



PORTRAIT OF DON FRANCISCO DE AROBÉ, DETAIL FROM *THE MULATTO GENTLEMEN OF ESMERALDAS*, BY ANDRÉS SÁNCHEZ GALLQUE, 1599

Globalization changed the world beginning in the fifteenth century as Europeans and Africans encountered native peoples in the New World. This portrait is part of a larger portrait of three men in Ecuador in the service of the Spanish king Philip III. The subject here, Francisco, was of mixed African descent, a Christian, and the governor of a settlement in Ecuador. He represents the new blending of peoples and cultures, and this portrait, the oldest surviving signed and dated painting from colonial South America, reveals the kind of changes that came about as people moved across the seas.

Faith, Fortune, and Fame

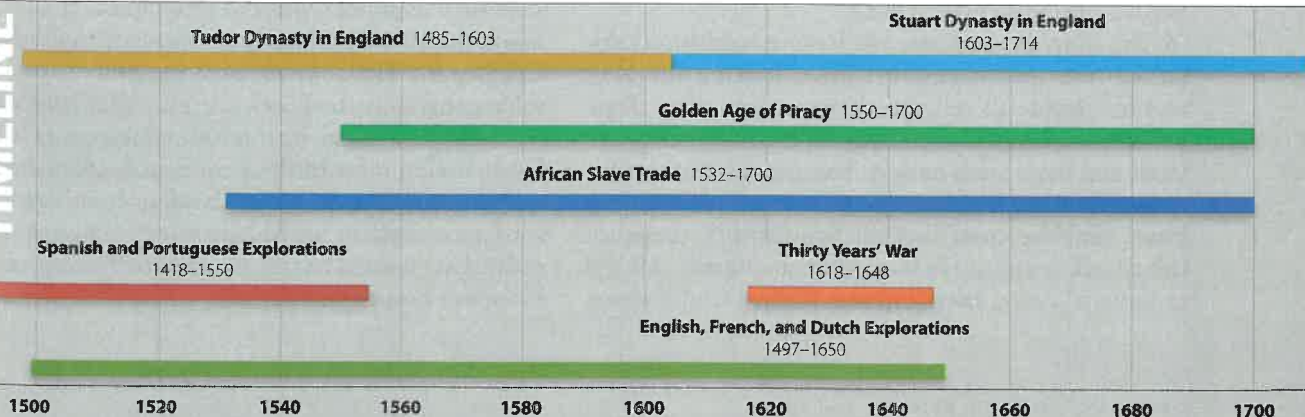
12

European Expansion, 1450–1700

“**T**o serve God and the King, to give light to those who are in darkness, and to grow rich, as all men desire to do.” With these words, the Portuguese explorer Bartholomeu Dias (1450–1500) explained purposes that drove men to sail their ships across uncharted oceans during the sixteenth and seventeenth centuries. At the same time that Italian Renaissance ideas spread and the Reformation created new martyrs, daring Europeans ventured where they had never gone before. Kings and queens sponsored these explorers in the hopes that the new territories and riches they promised would give monarchs an advantage over their dynastic rivals.

The adventurers traveled by ship east to China, Japan, and other places in the Pacific, and west to strange new islands and continents. As they journeyed, they met peoples living in great empires in the East and in the mountains and jungles of South and Central America. They traded with many others from tribes and kingdoms in sub-Saharan Africa, the Caribbean, and North America. The interactions among the many cultures prompted the emergence of new markets and the discovery of unusual products that whetted Europeans’ appetites for yet more novelties. Some men, like Don Francisco, shown in the chapter-opening portrait, were able to prosper in the new global environment, but not all were so successful. Sadly, the commingling also led to the transmission of deadly new diseases and other hardships. Europeans were irrevocably altered by these cultural contacts, and so were the cultures they encountered.

TIMELINE



PREVIEW

THE WORLD IMAGINED

Understand what the European explorers expected to find in the wider world.

THE WORLD DISCOVERED

Study the explorers, their motivations, and their destinations.

CONFRONTATION OF CULTURES

Learn about the Amerindians, the European conquests, and the slave trade.

THE WORLD MARKET AND COMMERCIAL REVOLUTION

Examine the rise of commercial capitalism, mercantilism, banking, and piracy.

THE WORLD TRANSFORMED

Trace how the spread of goods and ideas transformed the world.

THE WORLD IMAGINED

In 1498, four Portuguese ships led by Vasco da Gama sailed south from Europe and rounded the southern tip of Africa to reach India in the east. Gaspar Correa accompanied this journey, keeping a careful chronicle that told of the exciting, frightening voyage. In order to sail south with prevailing northwesterly winds, the navigators could not hug the shore but instead had to direct the ships southwest, tacking into the wind and going far away from the sight of land into the unknown sea. For two months, Vasco da Gama tacked out to sea to make sure that when they turned to shore, the ships would "double the cape," skirting the African continent. Correa wrote of the hardships of this venture into the Atlantic: "The fury of the sea [made] the ships seem every moment to be going to pieces. The crews grew sick with fear and hardship, . . . and all clamored for putting back to Portugal. . . . At times they met with such cold rains that the men could not prepare their food. All cried out to God for mercy upon their souls." Vasco da Gama finally ordered the ships about and they sailed southeast again. They circled the southern tip of Africa and with much celebration they headed northeast toward India.

The ships were to face much more hardship. They pulled into great rivers in Africa looking for food and for people to tell them where they were. They ate unknown fruits—one so toxic it made their gums swell and their teeth loosen. The captain ordered his ill men to rinse their mouths with urine to ease their gums, and the cure worked. Somehow, through all the adversity the crews carried on and finally docked in India at a city where citizens flocked to the shore,

amazed at the Western ships. Correa succinctly and accurately described the confrontation between East and West: "All were much amazed at seeing what they had never before seen." Vasco da Gama's crew was not unique in the fifteenth century; brave sailors sailed east and west from Europe, and the world was transformed as Europeans and indigenous peoples almost everywhere were amazed at their new confrontation.

The Lure of the East

Western Europeans had long coveted goods from the East, which they generally considered China and India. When they used the name "China," they also meant Japan Eastern trade and the other lands of eastern Asia. When they referred to "India," they included southeast Asia and the many islands dotting the Pacific, and although Vasco da Gama reached the mainland of India, he would have been content to land on any of the Pacific islands. More than just a geographic entity, though, the East, in many Europeans' minds, was the source of valuable luxury goods.

Since the Middle Ages, Europe had lusted after the silks, fine carpets, pottery, and precious jewels produced in the East. Europeans were so impressed by these exotic goods that they praised the Chinese as the finest craftsmen in the world. Yet it was the spices from the Orient that riveted Westerners' attention. European diets were bland, and those who depended only on local seasonings—garlic, saffron, and the ever-present salt—found the food tiresome. Recipes of the time and records showing commercial demand reveal that people clamored for cloves, cinnamon, coriander, and pepper in particular—all available only in the East. Throughout the Middle Ages, these products came overland through the Byzantine Empire into western Europe.

But after 1400, intensifying warfare in eastern Europe and Asia made overland travel difficult. (See Chapter 9 for the increased threat posed by the Turks.) Europeans began looking for new trade routes through the eastern Mediterranean to satisfy their appetite for spices. They revived centuries-old memories of journeys to the East by reading accounts like that of the Venetian explorer Marco Polo (1254–1324), who wrote detailed descriptions of his visits to China (see Chapter 9). These works were incorrect in much of their geography, however; for example, Marco Polo believed that Japan was 1,500 miles east of China. Furthermore, most of these older accounts contained exaggerated descriptions of botanical and biological features of Eastern lands. Nevertheless, no tale of the exotic East seemed too far-fetched to fifteenth-century European imaginations.

Imagined Peoples

Since the time of the Roman scholar Pliny the Elder (23–79), people had heard of unusual races of people who inhabited parts of the world outside the Mediterranean. Pliny's works had been read, copied, and embellished over the centuries, and by the fifteenth century, explorers expected to find beings as bizarre as dog-headed humans, headless people, one-legged "sciopods," and—south of the equator—"antipods," whose feet reportedly faced backward.

Figure 12.1 shows an illustration from a fifteenth-century manuscript about the travels of Marco Polo. Although Marco Polo never claimed to have seen such creatures, later Europeans imagined that he did. On the left of the illustration is a blemmyae, a headless man whose face is located on his chest. In the center is a sciopod, a one-legged creature believed to use his large foot as a parasol against the sun. These two beings are greeted by a cyclops approaching from the right.

A more plausible person the explorers expected to meet was Prester John, supposedly a rich and powerful Christian king reigning in the heart of Africa. By the Renaissance, Europeans hoped to enlist this king as an ally against the Muslims. However, the search for both Prester John and the fascinating creatures in Marco Polo's tales was stymied by an inaccurate geographic sense of the world that, like the descriptions of the monstrous races, the explorers had inherited from the ancients.

Ptolemy's Map

During the fifteenth century, western Europeans acquired the *Geography* of Ptolemy (ca. 100–ca. 178).

This guide had been translated from Greek, reproduced by the new printing presses, and widely distributed.

Now Renaissance explorers had a picture of the world that they could use to venture into the Atlantic, or the "green sea of darkness," as the Arabic commentators called it.

Ptolemy portrayed the world as a globe, divided into the familiar 360 degrees of longitude. Figure 12.2, from a 1482 edition of the *Geography*, shows Ptolemy's map of the world. This ancient geographer believed that the world consisted of three continents—Asia, Africa, and Europe—and two oceans—the Indian Ocean and the Western Ocean. The map is surrounded by figures representing the many winds so crucial to a sailing society. In addition to mistaking the number of continents, Ptolemy made two major errors: He underestimated the extent of the oceans, suggesting that land covered three-fourths of the earth's surface, and he miscalculated the earth as being one-sixth



FIGURE 12.1 Monstrous Races, fifteenth century

Influenced by writings of medieval travelers, explorers expected to see strange creatures such as those pictured here: the blemmyae on the left, a sciopod in the center, and a cyclops on the right.

smaller than its true size. With only Ptolemy's map to guide them, later explorers understandably expected the journey east to be shorter than it really was. During this age of discovery, however, the theories of Ptolemy dissolved in the face of experience.

THE WORLD DISCOVERED

The explorers expected to capitalize on Europe's desire for Eastern goods and bring back wealth for themselves and their sovereigns. Sixteenth-century rulers were desperate for money to field their expensive armies, and the conquest of Constantinople by the Turks in 1453 increased the price of the valuable spices as they imposed steep taxes on the goods. This costly trade siphoned precious metals away from an already coin-poor western Europe, and monarchs were willing to reward anyone who hunted for new wealth. Brave, enterprising men eager for fame and fortune took up the challenge.

Fame, Fortune, and Faith: The Drive to Explore

Though the lure of wealth motivated explorers and the sovereigns who funded them, some adventurers had other incentives for embarking on these risky travels. As Bartholomeu Dias implied in the quotation that introduced this chapter, religion also served as a major impulse for Europeans to seek new worlds. Christians during the fifteenth and sixteenth centuries felt besieged by the Islamic empire of the Ottoman Turks that loomed on Europe's eastern border (see Chapter 11).

*Ptolemy's
worldview*



FIGURE 12.2 Ptolemy's Map

The ancient map shows the world as the explorers expected it to be: largely land, with little sea, and Europe at the center. The four winds in the corners reminded sailors of their source of power.

Some voyages aimed to find allies against the Turks. The Reformation within Europe also stimulated explorations and migrations, as Catholics sought converts to Catholicism overseas and Protestants looked for new lands where they could practice their faith. Faith joined with fame and fortune to drive Europeans across the seas.

