s did the Spanish finally locate the bonanza they had been seeking. The fabulous silver mines at Potosí in present-day Bolivia and other smaller lodes in Mexico became the source of Spain's wealth and power for the next 100 years. So wondrous did the exploits of the *conquistadors* seem by then that anything became believable, including rumors that cities of gold lay waiting in the interior of North America.

North American Conquistadores and Missionaries

Alvar Núñez Cabeza de Vaca was one of four survivors of a disastrous 1528 Spanish expedition to Florida. He made his way back to Mexico City in 1536 after an overland journey that took him from Florida through Texas and northern

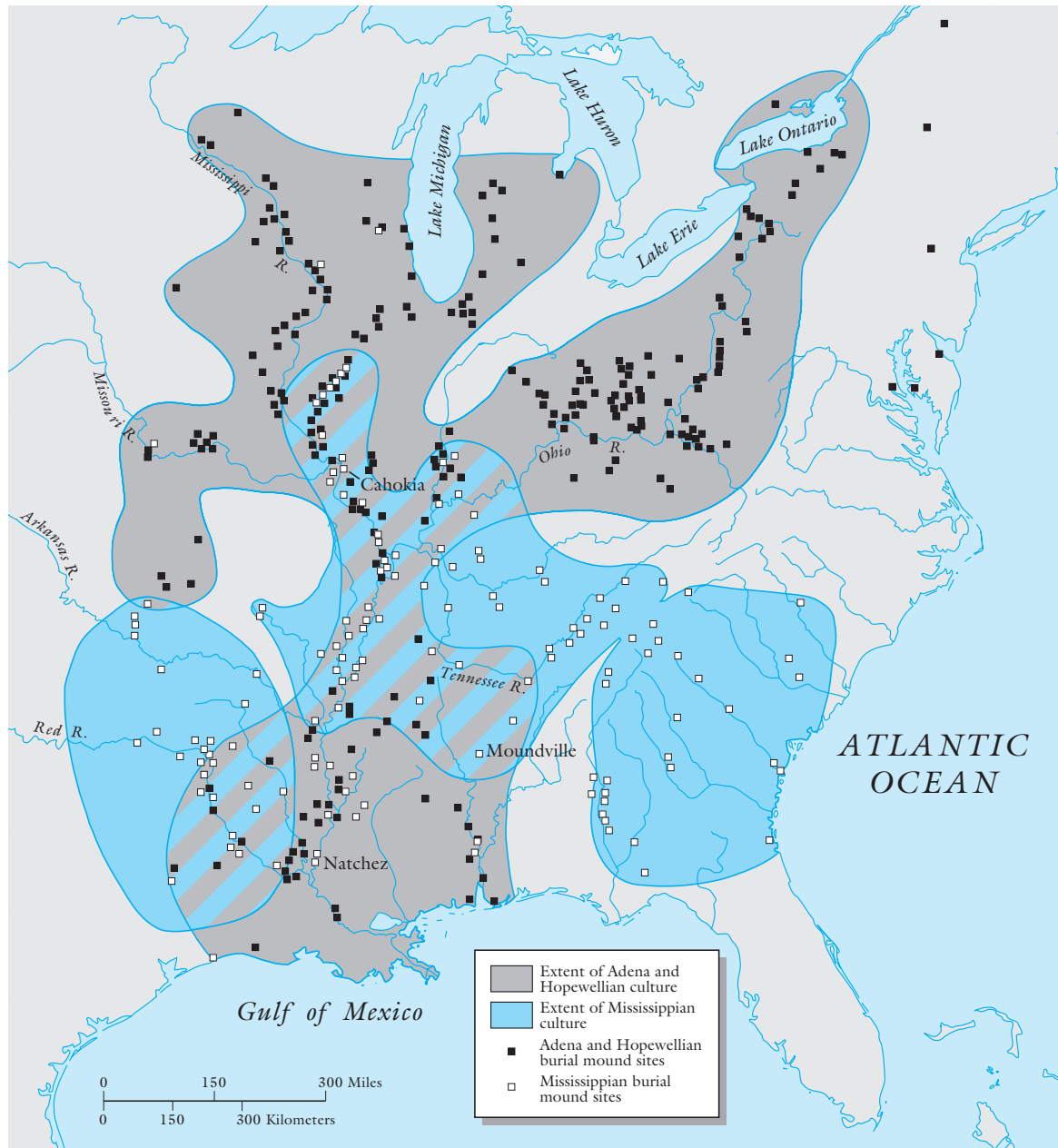
Mexico. In a published account of his adventures, he briefly mentioned Indian tales of great and populous cities to the north, and this reference soon became stories of “golden cities.” Hernando de Soto landed in Florida in 1539 and raped and pillaged his way through much of the southeastern United States in quest of these treasures, leaving disease and mayhem in his wake. He crossed the Mississippi in 1541, wandered through the Ozarks and eastern Oklahoma, and marched back to the great river. He died there in 1542. His companions continued to explore for another year before returning to Spanish territory. Farther west, Francisco Vasquez de Coronado marched into New Mexico and Arizona, where he encountered several Pueblo towns but no golden cities. The expedition reached the Grand Canyon, then headed east into Texas and as far north as Kansas before returning to Mexico in 1542.

After the *conquistadores* departed, Spanish priests did their best to convert thousands of North American Indians to the Catholic faith. These efforts extended well north of New Spain (Mexico). In 1570, the Jesuits even established a mission in what is now Virginia, but local Indians soon wiped it out. After the failure of the Jesuit mission, Spain tried to treat the Indians of Florida and New Mexico with decency and later came to rely on the missions for protection against



MAP 1.7 Valley of Mexico, 1519

Lake Texcoco and its principal cities, especially Tenochtitlán (built on the lake) and its allies, Tlacopan and Texcoco.

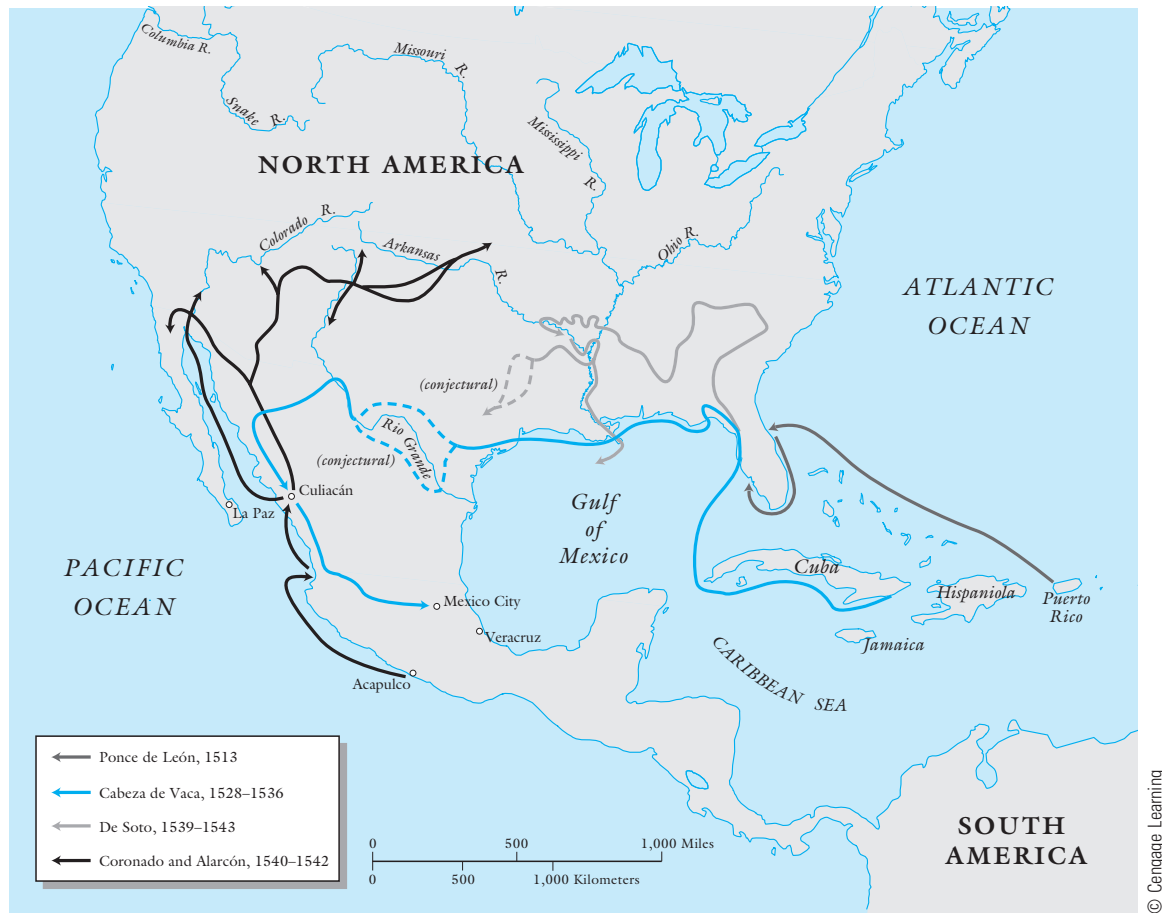


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MAP 1.8 Mound-Building Cultures of North America

Early Adena and Hopewell burial sites and later Mississippian sites and the areas that these cultures influenced.