New Technologies and Travel

Europeans had a passion for adventure, but they also needed strong navigational tools and skills if they were to survive these hazardous journeys. Fortunately for them, sailors in the Middle Ages had perfected instruments to help them sail out of sight of land. One device, the **quadrant**, aligned with the fixed North Star at night to let navigators determine their latitude. However, this was not useful in the Southern Hemisphere, where the North Star was not visible. Sailors going south had to confront uncharted heavens as well as unmapped lands. During the day, sailors in both Northern and Southern hemispheres could check their calculations with the **astrolabe**

Navigation instruments

(see **Figure 6.14**), which measured the height of the sun during the day or the altitude of a known star at night.

Finally, mapmakers had gained experience in charting the seas and lands and could graphically document their travels with some accuracy. Earlier skilled seafarers like the Vikings who first discovered North America lacked the cartography skills to allow them to reproduce their long sea voyages with as much certainty as did the sixteenth-century explorers. Navigators felt confident in their charts, and the newly discovered map of Ptolemy, though inaccurate, at least gave them a basic sense of direction.

Sailors lacked only the ships to carry them safely on long ventures. The galleys that had ruled the Mediterranean in the fourteenth century had large, square sails, but their locomotion came primarily from the many slaves who rowed the big ships. These ships were unsuitable for long distances and had little extra space left in their holds to store the provisions necessary for a lengthy sea voyage.

At the beginning of the fifteenth century, the Chinese built huge ships—more than twice as large as anything being built in Europe at the time—to explore

the South China Sea and the Indian Ocean. (Some scholars suggest that the ships may have sailed on into the Atlantic, but there is no solid evidence for such claims.) These voyages were led by Zheng He, a trusted admiral of the Ming dynasty in China.

Zheng He's ships dominated the east from 1405 to 1433 and may have had the ability to reach the New World. However, when the political situation changed after 1433, Chinese emperors abandoned voyages of exploration in order to concentrate on internal matters. The great ships were left to rot in the harbors, and imperial officials are believed to have been responsible for destroying navigational charts and records.

Leadership in global exploration moved to Europe, when the Portuguese began building ships that marked the highest development of a long evolution of Mediterranean sailing ships. In the Middle Ages, shipbuilders had developed a new kind of sail rigging that allowed ships to maneuver near shore in uncertain winds. By the sixteenth century, shipbuilders had improved the mobility of the sails and the rigging of the ropes so that the sails could be moved readily. Figure 12.3 shows a sixteenth-century watercolor of Portuguese caravels—the small (70 to 80 feet long) ships that conquered the great seas. The large square sails allowed the ships to move in the direction of the wind, or downwind. The real secret to long-distance sailing, however, was the lateen, a triangular, mobile sail at the rear (furled in Figure 12.3). This device not only let the ship sail faster but also allowed it to sail at an angle to the wind and thus progress upwind—a crucial advantage for traveling into the prevailing westerly winds of the Atlantic. This ship, with its absence of oar banks, stands in striking contrast to the Mediterranean galleys shown in Figure 11.10. The ships had to be heavy to withstand the storms of the Atlantic, and this weight gave the West an unforeseen advantage: They could support heavy cannons, giving them a military advantage over the lighter ships of the East that sailed the calmer Indian Ocean. On these innovative vessels, the Portuguese set out on voyages of discovery that changed the world.

The Portuguese Race for the East, 1418–1600

As the chronicler of Vasco da Gama's voyage described in the account at the beginning of this chapter, the Portuguese explorers had an immediate goal in mind: to venture south around Africa to the Indian Ocean and trade directly with natives in India for spices and other luxury items. This route would eliminate the troublesome role of the Ottoman Turks as key players in the eastern Mediterranean trade network. Beginning in 1418, Prince Henry the Navigator (1394–1460) of Portugal sponsored annual expeditions down the west coast of Africa.

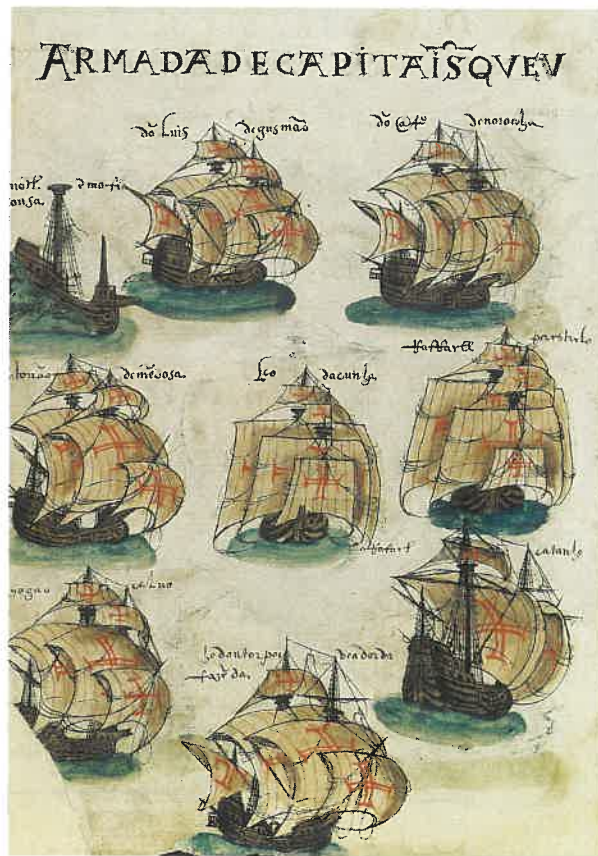
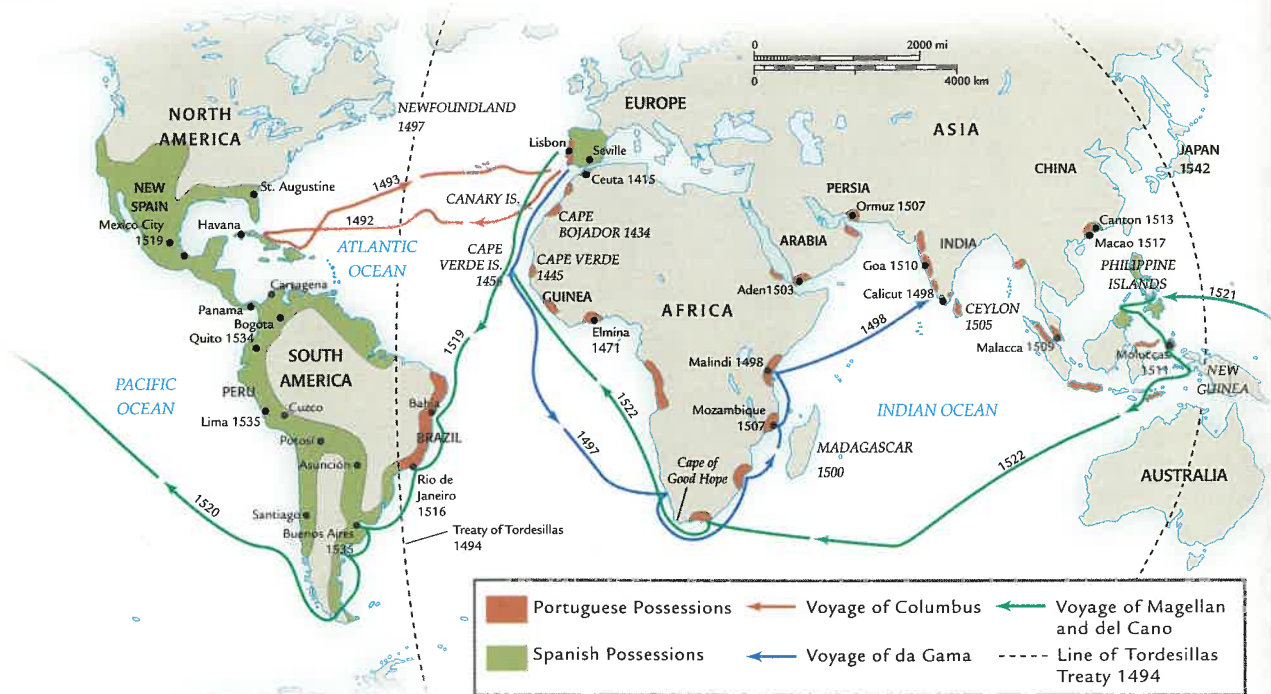


FIGURE 12.3 Portuguese Ships, sixteenth century
Portuguese caravels, the subject of this informative watercolor, were sturdily designed ships that sailed the great seas. Powered by huge sails, the ships did not need banks of oars, so they could be stocked with water and food for long voyages.

Bartholomeu Dias continued Henry's work with great success, rounding the southern tip of Africa in 1488. King John II of Portugal (r. 1481–1495), expecting this route to yield the riches of the East, named the tip the Cape of Good Hope. But Dias never reached India. His frightened crew had experienced the storms and hardships that Correa described, but Dias did not maintain the iron control that Vasco da Gama would, and his crew mutinied as he sailed north along the eastern coast of Africa. He was forced to return home.

In 1498, his countryman Vasco da Gama (ca. 1460–1524) set out with four ships to complete Dias's ill-fated voyage to India. He succeeded and returned to Portugal with ships laden with spices worth sixty times the cost of the journey. On his first trip to India, da Gama carried casks of honey, hats, and other trifles to trade for the precious spices. On his second voyage four years later, the explorer brought a new trading item that would transform commerce in the Indian basin: His casks were now filled with gunpowder. Soldiers in India had long known the recipe for gunpowder, but when they saw its use in da Gama's deadly cannons, a new arms race would begin that would fuel escalating violence in the age of exploration.



MAP 12.1

Exploration and Conquest, Fifteenth and Sixteenth Centuries

This map shows the routes and dates of the explorations of the fifteenth and sixteenth centuries, as well as the possessions claimed by the Spanish and Portuguese. It includes the Treaty of Tordesillas line, which divided the world between Portugal and Spain.

Explore the Map

1. What accounted for the differing settlement patterns in the Americas, Africa, and Asia?
2. How do you think the Treaty of Tordesillas influenced the differing settlement patterns of the Spanish and the Portuguese?
3. How were the small settlements around the coast of Africa useful for sailors and traders?

Portuguese explorers scored spectacular successes in opening up the trade to the East. As one pleasant surprise, they discovered that India was not simply one location—it included the Moluccas, "spice islands," from which wafted the delightful aroma of cloves as the

Trading outposts

Portuguese ships approached. As Map 12.1 shows, the Portuguese established a string of trading outposts throughout the East. In these small settlements, Europeans lived peacefully near native settlements in a mutually profitable relationship. Portugal's successful entry into the Indian Ocean trade struck a dramatic blow to the economy of the Muslims, who had previously held a monopoly on that trade. At the same time, their neighbors, the Spanish, took a quite different approach. Spain's explorers sailed westward in

hopes of reaching the fabulous Orient, believing Ptolemy's claim that the land of plenty lay just over the horizon.

Spain's Westward Discoveries, 1492–1522

Christopher Columbus (1446–1506) perhaps best exemplifies Spain's travel ambitions. The son of an Italian (Genoese) weaver, Columbus traveled to Portugal in 1476 to learn about Portuguese shipbuilding and sailing. During his visit, he became captivated by the accounts of Marco Polo and the *Geography* of Ptolemy. Inflamed by images of glory and wealth, he asked the Portuguese king to sponsor him on a trip west to Asia. The king rejected him, like many others, he dismissed Columbus

as a vague dreamer. Columbus then presented his idea to the Spanish monarchs Ferdinand and Isabella. The queen, impressed with Columbus's proposal, made him an admiral in 1492 and financed his expedition.

Columbus embarked on his journey with three ships, the *Niña*, the *Pinta*, and the *Santa María*. In October, the small fleet landed on an island in the Caribbean Sea.

According to the admiral's account, as he stepped ashore, Columbus "claimed all the lands for their Highnesses, by proclamation and with the royal standard displayed." According to Columbus, the many islanders who watched him did not object to his claims, so he accepted this as their tacit agreement—ignoring the language barrier that separated them. Subsequent explorers followed his lead, claiming ownership of already inhabited lands.