English and French intruders. The Jesuits withdrew and Franciscans took their place. In 1573, King Philip II (1556–1598) issued the Royal Orders for New Discoveries, which made it illegal to enslave Indians or even attack them. Instead, unarmed priests were to bring Indians together in missions and convert them into peaceful Catholic subjects of Spain. The Franciscans quickly discovered that, without military support, they were more likely to win martyrdom than converts. They reluctantly accepted military protection, but they tried, not always successfully,



MAP 1.9 Principal Spanish Explorations of North America

Four Spanish expeditions marched through much of the interior of North America between 1513 and 1543.

to make sure that none of the few soldiers who accompanied them behaved like conquistadores.

Franciscans had no success among the nomadic residents of central and southern Florida. They had to build their missions within the permanent villages of northern Florida or the Pueblo communities of New Mexico. The Spanish incursion into New Mexico began quite badly with the slaughter of perhaps 800 Indian men, women, and children in 1599, but then relations improved. At first, Indian women willingly supplied the labor needed to build and sustain these missions. By 1630, about 86,000 Pueblo, Apache, and Navajo Indians of New Mexico had accepted baptism. They lived in a chain of missions north and south of Santa Fe, 1,500 arduous and dusty miles from the colonial capital at Mexico City. By midcentury, 30 missions in Florida contained about 26,000 baptized Indians and covered an area extending some 250 miles from the Atlantic coast of what is now Georgia westward into the Florida panhandle. The Franciscans also urged their converts, with limited success, to wear European clothing. In 1671, when a bishop counted 4,081 newly converted women in Florida who went about topless and with their lower legs exposed, he ordered them to cover up.



MAP 1.10 Spanish Missions in Florida and New Mexico Circa 1675

Franciscan friars established missions in Florida from the Atlantic to the Gulf of Mexico and in New Mexico along the Rio Grande Valley and, in a few cases, farther inland.

The Spanish Empire and Demographic Catastrophe

By the late 16th century, the Spanish Empire had emerged as a system of direct colonial rule in Mexico and Peru, where the conquerors took over and used existing systems of tribute. These core holdings were protected by a strong defensive

perimeter in the Caribbean and surrounded by a series of frontier missions, extending in the north into Florida and New Mexico. The Spaniards also brought new systems of labor and new religious institutions to their overseas colonies, although in time both were altered by local conditions.

The first Spanish rulers in Mexico and Peru relied on a form of labor tribute that had helped to depopulate the West Indies. Called **encomienda**, this system permitted the holder, or *encomendero*, to claim labor from an Indian district for a stated period of time. *Encomienda* worked because it resembled the way the Aztecs and the Incas had routinely levied labor for their own massive public buildings and irrigation projects. In time, the king intervened to correct abuses and limit labor tribute to Crown projects, such as mining and the construction of churches or other public buildings. Spanish settlers resisted the reforms at first but slowly shifted from demanding labor to claiming land. In the countryside, the **hacienda**, a large estate with its own crops and herds, became a familiar institution.

Although the Church never had enough clergy to meet its needs, it became a massive presence during the 16th century. Yet America changed it, too. As missionaries acquired land and labor, they began to exhibit less zeal for Indian souls. The Franciscans—in Europe, the gentlest of Catholic religious orders—brutally and systematically tortured their Mayan converts in the 1560s whenever they caught them worshiping their old gods. To the Franciscans, the slightest lapse could signal a reversion to Satan worship, with human sacrifice a likely consequence. They did not dare to be kind.

Most important, the Spaniards brought deadly microbes with them. Smallpox, which could be fatal but which most Europeans survived in childhood, devastated the Indians, who had almost no immunity to it. Even measles could be fatal, and common colds easily turned into pneumonia. When Cortés arrived in 1519, the native population of Mexico probably exceeded 15 million. In the 1620s, after waves of killing epidemics, it bottomed out at 700,000 and did not regain its pre-Spanish level until the 1950s. Peru suffered nearly as horribly. Its population fell from about 10 million in 1525 to 600,000 a century later. For the hemisphere as a whole, any given region probably lost 90 or 95 percent of its population within a century of sustained contact with Europeans. Lowland tropical areas usually suffered the heaviest casualties; in some of these places, all of the Indians died. Highland areas and sparsely settled regions often fared better.

The Spanish Crown spent much of the 16th century trying to keep abreast of these changes, but eventually it imposed administrative order on the unruly *conquistadores* and brought peace to its colonies. At the center of the imperial bureaucracy, in Seville, stood the Council of the Indies. The council administered the three American viceroyalties of New Spain, Peru, and eventually New Granada, which were further subdivided into smaller *audiencias*, executive and judicial jurisdictions supervised by the viceroys. The Council of the Indies appointed the viceroys and other major officials, who ruled from the new cities that the Spaniards built with local labor at Havana, Mexico City, Lima, and elsewhere. Although centralized and autocratic in theory, the Spanish Empire allowed local officials a fair degree of initiative, if only because years could elapse in trying to communicate

across its immense distances. “If death came from Spain,” mused one official, “we should all live long lives.”

Brazil

Portuguese Brazil was also autocratic, but it was divided into 14 “captaincies,” or provinces, and so was far less centralized. The Portuguese invasion did not lead to direct rule over native societies but to their displacement or enslavement. After the colonists on the northeast coast turned to raising sugar in the late 16th century, Brazilian frontiersmen, or *bandeirantes*, foraged deep into the continent to enslave more Indians. They even raided remote Spanish Andean missions, rounded up the converts, and dragged them thousands of miles across mountains and through jungles to be worked to death on plantations. On several occasions, while Brazil was ruled by Spain (see below), missionaries persuaded the king to abolish slavery. Not even absolutism could achieve that goal. Slavery continued without pause, and Africans gradually replaced Indians as the dominant labor force. Brazil was the major market for African slaves until the 1640s, when Caribbean demand became even greater.

GLOBAL COLOSSUS, GLOBAL ECONOMY

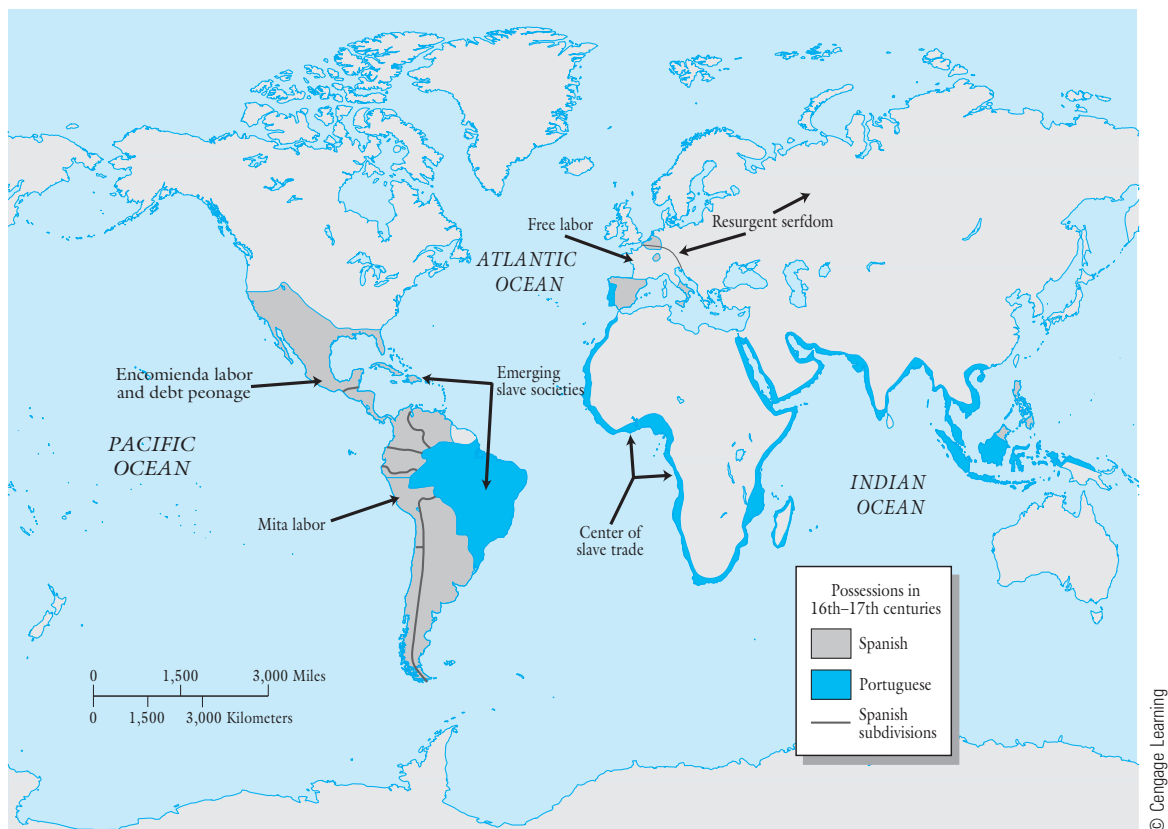
American silver made the king of Spain the most powerful monarch in Christendom. Philip II commanded the largest army in Europe, held the Turks in check in the Mediterranean, and tried to crush the Protestant Reformation in northern Europe (see Chapter 2). He had other ambitions as well. In 1580, after the king of Portugal died with no direct heir, Philip claimed that throne, thus uniting under his own rule Portugal’s Asian empire, Brazil, Spain’s American possessions, and the Philippines. This colossus was the greatest empire the world had ever seen. It also sustained the first truly global economy, because the Portuguese used Spain’s American silver to pay for the spices and silks they imported from Asia. The union of Spain and Portugal lasted until the 1640s, when Portugal revolted and regained its independence.