Figure 12.4 is a contemporary woodcut that was intended to capture this incident, and it shows all the essential elements: The king of Spain, on the left, gives Columbus the authority for his voyage. The three ships are featured in the center, and Columbus is shown landing on an island to claim it for the king. The island is depicted as a place as fanciful as any in the literature of imaginative travel, with exotic trees and beautiful, naked natives. The reality of the landing proved much less idyllic.

Columbus made four voyages between 1492 and 1502, during which he established settlements on several more Caribbean islands and visited the northern coast of South America and Central America. On his third voyage, he brought women from Spain to ensure the permanence of the settlements. The explorer was not a good administrator, and when Spain sent a judge to look into a revolt in the new lands, Columbus was brought back to Spain in chains. Though he was later released and made a final fourth voyage to the New World, Columbus never received the riches and acclaim he sought. Throughout these years, the Italian adventurer apparently felt sure that he had found Asian islands. He even referred to the natives as Indians because he was certain he was in the general region of India. Columbus never realized that he had discovered a world unknown by virtually all Europeans. Instead, he clung to the image of the world he had imagined. His continued misconceptions encouraged other voyagers, who would soon prove him wrong.

As the Spanish and Portuguese both raced to claim lands on their way east, they inevitably came into conflict. The Catholic sovereigns of Spain and Portugal appealed to the pope to divide the world into two spheres of influence. In the 1494 Treaty of Tordesillas (shown on Map 12.1), the Spanish received exclusive rights to the lands west of a line drawn 370 leagues (about 1,200 miles) west of the Cape Verde Islands off



FIGURE 12.4 Columbus's Discoveries

This contemporary woodcut shows the New World as Columbus wanted to portray it: populated by beautiful, naked peoples; lush with exotic plants; and all under the control of the Spanish king on the left.

the west coast of Africa, and the Portuguese received rights to the lands east of the line. This agreement (which was virtually ignored by the other European monarchs) was one of many attempts to apportion the world without regard for the opinions of indigenous residents.

Soon, subsequent travelers convinced Europeans that Columbus was wrong and that a great new landmass had been found. The most influential of these explorers was Amerigo Vespucci (1451–1512), an educated "Renaissance man" who worked for the Medici family of Florence (discussed in Chapter 10). In 1499, Vespucci set off on a voyage of discovery that took him westward from Spain and across the vast ocean to South America. During his voyage, he took careful navigational measurements and wrote colorful letters to his Medici patron, which were widely circulated. In the introduction to these works, Amerigo's publisher even suggested that Vespucci's name be given to the *Mundus Novus* (the New World) he had popularized with his maps and vivid tales of a continent across the ocean. The suggestion caught on, and the name "America" became attached to the western landmass that newly captured the European imagination. See Document 12.1 for an example of one of Vespucci's vivid descriptions.

After Vespucci's voyages, people set out purposefully to visit the new continent. For example, the Spanish adventurer Vasco Núñez de Balboa (1475–1517) trekked across the Isthmus of Panama, eventually

Circumnavigating the globe

thinking about sources

DOCUMENTS

DOCUMENT 12.1

Amerigo Vespucci Describes the New World

In 1499, the naval astronomer Amerigo Vespucci wrote a letter to Lorenzo de' Medici of Florence (see Chapter 10) describing his travels. The letter serves as a valuable early source for European impressions of the new lands. It was particularly influential because of Vespucci's engaging style and sharp observations.

It appears to me, most excellent Lorenzo, that by this voyage most of those philosophers are controverted who say that the torrid zone cannot be inhabited on account of the great heat. I have found the case to be quite the contrary. I have found that the air is fresher and more temperate in that region than beyond it, and that the inhabitants are also more numerous here than they are in the other zones, for reasons which will be given below. Thus it is certain that practice is of more value than theory.

Thus far I have related the navigation I accomplished in the south and west. It now remains for me to inform you of the appearance of the country we discovered, the nature of the inhabitants, and

their customs, the animals we saw, and of many other things worthy of remembrance which fell under my observation. After we turned our course to the north, the first land we found to be inhabited was an island at ten degrees distant from the equinoctial line. When we arrived at it we saw on the sea-shore a great many people, who stood looking at us with astonishment. We anchored within about a mile of the land, fitted out the boats, and twenty-two men, well armed, made for land. The people, when they saw us landing, and perceived that we were different from themselves—because they have no beard and wear no clothing of any description, being also of a different color, they being brown and we white—began to be afraid of us, and all ran into the woods. With great exertion, by means of signs, we reassured them and negotiated with them. We found that they were of a race called cannibals, the greater part or all of whom live on human flesh.

Your excellency may rest assured of this fact. They do not eat one another, but, navigating with certain barks which

they call "canoes," they bring their prey from the neighboring islands or countries inhabited by those who are enemies or of a different tribe from their own. They never eat any women, unless they consider them outcasts. These things we verified in many places where we found similar people. We often saw the bones and heads of those who had been eaten, and they who had made the repast admitted the fact, and said that their enemies always stood in much greater fear on that account.

Still they are a people of gentle disposition and beautiful stature. They go entirely naked, and the arms which they carry are bows and arrows and shields. They are a people of great activity and much courage. They are very excellent marksmen. . . .

FROM: Amerigo Vespucci, "Letter to Lorenzo de' Medici," in *The Great Events by Famous Historians*, vol. VIII, ed. Rossiter Johnson (The National Alumni, 1905), pp. 351–356.

Analyze the Source

1. How did Vespucci's observations foster a scientific attitude?
2. How might Vespucci's descriptions of the native peoples influence future interactions between them and the Europeans?

reaching the Pacific Ocean on the other side. Besides adding to the evidence that a new continent existed, Balboa's discovery intensified the race to the riches of the East. New men with even bigger dreams of wealth joined the rush.

Ferdinand Magellan (ca. 1480–1521) was one of these men. A Portuguese explorer in the service of Spain, Magellan began the first expedition that succeeded in encircling the world. He sailed west from Spain in 1519 with three ships and discovered (and named) the Straits of Magellan at the southern tip of South America. The straits gave him access to the Pacific Ocean (which he also named). He and his crew braved the huge expanses of ocean and withstood mutinies. In 1521, Magellan was killed while interfering in a local war in the Philippines. His navigator, Sebastian Elcano (ca. 1476–1526), finished the journey to Asia and through the Indian Ocean back to Spain. Elcano's voyage took three years and he returned home with only one ship. But that ship was packed with enough spices not only to pay for

the cost of the expedition but also to make the crew very rich.

Magellan and Elcano's successful circumnavigation of the globe revealed not that the world was round (they knew that), but its true size. It also demonstrated the impracticality of sailing to the Orient by way of the Pacific. The Spanish would have to search for new sources of wealth—this time in the New World.

The Northern Europeans Join the Race, 1497–1650

England, France, and the Netherlands came late to the race for the riches of the New World. Understandably, they were unwilling to accept the terms of the Treaty of Tordesillas. Instead, they began their own explorations. They started by looking for a "northwest passage" to the East that would parallel the southern route around South America. In about 1497, the Genoese captain John Cabot (1450–1498) and his son Sebastian (1476–1557), who both had settled in England,

received a letter from the English king Henry VII (r. 1485–1509) authorizing them to take possession for England of any new lands unclaimed by any Christian nation. So empowered, father and son sailed across the North Atlantic to Newfoundland and Maine. They found codfish so plentiful that their ships could not pass through the thick schools of fish. However, the voyage was immediately disappointing because they neither reached Asia nor returned laden with spices.

The French also hunted for a northwest passage to the East. In 1534, Jacques Cartier led three voyages that explored the St. Lawrence River in what is today Canada. He and his crew got as far as Montreal, but the great waterway led only inland, not out to the Pacific Northwest. An early settlement effort in the region of Quebec in 1541 failed, owing to the harsh winter and indigenes' hostility. In about 1600, Samuel de Champlain (ca. 1567–1635) made another try at establishing a settlement in North America. He founded Quebec, signing treaties with the natives to secure the settlement. Canadian settlements remained small in both size and number through the seventeenth century, but their existence ensured the continuous presence of European traders and missionaries in this northern land.

When the much-sought-after northwest passage proved elusive, northern Europeans shifted their journeys of discovery farther south and began to confront the Iberians directly.

The Dutch established trading posts in the Spice Islands, and Dutch warships proved their superiority and expelled the Portuguese from the islands that we now know as Indonesia. The Dutch also redesigned their ships to haul more cargo than the small Portuguese caravels that had first mastered the oceans. They then dominated the lucrative spice trade, founding colonies in strategic locations to protect their growing trade empire. As one example, they colonized the tip of South Africa to facilitate their Eastern trade and planted colonies in North America (most famously on Manhattan Island) and in the Caribbean.

The English, for their part, began to install settlements along the North American Atlantic seaboard in the seventeenth century: By 1700, about 250,000 colonists lived along the coast. Many of these people moved

there to escape the religious persecution that swept Europe in the seventeenth century. For this reason, they traveled west with their entire families, with the intent to stay. Their presence irrevocably altered the face of North America. **Map 12.2** shows the status of the European colonization in about 1700, and it illustrates how the northern European countries had joined the Spanish and Portuguese in their race around the world.

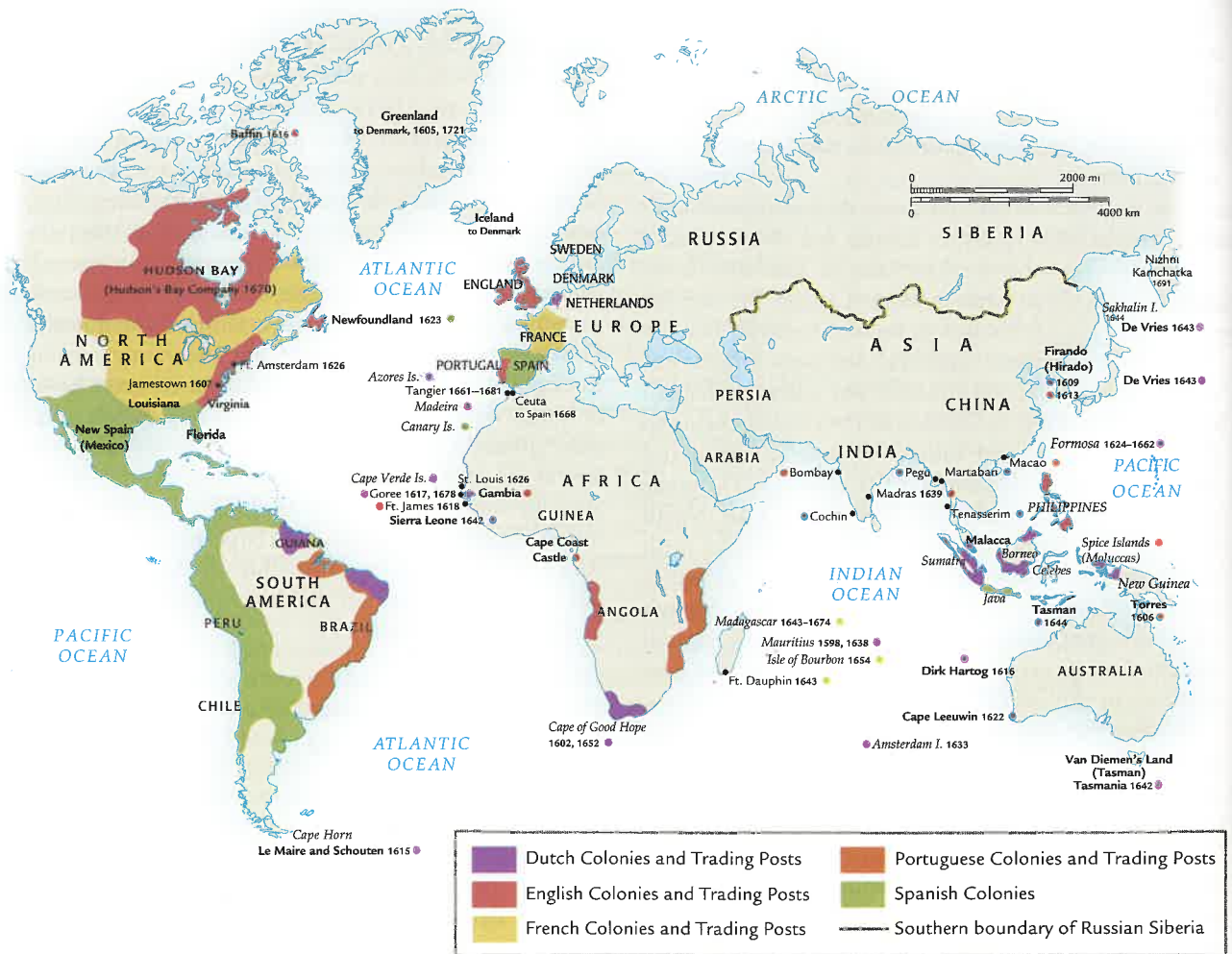
CONFRONTATION OF CULTURES

When the Europeans arrived in the New World, it was already abundantly populated by peoples who had lived there in resilient societies for millennia. From as early as 35,000 B.C.E., small groups of people walked from Asia northward across a land bridge from Siberia to Alaska. Recent scholarship suggests that they might have been joined by other groups of prehistoric travelers, perhaps coming across the seas. Slowly, over tens of thousands of years, families, clans, and tribes moved southward and settled throughout North, Central, and South America. At first, all these tribes pursued a highly effective hunting-and-gathering existence, with devastating consequences for their future development. As the hunters came through North America, they confronted great herds of large mammals—horses, elephants, camels, and giant ground sloths. Within a few centuries of human arrival, all those large mammals were extinct, probably because of effective hunting. However, this meant that there were no more large animals in North America for domestication—this would represent a fatal disadvantage when the Amerindians confronted Europeans millennia later.

The Original Americans South of the Rio Grande

In about 5500 B.C.E., tribes in central Mexico first developed agriculture, which, as we saw in Chapter 1, allowed large settled populations to become established. These civilizations would become tempting, wealthy targets for European explorers. Agriculture spread north and south from there, but very slowly. The differing latitudes and varied growing seasons of the large American continents caused agriculture to diffuse more slowly in the Americas than it had in Europe and Asia, where crops spread primarily within similar latitudes. In the Americas, for example, it took about 3,500 years for maize (what we usually call corn) and beans to spread 700 miles from Mexico to the southern farmlands of the modern United States, but spread they did.

With the early use of agriculture in Central America and the western mountains of South America, populations grew large and elaborate empires—the Maya, Aztec, Inca, and others—developed. These civilizations thrived mainly through the cultivation of maize. This highly nutritious, versatile crop originally grew wild in the New World but had been cultivated for so long that it no longer grew without human help. Maize offered high yields with very little effort. Cultivators worked only about fifty days a year to produce an abundant crop that could be eaten even before it



MAP 12.2

European Expansion, ca. 1700

This map shows the world around 1700, when Europeans had expanded around the globe. Notice where the people from the various countries settled, and compare the different settlement patterns of the Americas, Africa, and Asia.

Explore the Map

1. What might account for the differences in settlement patterns?
2. Compare this map with **Map 12.1**. What are the major differences between the maps, and what caused these differences?
3. Why was North America so heavily settled compared to Africa?

was ripe. In these maize-growing societies, men cut and burned brush to clear the land to plant the grain, and women ground the hard kernels into flour to make tortillas, or flat bread.

The Incas, a people living in the Andes Mountains of South America, also cultivated a crop indigenous to that region—potatoes. An excellent alternative to maize, which did not grow in the high country, this hardy vegetable grew easily in the adverse conditions

and high altitudes of mountain ranges and provided a hearty food supply. Once planted, potatoes required little work to harvest and prepare. Incas living in the mountains dried potatoes for long-term storage.

The small amount of time required to cultivate and harvest maize and potatoes left many days free for other work, and the great Central and South American empires developed a religious and aristocratic culture that demanded

Empire building

human labor for immense building projects. The Maya, Aztecs, and Incas built magnificent cities and roads and imposing pyramids. These constructions seem even more remarkable when we realize that they were built with Stone Age technology and without use of the wheel and (in most places) without the help of powerful, domesticated animals. Among these civilizations, only the Incas had domesticated the llama and alpaca as beasts of burden; throughout the rest of North and South America, people raised only dogs and fowl.

Map 12.3 shows the locations of the large South American empires as they existed when the Europeans arrived in the fifteenth century. The illustration shows the narrow Isthmus of Panama, which formed an effective geographic barrier between the two major empires, and which also served to disadvantage the Amerindians in developing increasingly complex societies. For example, the Aztecs in Mexico invented a wheel, but because they lacked draft animals, the wheel remained a children's toy. The Incas had domesticated the llama but had no wheel to convert this animal into an effective beast of burden.

In Mexico, the Aztecs had located their capital at the great city of Tenochtitlán, built on a lake and accessible only by boat or causeway.

Aztec Empire (Tenochtitlán is the site of present-day Mexico City.) The Aztecs called themselves Meshica, from which we get the word *Mexico*. The Aztecs had conquered all the surrounding local tribes and claimed tribute from the vanquished, including humans sacrificed to the demanding Aztec gods, who people believed claimed human blood to delay an inevitable destruction of Aztec society. Much of the visual information we have on the South American tribes comes from manuscripts written in the sixteenth century after the Spanish conquests. Authors included drawings within these books—many created by the Amerindians themselves. From these drawings, we can gain information about life before and after the Spanish invasions. Figure 12.5 is one such drawing, which shows the ritual human sacrifice. In the sacrificial ceremony, victims were forced to the top of a pyramid and stretched over a stone. A priest then used a sharp stone knife to cut out the victim's heart and offer it—still beating—to the god. The voracious demand for such tribute from the subject peoples catalyzed resentment among them—a force that the new conquerors from Europe would find useful in overpowering the Aztecs.



FIGURE 12.5 Aztec Human Sacrifice from the Codex Magliabecchiano, ca. 1570

Spanish conquerors took advantage of internal warfare among the tribes that generated human sacrifices such as that documented in this Aztec manuscript. The priest at the top removes the heart of the victims.

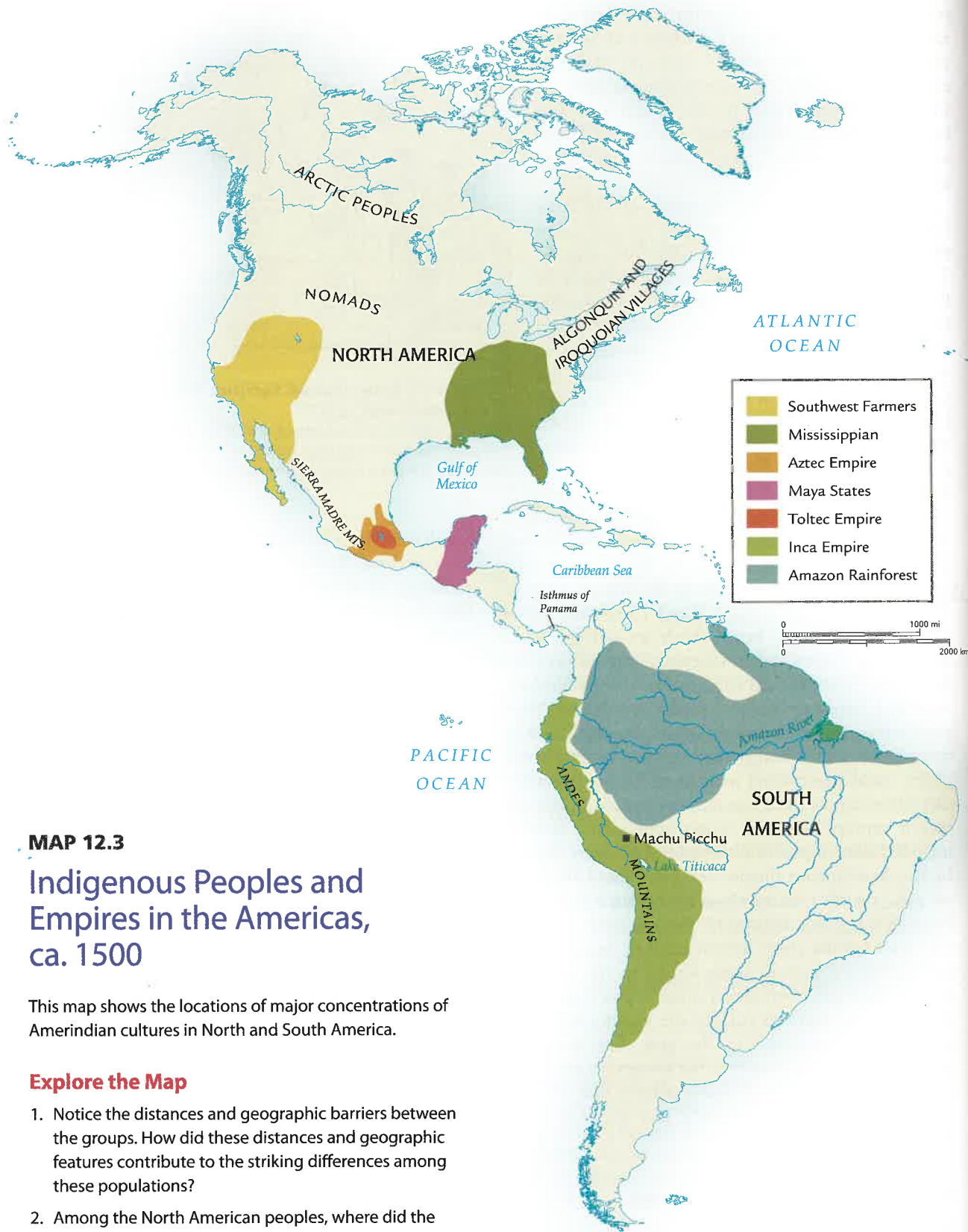
Southwest, Pueblo and Navajo peoples adapted to their dry lands by irrigating crops of maize, beans, and squashes. They built permanent adobe buildings, and their populations grew. Farther north and east, Amerindians shaped their environments in different ways. They made extensive use of fire to burn underbrush in forests and, probably more significantly, to burn the great plains and prairies. In doing so, they created a huge pastureland for game, and their populations grew as well. Map 12.3 shows the general patterns of the North American settlements.

The largest settled populations north of the Rio Grande spread along the Mississippi valley with the mound-building cultures. The largest surviving mound, at Cahokia near St. Louis, Illinois, is an astonishing structure, 100 feet high and 1,000 feet long. There were more than a hundred smaller mounds nearby. By 1250 C.E., the settlement surrounding these mounds probably reached between 15,000 and 38,000 inhabitants. These people grew prosperous from long-distance trade along the Missouri and Mississippi rivers, which brought seashells from Florida, copper from the Great Lakes, and other goods from all over the continent. The rise of Cahokia coincided with the spread of maize into the eastern part of the continent, a development that allowed the native populations to grow even more.

Fortunately, we have a visual record of the prosperity that eastern tribes of Amerindians enjoyed before their contact with Europeans, for an artist, John White, accompanied three voyages to the colony of

The Original Northern Americans

The spread of maize led to large, settled agricultural communities in North America. In the American



MAP 12.3

Indigenous Peoples and Empires in the Americas, ca. 1500

This map shows the locations of major concentrations of Amerindian cultures in North and South America.

Explore the Map

1. Notice the distances and geographic barriers between the groups. How did these distances and geographic features contribute to the striking differences among these populations?
2. Among the North American peoples, where did the cultivation of corn (maize) allow for large settlements?

Roanoke. White's detailed watercolors, copied by an engraver in the Netherlands and published in 1590, remain an excellent source of information about the lives and livelihoods of some North American tribes. The village White portrays in Figure 12.6 is prosperous and orderly and has abundant food available. In the upper left of the etching, Amerindians hunt deer. In the hut at the upper right, a watchman makes "continual cries and noise" to frighten animals and birds from the fields, where maize and pumpkins (on the right) and tobacco (in the circular field on the left) grow. Villagers celebrate the abundance by dancing (lower right) and feasting (center).