The Spanish colossus became part of an even broader economic pattern. **Serfdom**, which tied peasants to their lords and to the land, had been Europe’s predominant labor system in the early Middle Ages. Although peasants could not move, neither could they be sold; they were not slaves. Serfdom had been declining in Western Europe since the 12th century and was nearly gone by 1500. A system of free labor arose in its place, and overseas expansion strengthened that trend within Western Europe. Although free labor prevailed in the Western European homeland, unfree labor systems took root all around Europe’s periphery, both overseas and in Eastern Europe, and the two systems were structurally linked. In general, free labor reigned where populations were dense and still growing. Large pools of labor kept wages low, but around the periphery of Western Europe, where land was cheap and labor expensive, coercive systems became the only efficient way for Europeans to extract from those areas the products they desired.

The forms of unfree labor varied greatly across space and time, from slavery to less brutal systems. In New Spain, as the native population dwindled, the practice of *encomienda* slowly yielded to debt peonage. Unpayable debts kept Indians tied to the *haciendas* of the countryside. The mining of precious metals, on the other

hand, was so dangerous and unpleasant that it almost always required a large degree of physical coercion, a system of labor tribute called *mita* in the Andes. Similarly, any colonial region that devoted itself to the production of staple crops for sale in Europe also turned to unfree labor and eventually to overt slavery. Sugar production first reduced Indians to bondage in Brazil and the Caribbean and later, as they died off, led to the importation of African slaves by the millions. Other staples—tobacco, rice, coffee, cotton—later followed similar patterns. At first these crops were considered luxuries and commanded high prices, but as they became widely available on the world market, their prices fell steeply, profit margins contracted, and planters turned overwhelmingly to coerced labor. Even in Eastern Europe, which began to specialize in producing cereal crops for sale in the more diversified West, serfdom revived. In Russia, where the Orthodox Church never condemned the enslavement of fellow Christians, the condition of a serf came to resemble that of a slave in one of the Atlantic empires. Some serfs were even bought and sold.

Spain's rise had been spectacular, but its empire was vulnerable. Although silver from the Americas vastly enhanced the Crown's ability to wage war, the costs of continuous conflict, the inflation generated by a steady influx of silver, and the



MAP 1.11 Spanish Empire and Global Labor System

While Western European states were becoming free-labor societies, they created or encouraged the establishment of societies built on or providing laborers for various unfree labor systems in the Americas, the Caribbean, Africa, and Eastern Europe.

need to defend a much greater perimeter absorbed Spain's new resources and a great deal more. Between 1492 and 1580, Spain's population grew from 4.9 million to 8 million, but over the course of the following century, it fell by 20 percent, mostly because of the escalating costs, both financial and human, of Spain's wars. As population declined, taxes rose. Castile grew poorer, not richer, in its century and a half of imperial glory. Most of the wealth of the Indies went elsewhere to pay for goods or services that Spain failed to provide for itself: to merchants in Genoa, to manufacturers in Lombardy and the Low Countries, and to bankers in Augsburg.