There is much controversy over the size of these indigenous populations in North America, but certainly millions of people prospered in the American North. These flourishing cultures would be drastically affected by the arrival of Europeans.

Early Contacts

Christopher Columbus set the tone for the relationship between the original Americans and Europeans when he claimed land in the New World for the Spanish monarchs and when he treated the people as sources of revenue for the Spanish crown. With few exceptions, subsequent European explorers viewed the native peoples in the same way. Sometimes they traded with them; other times they used them as labor. Still other times, they killed or enslaved the men and women they found living in the new lands.

Explorers of the New World believed they had encountered a major problem: These lands lacked the spices and luxury goods of the East that had brought so much immediate wealth to merchants. These new explorers had to find other forms of riches to bring home. Sometimes they enslaved natives, but this was not particularly lucrative. Instead, they searched for silver and gold to take back to Europe. According to one contemporary observer, when an Amerindian asked a Spaniard what Europeans ate, the Spaniard responded, "Gold and silver." (We do not know whether this exchange actually took place, but the anecdote testifies to the insatiable European appetite for precious metals.) For the Europeans, all the early contacts involved questions of profit; for the Amerindians, such contacts brought suffering.

Conquest of the Great Empires,

1520–1550

While in the Caribbean, the Spanish explorer Hernando Cortés (1485–1547) heard of a fabulously rich society to the west. Their curiosity aroused, he and 600 men sailed across the Gulf of Mexico in search of gold and glory. These Spanish soldiers of fortune were known as **conquistadors**.



FIGURE 12.6 Amerindian Village from Theodore DeBry, *Grands et Petits Voyages*, 1590

This watercolor shows a well-ordered village in North America. Tribes grow tobacco, corn, and pumpkins.

When Cortés landed on the Yucatán peninsula in southeast Mexico, the people he met there told him of a wealthy civilization in the interior (the Aztecs). As Cortés moved inland, he acquired a gift that proved more valuable to his quest than anything else—the slave woman Malinche.

According to later Spanish sources, Malinche was a princess whose father had died when she was young. The girl's mother gave her to local slave traders when the mother remarried, and the traders included the young woman in their gifts to Cortés. Malinche spoke four Amerindian languages, including the Nahuatl of the Aztecs, and she easily learned Spanish. She converted to Christianity and took the baptismal name of Marina. Malinche was constantly at Cortés's side, interpreting and advising him on matters of policy and customs as he made his way west. The various peoples they encountered on their journey recognized her importance, calling Cortés "Malinche's Captain."

Eventually, Cortés's group marched 250 miles into the interior of Mexico and reached the Aztec capital of Tenochtitlán. There, Cortés and Malinche met with Montezuma II (1502–1520), the Aztec emperor.

*Confronting
the Aztecs*



FIGURE 12.7 Cortés and Montezuma, from *Lecuzo de Tlaxcala*, sixteenth century, copied in eighteenth century Cortés is accompanied by his translator Malinche as he negotiates with the Aztec ruler Montezuma.

Figure 12.7 depicts this meeting. This drawing was taken from a valuable cloth that was painted in the mid-sixteenth century by a Mexican tribe that helped Cortés conquer the Aztecs. (Unfortunately, the original cloth has disappeared, but a copy was made in Mexico in the eighteenth century.)

By skilled use of images, the painter emphasized the role of Malinche in the conquest. In the illustration, Cortés and Malinche use the same gesture, showing that they speak with one voice. Montezuma sits in state, his nobles standing behind him. The Aztecs have gathered gifts for Cortés, drawn at the bottom of the page. The illustration foreshadows the coming European conquest: In the center of the picture, the Aztec royal headdress moves toward Cortés; in the upper-right corner, the hand of God reaches down to bless the proceedings.

Cortés knew that to transport the riches of the Aztecs back to Spain, he first had to vanquish this mighty civilization. With the help of Malinche, he garnered the support of nearly

Aztecs conquered

100,000 people from neighboring tribes who were eager to throw off the Aztec yoke. Even with the advantage of gunpowder, armor, horses, and fierce dogs, it took him nearly a year to subdue the empire, and contemporary witnesses captured the violence of the struggle. Bernal Díaz del Castillo described the capture of the last stronghold: "I have read of the destruction of Jerusalem, but I know not if that slaughter was more fearful than this—the earth, the lagoons, and the buttresses were full of corpses and the stench was more than

any man could bear." In 1522, Cortés proclaimed the Aztec Empire "New Spain," and he prepared to rule. Although he had fathered a son with Malinche, he gave her as a bride to one of his soldiers and presented her with expensive estates to thank her for her help.

The Inca Empire fell to another conquistador, Francisco Pizarro (ca. 1475–1541). In 1532, Pizarro landed on the west coast of South America and began to march to Cuzco, the Incan capital. (See Global Connections.) The Inca rulers had just endured a five-year civil war over a disputed succession, and the newly victorious ruler, Atahualpa, apparently underestimated the Spanish. Atahualpa came unguarded to meet with Pizarro, and he was promptly captured. He offered a roomful of gold as his ransom, which the Spanish accepted. After collecting the ransom, they killed their hostage. The Incas fought fiercely for a few years after the fall of their leader, but they were unable to overcome the Spanish technical advantages. A new order arose in South America.

Incas conquered

How did these small numbers of Europeans manage to conquer the impressive Amerindian empires? They gained a clear advantage from their steel weapons, horses, and high organization (including writing, which allowed them to communicate effectively).

Germes

However, in the long run, their greatest weapon was biological—germs they brought from Europe. When previously isolated populations mingle, it is common for epidemics to break out, but the confrontation between Europeans and Amerindians was particularly devastating because the New World had no history of interaction with domesticated animals. The most devastating acute diseases that Eurasians faced came initially from their animals: measles, tuberculosis, flu, whooping cough, and, perhaps most deadly, smallpox. With thousands of years of exposure to these diseases, Europeans had developed immunities. Amerindians had not. In what turned out to be a biological tragedy that clinched the European conquest, disease and death followed the colonists everywhere they ventured. As one Huron woman said of the Jesuit missionaries, "They set themselves up in a village where everyone is feeling fine; no sooner are they there but everyone dies except for three or four people. They move to another place, and the same thing happens."

North American Contacts

The fortunes of the northern Amerindians in the wake of Europeans' arrival are more difficult to recount because the first contacts between the Europeans and the northern tribes were indirect. Direct contacts in the north did not occur until twenty-five to

The Inca Empire Falls

en years after Hernando Cortés had sailed from Spain and conquered the Aztec Empire in Mexico in 1521, another conquistador, Francisco Pizarro, set off to seek his own fortune in the New World. He landed on the west coast of South America—which stretched the 2,500-mile border of the vast Inca Empire. (See **Map**) The Inca ruler used a hierarchical bureaucracy to govern a population of about 11.5 million peasants. Before Pizarro even landed in South America, the great Inca Empire had already had deep troubles. Powerful earthquakes accompanied by giant waves had battered the coast. Lightning had struck the palace of Huayna Capac. Messengers had also told Huayna that strange beings with beards had landed on the coast. In the midst of these disasters, the Incas remembered a prophecy claiming that during the reign of the twelfth ruler, Spanish men would invade and destroy the Inca Empire. Huayna was the eleventh ruler. On his deathbed, he purportedly advised his subjects to submit to the newcomers, who would surely arrive soon in fulfillment of the prophecy. At the time, the empire's ruling house had already had other problems as well. Civil war between two half brothers over succession erupted after the death of Huayna Capac. Atahualpa, Huayna's

illegitimate son, challenged Huascar, the legitimate heir. In 1533, Atahualpa captured Huascar, but resistance to Atahualpa's rule continued in the region of Cuzco. At this volatile moment, Pizarro arrived. Some of Huascar's supporters claimed that their god, Viracochas, had sent the armed men to place Huascar on the throne. This account of Inca beliefs on the eve of Pizarro's conquest was recorded in the early sixteenth century by the conquerors themselves. Historians have used it in part to explain how Pizarro—with a force of only 62 mounted men and 106 foot soldiers—could overwhelm between 100,000 and 400,000 armed Incas. Yet, it was neither their fatalism nor Pizarro's temporary alliance with Huascar that gave the Spanish the advantage; it was their technological superiority.

In the sixteenth century, warfare had honed both the weapons and the tactical skills of the Spanish. Their horses made a huge difference, adding power and reach to the mounted soldier. Pizarro wrote that the horsemen "did all the fighting, because the . . . Indians hold the footsoldiers in slight account." Furthermore, the Spanish fighters' steel swords, spears, and pikes so outmatched the Incas' most effective weapon, the sling, that the armored invaders could engage many Indians without much fear of injury themselves. Yet, even with these advantages, the

Spanish took seven years to fully conquer the extensive empire. Despite the Incas' lack of advanced weaponry, they quickly assessed the Spanish tactics and bravely exploited what weaknesses they could find.

Due to the cultural and technological chasm between the Spanish and the Incas, the conquest took on unprecedented brutality. One conquistador wrote, "I can bear witness that this is the most dreadful and cruel war in the world. For between Christians and Muslims there is some well-feeling. . . . But in this Indian war there is no such feeling on either side. They give each other the cruelest deaths they can imagine." After finally crushing the Incas, the Spanish had little inclination to treat their captives with any humanity. The early Spanish rule—with its forced labor programs—proved as brutal as the conquest itself.

Making Connections

1. How did technological differences between the Incas and the Spanish contribute to the brutality of the Spanish rule?
2. How did internal problems and Spanish military technology lead to the Incas' defeat?



one hundred years later than the South and Central American contacts. Thus we do not have as many eyewitness accounts for the early period in the north. Yet the effects of the Europeans' arrival were still powerfully felt there, because European germs were able to spread to North America, where they brought diseases to the people and destroyed their societies on a large scale. Thus, when the first accounts of the northern contact were written, the authors described societies that had already been severely disrupted.

One example of the ravages of disease in the north following European contact came in the wake of the Spaniard Hernando de Soto's (ca. 1496/97–1542) landing in Florida in 1539. For four years, de Soto's small force wandered through Florida and Georgia and elsewhere in the South looking for gold. De Soto's band killed many Indians in the course of their travels, but the explorer eventually succumbed to fever and died. Many of de Soto's pigs remained to roam in the woods. As we have seen, domestic animals often served as sources of disease in early

modern times, just as they do in the world today, as we are periodically confronted by animal-borne diseases such as swine flu and avian flu. De Soto's pigs similarly brought disease that spread widely through the human population. By the time the next Europeans traveled through the Mississippi valley a century later, the population had fallen steeply, by perhaps as much as 96 percent. Disease had emptied this rich land of its peoples.

Across the continent in southwestern North America, a shipwreck stranded another Spaniard, Álvar Núñez Cabeza de Vaca (ca. 1490–ca. 1560), with his three companions, who included an African slave. Cabeza de Vaca created a valuable account that told of a society already damaged by earlier contacts. For eight years, the travelers roved among the southern nomadic tribes until they encountered a Spanish colony in 1536. De Vaca wrote of hunger, hospitality, and warfare among the Amerindians, and his narratives shaped many Europeans' views of the native North Americans.

Some scholars believe that the rich environmental and animal resources the North American colonists found, from the fertile Great Plains to the innumerable buffalo herds, existed because the native peoples who had tended the land had died off, primarily from imported diseases. The North American world was transformed by the European arrival as surely as was the Southern Hemisphere.

Life and Death Under European Rule, 1550–1700

The goal of the newly established European colonial empires was to enrich the home countries. To meet this aim, the colonists exploited natural resources and Amerindian peoples to their fullest. The Spanish crown divided up the lands, placing viceroys in charge of each section. These royal representatives were responsible for delivering to the crown the profits taken from the new lands. The crown claimed one-fifth of all gold and silver mined in the New World, and the treasure ships departed the coasts of the Americas heavily laden.

To get the human labor he needed to search and mine for precious metals, Christopher Columbus proposed enslaving the native peoples. Queen Isabella rejected the plan, for she considered the New World peoples her subjects. Instead, the Spanish developed a new structure, called the *encomienda* system, to provide the conquerors with labor. Under this system, the crown would grant an *encomienda*, which gave conquistadors and their successors the right to the labor of a certain number of Amerindians. Theoretically, in exchange for labor, the Spanish

Enforced labor

proposed enslaving the native peoples. Queen Isabella rejected the plan, for she considered the New

World peoples her subjects. Instead, the Spanish developed a new structure, called the *encomienda* system, to provide the conquerors with labor. Under this system, the crown would grant an *encomienda*, which gave conquistadors and their successors the right to the labor of a certain number of Amerindians. Theoretically, in exchange for labor, the Spanish

owed the natives protection and an introduction to the Christian faith.

The *encomiendas* lasted only through the sixteenth century; but this system was replaced by other forms of labor servitude, like the *repartimiento*, which required adult males to devote a certain number of days of labor annually to Spanish economic enterprises, such as plantations (called *haciendas*) or mines. Sometimes these contracts stipulated a lifetime of labor (though the subject peoples remained personally free); other times, the Amerindians had to work for the Spanish for a fixed number of years. Life under these contracts proved extremely harsh—with hard labor and a shortage of food—and many laborers died while working for their new overseers.

For the Spanish, the arrangement yielded untold wealth, exemplified by the silver mine in Bolivia—the Potosí—shown in the painting in **Figure 12.8**. In the background of this picture, workers and pack-trains climb steep peaks that lead to the veins of ore. The workers' homes are shown in the middle of the painting. In the foreground, other local Amerindians process the ore. First they watch a hydraulic wheel crush the raw ore; then they pound the ore with large hammers until it is reduced to powder. The waterwheel is fed by long canals that convey melting snow and rainwater from the mountain. The last step in the process was to mix the ore with mercury and convert it into a paste. This technique, brought from Europe in 1557, increased silver production tenfold. From 1580 to 1620, the great age of Spanish imperialism was financed by the silver extracted primarily from the Potosí mine.

Figure 12.8 also hints at the amount of work necessary to run sixteenth-century mines and the reason that the mine owners saw the enforced labor of the locals as essential. The Spanish crown gave the owners of the Potosí mine the conscripted labor of 13,300 Amerindians. These workers had to report to the mine on Monday morning and toil underground until Saturday evening. The mine owners did not provide meals; throughout the workweek, the men's wives had to bring them food. Many workers perished under the inhumane conditions.

Not everyone accepted this colonial brutality as a natural consequence of the need for silver. The most severe critic among these was the Dominican friar Bartolomé de Las Casas (1474–1566).

In his book *The Tears of the Indians*, Las Casas wrote: "There is nothing more detestable or more cruel, than the tyranny which the Spaniards use toward the Indian." Historians have disagreed about the exact number of lives lost in the Spanish domination of Central and South America, but all the estimates are shocking. Diseases, overwork, and warfare took a terrible toll on

Amerindian mortality

indigenous people everywhere in the New World. When Columbus landed in 1492, for example, the population of the Caribbean Islands was about 6,000,000, and fifty years later, it numbered only a few thousand. The native population of Peru fell from about 1,250,000 in 1570 to just 500,000 in 1620. Mexico fared worse: About 24 million native individuals died between 1519 and 1605. Many fell victim to diseases, overwork, and the abuse that Las Casas had described. Some Europeans abhorred this destruction, but many saw it as merely a source of worry about where to get enough labor to work their mines and the plantations.

In another tragic turn of events, Las Casas proposed a solution that he thought might free the native workers from their burden of labor. He suggested that the king of Spain offer Spanish men and women a license to settle in the New World. In addition to land, each license would give permission for the holder to import a dozen African slaves to the Americas. In his old age, Las Casas recognized the problems with this policy. To his regret, the plan brought a shameful new injustice to the New World: the African slave trade.

The African Slave Trade

By the beginning of the seventeenth century, the new rulers in the Americas were facing alarming labor shortages. The original Americans had died in huge numbers just as colonists stepped up the need for labor in their profitable enterprises. As we saw earlier, mining required countless workers. The sprawling plantations built to exploit demand for new crops also desperately depended on large numbers of ill-paid workers.

Sugar is the overriding example. Although sugarcane grew in Egypt and North Africa, it remained scarce and expensive. Europeans discovered that the cane flourished in the New World and began to cultivate it avidly in hopes of satisfying the intense European craving for its sweet flavor. Sugar also fueled a new vice—the alcoholic beverages (like rum) that it helped make. Throughout the Caribbean and in Brazil, colonists established grand sugar plantations and began using African slaves to work them. On the plantations, like the one in Barbados shown in Figure 12.9, workers tended the sugarcane and harvested it with large, sharp knives—a practice that often led to serious injuries. Then the cane had to be crushed to extract its juice. In this illustration, the cane is crushed in the background with grindstones. In the center, the crushed cane is cooked in vats to produce molasses, and then the product is distilled into rum (in the lower



FIGURE 12.8 Potosí Silver Mine, ca. 1584

This mine in Bolivia, worked by more than 13,000 conscripted Amerindians, supplied huge amounts of silver at great cost. The process used mercury, which polluted the waterways.

left). The whole process was guided by overseers like the one in the foreground holding his stick to beat any recalcitrant slaves.

Sugar and other plantations (for example, cotton in North America) were designed to produce enough of their specified crop to satisfy a world market. Plantation owners took a consuming interest in the success of these endeavors. Indeed, the German naturalist Maria Merian (see the Biography on page 383) wrote that she was ridiculed in the colony of Surinam, in South America, because she was interested in things other than sugar. This monoculture, or focus on a single crop, forced the plantations to trade with the rest of the world for all their remaining necessities, including labor.

As we saw in Chapter 10, slavery on a small scale began to be reintroduced into Europe during the Renaissance, and the sixteenth-century warfare escalating between Christians and Muslims stimulated even more enslavements in North Africa. For example, in 1627 Muslim pirates from the Mediterranean raided distant Iceland and enslaved nearly 400 descendants of the Vikings. Current studies suggest that between 1580 and 1680, some 850,000 Christian captives were enslaved in Muslim North Africa. Some of these captives who escaped or were ransomed engaged in their own slaving raids against Muslims as a form of revenge.

This growth of slavery between Christians and Muslims likely suggested to Europeans a solution for the



FIGURE 12.9 Sugar Plantation, 1667

Sugar was the crop that brought the most wealth to plantation owners. Originally from Egypt, sugar was transplanted wherever it would grow, to satisfy soaring European tastes for sugar and rum. Slaves were brought to work the fields and the processing plants.

labor shortages in the New World. In 1532, the first slave shipments departed from Africa to transport slaves directly across the Atlantic to the plantations of the West Indies and Brazil. Before 1650, only about 7,000 slaves annually crossed the Atlantic, but the figure doubled to about 14,000 between 1650 and 1675. Before the

African slaves

1680s, the Atlantic slave trade almost exclusively provided slaves for these sugar plantations. During the seventeenth century, blacks brought to North America came from the Caribbean, not directly from Africa—many had European surnames and knew a European language. A significant fraction of these early “servants for life” in North America became free, and some appear in the early records of the colonies (even in the South) as freeholders and voters. By the eighteenth century, the rise in plantations in North America caused slaves to be imported directly from Africa in large numbers (see Chapter 15).

The slave trade generated huge profits, not only for the Europeans, but also for African chiefs who supplied slaves to the traders. Because of long, but periodic, contact with Europe for millennia, Africans had substantial resistance to European diseases, so they survived in larger numbers than the Amerindians had. Slavery had always been part of African warfare, and as early as the seventh century, Muslims profited from slaves brought across the Sahara Desert. However, in the sixteenth

Impact in Africa

century the huge profits created a new scale of trade—chiefs traded slaves to the Europeans in exchange for guns to gain advantage over their traditional rivals. Some tribes (such as the Congo in central Africa) were initially opposed to the trade but became heavily involved to stay competitive with their neighbors.

The political consequences of the trade in Africa varied. In the kingdom of the Congo, the Portuguese quest for slaves weakened the monarchy and led to local warfare and a decentralization of power. In the military kingdom of Dahomey on the west coast of Africa, kings made the slave trade a royal monopoly and profited enormously. When the trade ended, however, the resulting economic depression in Dahomey led to severe political disturbance. Although this discussion shows it is possible to treat the slave trade as one more manifestation of the growing world economy, one cannot ignore the fact that the trade of human beings rendered incalculable costs in human misery.

By 1700, traders were delivering about 30,000 slaves each year, and that number continued to escalate into the late eighteenth century. Packed tightly into the holds of ships and subjected to lack of food, water, and sanitary facilities, as many as 25 percent of these human beings died in transit. Anyone who survived the trip then faced new horrors: starvation and overwork and sometimes harsh physical discipline by their owners.

Some slaves ran away. In Brazil, in particular, many escapees fled into the forest and founded their own communities. The largest of the settlements was Palmares, which the Portuguese attacked in 1692 and destroyed three years later. Although it is impossible

Slave rebellions
to get exact figures, it seems the community consisted of perhaps 10,000 fugitives who had formed a kingdom and designated a king and a council of elders. Other slaves devised more subtle forms of rebellion, including slow labor. In one interesting instance, an African woman in Surinam told the naturalist Maria Merian that the slaves practiced birth control to avoid bringing children into slavery. Although we know that Africans practiced some birth control in Africa, we cannot know for sure that it took a new purpose under slavery, but it may have.

Gathering Souls in the New Lands

Early explorers were partially motivated to travel by their desire to spread the Christian faith, and this desire only increased as Europeans found so many "heathens" around the world. Cultures all over the world became exposed to the Christian message. Many missionaries worked to alleviate the misery caused by the conquests, but others traveled from Europe with the zeal of crusaders and with the dogged insensitivity of the conquistadors. Some of them baptized natives in large groups, with no concern for their spiritual inclinations. Columbus and other early explorers, ignorant of native culture, wrote that the indigenous peoples had no religious sensibilities and thus should be easily converted. As a result, subsequent missionaries believed they were offering the benefits of religion to people who had none.

This attitude led to even further ill treatment of native peoples. In 1543, for example, the archbishop of New Spain (Mexico) tried 131 people for heresy, including 13 Aztecs, who he (rightly) believed practiced old forms of piety. In 1555, the Council of Mexico resolved not to ordain anyone of Indian, African, or mixed background—the priesthood was to be reserved for those of European descent. The suspicion extended even to churchmen sympathetic to native peoples. The Spanish crown had banned the writings of Bartolomé de Las Casas that decried Iberian treatment of Amerindians, and the Spanish Inquisition included them on its list of forbidden books.

A significant turning point in the conversion of the indigenous peoples of Mexico came in 1531, when a native convert named Juan Diego claimed to have seen the Virgin Mary. As Diego explained it, Mary had commanded him to build a church in her honor, and when he needed proof of this command, the Virgin ordered him to gather roses

within his cloak and take them to the bishop. Although it was not the season for the flower, Diego claimed to have found them and when he unfolded his cloak in the presence of the bishop, all claimed to see a miraculously formed image of the Virgin Mary left on the cloak. The Virgin of Guadalupe (named for the region near Mexico City where she reportedly appeared) became the patroness of Mexico, and Juan Diego's cloak with the Virgin's image remains in her shrine, where pilgrims gather to see it. **Figure 12.10** shows an eighteenth-century reproduction of the image on the cloak painted on wood. For many Mexicans, she lent credence to their belief that Christianity did not belong only to Europeans. Her shrine remains a major pilgrimage site today, and reproductions of the image have been widely circulated. Juan Diego, too, remained a venerated figure, and in 2002, he was declared a saint.