EXPLANATIONS: PATTERNS OF CONQUEST, SUBMISSION, AND RESISTANCE

By the middle of the 18th century, Europeans who thought seriously about the discovery of America and its global implications generally agreed that the whole process had been a moral outrage, possibly the worst in history. Conquest and settlement had killed millions of Indians, enslaved millions of Africans, and degraded Europeans. By comparison, the benefits to humanity seemed small even though economic gains by 1750 were large. If the cruelest of the conquerors had foreseen the results of this process, asked the Abbé Raynal, would he have proceeded? "Is it to be imagined that there exists a being infernal enough to answer this question in the affirmative!" The success of the American Revolution, with its message of freedom and human rights, quieted such thinking for a time, but the critique has revived in recent years, especially in the developing world.

Modern historians, less moralistic than Raynal, also realize that he considerably underestimated the death toll. Even so, they are more interested in asking how and why these things happened. One major reason is geographical. The Eurasian land mass, the world's largest, follows an east-west axis that permits life forms and human inventions to travel immense distances without going through forbidding changes of climate. Chinese inventions eventually reached Europe. By contrast, the Americas and sub-Saharan Africa lie along north-south axes that do impose such barriers. Another compelling explanation for European success focuses on the prolonged isolation of the Americas from the rest of the world. If two communities of equal ability are kept apart, the one with the larger and more varied population will be more inventive than the other, and its people will learn more rapidly from one another over time. For example, the use of iron spread gradually throughout nearly all of Asia, Africa, and Europe and even though Europeans knew little about China, they slowly acquired Chinese inventions such as paper, the compass, and gunpowder. Steel, more than any other technological edge, far more than firearms or even horses, made military conquest possible. European armor stopped enemy spears and arrows, and European swords killed opponents swiftly without any need to reload.

The biological consequences of isolation were even more momentous than the technological barriers. The devastation that European microbes inflicted upon the Indian population is the greatest tragedy in the history of humankind. The Indians' genetic makeup was more uniform than that of Europeans, Africans, or Asians, which made them more vulnerable to contagious maladies. Indians were descended

from a rather small sample of the total gene pool of Asia. Centuries in Beringia had weeded out weaker people and killed the microbes that produce most diseases. The Indians first encountered by Europeans were bigger, stronger, and—at first contact—healthier than the invaders, but with almost no resistance to new diseases, they died in enormous numbers.

European plants also thrived at the expense of native vegetation. For example, when British settlers first crossed the Appalachians, they marveled at the lush Kentucky bluegrass. They did not realize that they were looking at an accidental European import that had conquered the landscape even faster than they had. European animals also prevailed over potential American rivals. Horses multiplied at an astonishing rate in America, and wild herds moved north from Mexico faster than the Spaniards, transforming the way of life of the Apaches and the Sioux. The lowly sparrow never had it so good until someone turned a few loose in North America. But other life forms also moved from the Americas to Europe, Asia, and Africa. Indians probably gave syphilis to the first Europeans they met. Other American exports, such as corn, potatoes, and tomatoes, were far more benign and have enriched the diet of the rest of the world. Historian Alfred W. Crosby has called this larger process “the **Columbian exchange**.” It ranks as one of the most important events of all time.

CONCLUSION

Americans like to believe that their history is a story of progress. They are right about its European phase. After its tragic beginnings in conquest, depopulation, and enslavement, some things finally did improve.

For thousands of years, the Americas had been cut off from the rest of the world. The major cultures of Eurasia and Africa had existed in relative isolation, engaging in direct contact with only their immediate neighbors. Islamic societies that shared borders with India, the East Indies, black Africa, and Europe had been the principal mediators among these cultures and, in that era, were more tolerant than most Christian societies.

In just 40 years, daring European navigators, supported by the crowns of Portugal and Spain, joined the world together and challenged Islam’s mediating role. Between 1492 and 1532, Europe, Africa, Asia, the Spice Islands, the Philippines, the Caribbean, Aztec Mexico, Inca Peru, and other parts of the Americas came into intense and often violent contact with one another. A few individuals gained much, and Spain acquired a military advantage within Europe that endured into the 1640s. Nearly everybody else suffered, millions horribly, especially in the Americas and Africa. And Spain spent the rest of the 16th century trying to create an imperial system that could impose order on this turbulent reality. But Spain had many enemies. They too would find the lure of wealth and land overseas irresistible.