Some missionaries to the Americas proved acutely sensitive to the needs of the new converts and accommodated Christian practice to local religious ways. Las Casas was one such missionary; another was Marie de l'Incarnation *Missionaries* (1599–ca. 1669), a French nun who founded a convent in Quebec to teach native Canadian girls. Marie not only cared for the young women who came to her convent but also learned the Algonquian language and translated some religious writings into that language to make them accessible to the Algonquian-speaking peoples.

Missionaries generally paid more attention to the spiritual salvation of New World natives than to that of the African slaves brought to the Americas. A striking exception to this rule was the Portuguese missionary Pedro Claver (1580–1654), who has now been declared a Catholic saint. Claver settled in Colombia in 1610 and was horrified by the plight of the slaves who worked the plantations. From then on, whenever he signed his name, he added the vow "forever a servant to Africans." He lived up to that vow, converting many Africans to Christianity while caring for their physical needs. He even built and worked in a leper colony, caring for sick, neglected Africans.

Elsewhere across the world, European missionary work took on decidedly different forms than it did in the Americas. In Asia, the missionaries succeeded in their aims only after they acknowledged the validity and strengths of the local cultures. For example, some Jesuit priests in Japan adopted the status of Zen Buddhist priests and strictly observed Japanese etiquette. The Japanese were quite receptive to the missionaries, and by 1580, Jesuits claimed over 100,000 conversions in Japan. The goodwill ended in about 1600, when trade disputes unleashed a Japanese persecution of Christians that was so brutal it virtually stamped out Christianity on the island. The Jesuit Roberto de Nobili in 1605 carried this policy

Virgin of Guadalupe



FIGURE 12.10 Virgin of Guadalupe

In 1531, the Virgin Mary was said to have appeared to Juan Diego, a native convert in Mexico. This miracle was instrumental in bringing Christianity to the New World. This illustration of the Virgin of Guadalupe is by Pedro Antonio Fresquis, ca. 1790.

of religious accommodation to its logical extreme in India by dressing in the robes of an Indian holy man, studying Sanskrit, and refusing all contact with fellow Europeans.

The Chinese proved more suspicious of the West-erners, at first denying them entry to their country. Nevertheless, a Jesuit—Matteo Ricci (1552–1610)—approached them with Western gifts (such as a mechanical clock) and gained admission to the court of the Ming emperor Wan-li (r. 1573–1620). While practicing his faith at the Chinese court, Ricci adopted much that was Chinese. He dressed as a Con-fucian scholar, for example, and preached the Chris-tian message in terms consistent with Chinese ethics. By 1605, 17 missionaries were working in China. Not all the missionaries working in China were as toler-ant as Ricci, and many condemned Confucianism as paganism.

As Christianity spread around the world, Christian practice changed as it accommodated the needs of new converts. Mexican Christians, for example, venerated the dark-skinned image of the Virgin of Guadalupe with a vigor unappreciated in Europe. Brazilian and Haitian converts wor-shipped in the Christian tradition, all the while acknowledging spiritual customs brought from Africa. Chinese Christians continued their practice of venerating ancestors, much to the chagrin of some European priests. In all these cases, the Catholic Church was itself transformed even as it transformed those around it. In time, Protestant worship, too, would be affected—the use of African rhythms in gospel music in modern North American churches offers one vivid example.

Christianity transformed

THE WORLD MARKET AND COMMERCIAL REVOLUTION

Europeans had long traded over extensive distances, after all, it was the spices and silks of the Far East that had first lured them across the Atlantic. During the twelfth and thirteenth centuries, Europeans had enjoyed a growing commerce (see Chapter 8), creat-ing northern and southern trade routes that brought goods through the Middle East from the farthest reaches of Asia. These centuries introduced a com-mercial revolution that greatly expanded the oppor-tunities for many in the growing towns of the Middle Ages. However, the disasters of the fourteenth century (see Chapter 9) put the brakes on this growth, and this commercial contraction lasted almost until the middle of the sixteenth century. Now, the navigation of the seas and the exploration of new lands reopened and reshaped this pattern of production and commerce. By the end of the sixteenth century, Europeans were trad-ing in a world market, on a scale larger than they had ever before experienced.

High Prices and Profits: Trading on the World Stage

In Figure 12.11, the Dutch artist Jan Vermeer (1632–1676) captures some of the themes of this new commercial age. Vermeer painted many everyday scenes praising the tranquillity and order of the pros-perous Netherlands. However, these serene images also testify to the bustling world market that made middle-class townspeople so wealthy. Indeed, the lifestyle hinted at in this painting would have been unimaginable in the Middle Ages. Vermeer depicts a young woman gently grasping a water pitcher. The pitcher is made of silver, possibly from the Potosí mine in Bolivia (see Figure 12.8). The jewel box to the

right of the pitcher lies open, revealing pearls, probably from the Orient. Both objects are set on a tablecloth of tapestry from India. The woman's clothing is made of Oriental silk—an unusual luxury for everyday dress. Even the woman's movement to open a window suggests wealth, for expensive, leaded glass windows originally had been used only in churches. Vermeer completes this picture of prosperity with a leather map of the world hanging on the wall—a fitting symbol of the new global commerce.

What exactly stepped up the global demand for luxury goods? In part, the demand was fueled by population growth in the sixteenth and seventeenth centuries. During the sixteenth century, the number of Europeans expanded from about 80 million to 105 million as Europe recovered from the devastation of the Black Death. These increases continued. As the population steadily rose, goods became scarce. Demand intensified and drove prices up. In the sixteenth century, cereal prices escalated about fivefold, and the price of manufactured goods tripled. Contemporary witnesses repeatedly expressed shock at the inflation. As one sixteenth-century Spaniard lamented, "Today a pound of mutton costs as much as a whole sheep used to." People complained, but no one had concrete solutions to the problem.

At mid-century, some Europeans began blaming the influx of precious metals from the New World for their inflation woes. Their frustration was understandable. The Potosí mine alone yielded millions of Spanish coins a year, which poured unchecked into the European economy, moving rapidly from one country to the next. As just one example of the interconnected economy, the massive Spanish ships that transported silver across the Atlantic depended on French canvas for their sails. Silver coins from the New World paid for those sails. As one French author wrote, "They may have the ships, but we have their wings." Economists can trace Spanish silver from Europe to as far as China, where European merchants snapped up the silks and spices that initially inspired the explorations. Yet the flood of coins into Europe was only part of the picture. In truth, the price revolution stemmed from a combination of the new money, a surge in population growth, and unprecedented appetites for new goods.

The Rise of Commercial Capitalism

Inflation always hurts those with fixed incomes, but high prices also provide incentives for enterprising people to make a profit. The energetic sixteenth-century pursuit of trade stimulated new forms of



FIGURE 12.11 Jan Vermeer, *Young Woman with a Water Pitcher*, ca. 1664

The global trade brought wealth to new merchant classes. They could then afford beautiful art that celebrated their new acquisitions, such as glass windows, silver pitchers, woven tapestries, and even a world map for the wall.

production and economic concepts that together have been called the commercial revolution, but might more accurately be termed a commercial acceleration, during which trading practices developed in the Middle Ages spread and flourished. During this vital era, a set of business practices (and perceptions) arose that we know as capitalism. The word *capitalism* was actually not used until the nineteenth century. By the mid-seventeenth century, however, some individuals were called **capitalists**, a word indicating how they handled money. Capitalists were people who chose to invest their funds in business activities in order to make more money (capital). For these **entrepreneurs**, the most lucrative business opportunity was the growing world trade. Document 12.2 presents a seventeenth-century testimonial on the benefits of this long-distance trade.

Dutch entrepreneurs led the way in implementing capitalist ideas as they engaged in worldwide trade. For example, merchants in Amsterdam built huge

DOCUMENT 12.2

Thomas Mun Praises Trade

Thomas Mun (1571–1641) was a director in the East India Company, and in 1630 he wrote "Discourse on England's Treasure by Foreign Trade," which was published in 1664. In this excerpt, Mun shows that he shared the mercantilist view that trade could enrich the kingdom.

Although a Kingdom may be enriched by gifts received, or by purchase taken from some other Nations, yet these are things uncertain and of small consideration when they happen. The ordinary means therefore to increase our wealth and treasure is by Foreign Trade, wherein we must ever observe this rule: to sell more to strangers yearly than we consume of theirs in value. For suppose that when this Kingdom is plentifully served

with the Cloth, Lead, Tin, Iron, Fish and other native commodities, we do yearly export the overplus to foreign countries to the value of twenty-two hundred thousand pounds; by which means we are enabled beyond the Seas to buy and bring in foreign wares for our use and Consumptions, to the value of twenty hundred thousand pounds: By this order duly kept in our trading, we may rest assured that the kingdom shall be enriched yearly two hundred thousand pounds, which must be brought to us in so much Treasure; because that part of our stock which is not returned to us in wares must necessarily be brought home in treasure. . . .

Let Princes oppress, Lawyers extort, Usurers bite, Prodigals wast, and lastly

let Merchants carry out what money they shall have occasion to use in trafique. Yet all these actions can work no other effects in the course of trade than is declared in this discourse. For so much Treasure only will be brought in or carried out of a Commonwealth, as the foreign Trade doth over or under balance in value. And this must come to pass by a Necessity beyond all resistance. . . .

Behold then the true form and worth of foreign trade, which is *The great Revenue of the King*. . . .

FROM: Thomas Mun, from *England's Treasure By Forraign Trade*, 1664, in *Modern History Sourcebook*, www.fordham.edu/halsall/mod/1664mun-engtrade.html.

Analyze the Source

1. What does he consider a favorable balance of trade? How are these views consistent with mercantilist thought, and how do they differ from your understanding of modern economic life?

warehouses to store goods so that they could control supplies and keep prices high. Through new strategies like this and through individual initiative (rather than through government policy), the Netherlands became the leading commercial center in Europe in the sixteenth century.

Capitalist ideas

Indeed, it was this very success that generated the wealth depicted in the households painted by Vermeer.

Capitalist initiative gave rise to fluctuations in demand for goods. We can follow an early example of this economic cycle in the tulip industry. Tulips originally were imported into the Netherlands from Turkey, in the sixteenth century. A Dutch botanist discovered how to grow the many varied colors of this versatile flower. By 1634, buyers not only in the Netherlands but also all over Europe were so enthralled by the exotic and beautiful plants that one rare tulip bulb sold for 1,000 pounds of cheese, four oxen, eight pigs, twelve sheep, a bed, and a suit of clothes. Investors rushed to take advantage of the lucrative tulip market and the supply of the bulbs ballooned. Three years later, however, the increased supply drove down the price, ruining many who had gambled on the rare flower. Novice capitalists learned the hard way about the cruel whims of the market economy.

People with moderate means also yearned to participate in promising financial ventures. To accommodate them, businesses built upon medieval concepts of trading partnerships and developed an innovative entity called the **joint-stock company**. This new economic structure allowed ordinary investors to buy shares in commercial ventures that were run by boards of directors. With successes in such investments, modest capitalists might generate enough money to set out on their own and gamble on higher-risk opportunities. These joint-stock companies made it easier to raise enough capital for trading ventures around the world. Amsterdam was the site of the first stock exchange, and enterprising people in the colony of New York began trading shares at a tree at the end of Wall Street.

Joint-stock companies

In the seventeenth century, English and Dutch merchants formed exceptionally efficient joint-stock companies that helped them dominate trade in Asia: the English East India Company, founded in 1600, and the Dutch United East India Company, known by its initials VOC (Vereenigde Oost-Indische Compagnie), founded in 1602. Although both companies enjoyed government support, they were privately owned by merchant investors. Their charters granted them remarkable powers—they could buy, sell, and even

wage war in the companies' interests. These companies immediately generated huge profits, and both contributed to the early formation of a global network of trade.

Mercantilism: Controlling the Balance of Trade

With so much money at stake, western European governments attempted centralized regulation of their economies—**mercantilism**—to profit from the expanded global trade. Mercantilism was based on the assumption that the amount of worldwide wealth was fixed, so countries competed to get a larger piece of the pie. This was essentially economic nationalism, in which governments controlled their economies to increase their acquisition of hard currency. The simple principle “buy low, sell high” led these governments to discourage imports, particularly expensive ones, and encourage exports. In 1586, one Spanish bureaucrat asked King Philip II to forbid the import of handles, glass trinkets, jewelry, cutlery, and other such items, because these sorts of “useless” luxuries drained away precious Spanish gold. Such policies aimed to create a favorable balance of trade and fill bank vaults with gold.

Mercantilist governments passed laws to ensure a favorable trade balance. They imposed tariffs on imports and discouraged manufacturing in their colonies to force them to buy exports from the home country. Thus, hard currency would flow from the colonies to enrich royal treasuries in Europe. In fact, mercantilist policy encouraged the founding of new colonies to create new markets to purchase European exports. When other things failed, governments debased their coins to try to maintain a favorable balance.

Some governments even tried to keep wages low so that citizens would have little discretionary income with which to buy expensive imports. All these efforts were meant to enrich the states, not the fortunes of wealthy citizens. Mercantilist policies placed the state before the individual. They achieved their goal, vastly enriching the powerful monarchies of western Europe. Sadly, they also financed the destructive wars that swept over Europe through the mid-seventeenth century (discussed in Chapter 11). Mercantilist economic policy would continue to shape government policy into the eighteenth century (as we will see in Chapter 15).

The Growth of Banking

Neither private capitalism nor mercantilism could have succeeded without innovations in banking

practices. Medieval ideas that forbade charging interest and that kept royal treasuries locked in chests in royal bedrooms had become obsolete. In this new age, people needed easier access to a lot of money, and they refined banking techniques that had been developed in the late Middle Ages in the Italian cities of the Renaissance. Medieval bankers had developed bills of exchange and complex account books to facilitate commerce, but in the late fifteenth century, bankers added checks, bank drafts, and sophisticated double-entry bookkeeping to their skills, all of which made commercial ventures easier than ever.

Through the sixteenth century, private bankers handled most financial transactions. The Fuggers of Germany were the most successful at this profession, taking over a role that the Medicis in Florence had dominated in the fifteenth century. The Fugger family became so wealthy that they even lent money to Emperor Charles V. With the emergence of mercantilist ideas about economics serving the state, this kind of practice waned. Instead, government banks developed that controlled profits going to individuals. The Bank of Amsterdam was founded in 1609, followed by the Bank of Sweden in 1657, and the Bank of England in 1694. However, new banking policies could not ensure that even mercantilist governments would grow rich.

State banks

The Danger of Overspending: Spain Learns a Lesson

At first, Europeans believed that the wealth flowing into Europe from the New World was the primary payoff from their explorations. Entire countries became rich, and imperial powers grew in previously unheard-of ways. Spain immediately capitalized on the new wealth, its treasure ships offering unlimited prosperity and power to the monarchs. Yet, the vast influx of silver was deceiving, and the Spanish king spent it wastefully on the incessant wars that dominated the sixteenth and early seventeenth centuries.

Consequently, the Spanish crown had to declare bankruptcy several times in the course of the sixteenth and seventeenth centuries. Spain's financial troubles hurt merchants in Germany and Italy, but the real burden fell on the Spanish taxpayers, who were soon saddled with debt. Instead of relieving their debt burdens, the politics of empire only added to them. Domination of the New World passed to the governments of other countries (notably Holland and England) that proved more efficient in fiscal matters.

Ultimately, much of the gold and silver that motivated the expansionist countries did not even

end up in Europe. A large percentage of this currency eventually flowed to the East for the purchase of luxury items. As Spain discovered, these precious metals were not enough to keep profligate governments in power.

Redefining Work Roles

The commercial revolution both enlarged the scale of business and redefined the way people viewed their work. While most people still worked

Women's work

the land, in the cities, which served as the nerve centers of the new economies, people experienced the most remarkable shifts in how they made their living. As the middle class rose to economic power on the dual waves of trade and hard work, the lives of urban women in particular diverged dramatically from earlier times. In the early Middle Ages, women had labored in the stores and workshops of Europe's cities. They dominated trades that they had controlled in the home—textile making and brewing, for example. Women had such a presence in these fields that feminine forms of certain words (ending in *ster*) derived from these jobs—for instance, *webster* (from *weaver*) and *brewster* (from *brewer*)—arose and even became common surnames. Women also owned taverns in such numbers that an instruction manual written for merchants in 1515 assumed that the innkeeper would be a woman and gave instructions on “how to ask the *hostess* how much one has spent.”

Still, women's access to the workforce came primarily through their families. Daughters, like most sons, mastered trades in the family workshops, just as Maria Merian (in the Biography on page 405) learned printing from her stepfather. Wives worked with their husbands, and widows frequently ran businesses and took their husbands' place in the guilds. During the late Middle Ages, men slowly began to replace women in some of the most lucrative jobs, like cloth making, and just as in banking and commercial enterprises, this late-medieval trend accelerated in the early modern period.

Into the sixteenth century, as work generated more capital and power, it began losing its association with the family and became more linked to the public political arena. Many people (women and

Leaving the workforce

men alike) believed that public work and control of money were more appropriately managed by men than women. Late in the sixteenth century, cities accordingly began to issue ordinances restricting women's entry into guilds, which had taken on markedly political overtones. For example, a ruling in France in 1583 limited silk-making apprentices (who had previously been predominantly female) to only two males per

master. In another example, a 1508 ordinance in the Netherlands referred to a “brotherhood and sisterhood” of a guild, but the reissued ordinance in 1552 mentioned only a “brotherhood of trimmers.” By 1563, when the ordinances were again revised, even widows' rights had been omitted.

Similar examples emerged at local levels throughout Europe. As the commercial revolution spread and urban merchants grew powerful, the old divisions of those who worked and those who did not began to blur. Instead, the growing middle class began to divide the world between those who worked outside the home in the public, political arena and those who worked inside the home. Urban women, relegated increasingly to the domestic sphere, lost much of their visibility in the public arena.

Piracy: Banditry on a World Scale, 1550–1700

The expansion of trade into the Atlantic and Pacific brought with it another nettlesome problem: a rise in piracy. Piracy was as old as Mediterranean shipping, when seagoing robbers had preyed mercilessly on the ponderous merchant roundships that moved goods through the inland sea. As the pace of the world economy quickened, pirates moved to take advantage. From about 1550 to about 1700, a “pirate belt” developed that stretched from the West Indies to East Asia. The new entrepreneurial raiding coincided with the weakening of the great Turkish, Spanish, and Chinese empires that we saw in Chapter 11, because these navies could no longer effectively patrol their territorial waters.

Piracy as a way of life actually had a somewhat benign origin—monarchs had often issued licenses for people to steal from other countries in unofficial warfare. Before the seventeenth century, the word *pirate* rarely appeared. Instead, seagoing raiders were called *privateers* or *corsairs*, terms meaning that they had the authorization of formal commissions from their rulers. Even as late as the eighteenth century, the United States Constitution gave Congress the right to issue letters of marque and reprisal, essentially to hire pirate ships. Privateers earned their profits from captured booty, and in the freewheeling raids that took place on the open seas, it was impossible to distinguish them from pirates acting on their own. The ships that were robbed probably did not draw any distinction between the two.

Early privateers

The difficulties of discerning pirate from privateer may be seen in the case of the famous early English privateers, particularly Francis Drake (ca. 1540–1596). By 1571, Drake had become a major force in the Caribbean, and this champion of the British was considered

BIOGRAPHY

Maria Sibylla Merian (1647–1717)

Maria Sibylla Merian was born in Frankfurt, Germany, the daughter of a well-known engraver and publisher and his second wife, Johanna. Maria's father also had a keen interest in the explorations of the age. He published editions of *Grands et Petits Voyages*, which contained accounts of journeys to the New World (including the illustration shown in **Figure 12.6**). Although he died in 1650 when Maria

was only 3 years old, she grew up to excel in the same fields that had so captivated her father. Maria's mother married a painter and art dealer, and the young girl cultivated her artistic interests and skills in her stepfather's workshop.

In her later years, Maria remembered acquiring an additional passion: "I have been concerned with the study of insects. This led me to collect all the caterpillars I could find in order to study their metamorphoses . . . and to work at my painter's art so that I could sketch them from life and represent them in lifelike colors."

Maria married Johann Andreas Graff, an artist and publisher, in 1665, and the couple had two daughters. Ten years later, she published her first book of copperplate engravings. This work consisted solely of illustrations of flowers and some insects.

A few years later, she published *Wonderful Transformation and Singular Flower-Food of Caterpillars*. This work contained her detailed observations and commentaries on the habits of caterpillars and was hailed as "amazing."

Yet Merian's scientific work was soon interrupted by dramatic changes in her personal life. In 1685, she was consumed with a fervor for religious renewal. With her elderly

mother and two daughters, she joined a radical Protestant sect, the Labadists, in the Netherlands.

Her husband divorced her and she moved with her daughters to Amsterdam, the thriving port city that bustled with exotic goods and hummed with exciting tales of travel. Recognized for her previous work, Merian was welcomed into the circle of naturalists in Amsterdam.

Despite the attractions of her new life, Merian continued to find fascination in insects. In 1699, she and her daughter Dorothea sailed from Amsterdam to Surinam, the Dutch colony on the northern shore of South America.

The devoted naturalist lived in Surinam for two years. With the help of Amerindians and African slaves, she collected thousands of specimens and made hundreds of drawings of plant and insect species unknown in Europe. In 1701, she returned to Amsterdam, and several years later she published *Metamorphosis of the Insects of Surinam* in both Dutch and Latin. Her drawings were praised as "the most beautiful work ever painted in America" (see **Figure 12.15**).

*Naturalist,
Artist, and
Traveler*



FIGURE 12.12 Maria Sibylla Merian
frontispiece to Merian, *Der Rupsen*, 1717.

Connecting People & Society

1. What evidence does this life offer about a growing scientific curiosity about the West?
2. What does this account tell us about the position of and opportunities for women?

a ruthless pirate by the Spanish. Drake had numerous bases on land and gained the admiration and support of unconquered Amerindians and Spanish-hating escaped slaves. With the backing and affection of Queen Elizabeth I (r. 1558–1603), Drake and his fellow privateers relentlessly harassed the Spanish ships they found sailing in the Caribbean.

The fortunes of Drake's compatriot Walter Raleigh (ca. 1554–1618) showed how fragile royal support of these independent captains could be. Elizabeth backed Raleigh in his flamboyant enterprises, even knight-ing her champion. However, her successor, James I

(r. 1603–1625), found the privateer less useful. As James began to have political difficulties with English Protestants, he sought an alliance with Spain (as we will see in Chapter 13). As a token of goodwill to Spain, James imprisoned Raleigh in the Tower of London and executed him in 1618.

Pirates included many Africans who had been captured as slaves, because after seizing wealthy slave-trading ships, pirates frequently gave the slaves the choice to continue on their way or join the pirate band. The eighteenth-century trial records of a pirate on the ship

Pirate life

Whydah indicate that about 30 to 50 of the men on his ship were African and 1 was an Amerindian. The freedom of the pirate life drew many who had few choices elsewhere.

With all its hazards—from fickle royal supporters to war on the high seas—the pirate life could bring amazing riches even for those without a royal patron. Pirate cities sprang up based solely on the illicit trade. For example, Algiers in North Africa became a prosperous Muslim pirate city, and Malta in the Mediterranean was its Christian counterpart. Other pirate cities dotted the Caribbean from the coast of the Yucatán to the islands of the West Indies. These cities served as havens for the violent, reckless sea raiders and their families. They also were places where talented outsiders could rise to positions of considerable power. For example, a poor North African shepherd boy rose through the pirate ranks to become “king” of Algiers in 1569. During the eighteenth century, several women even took command of pirate ships.

By the mid-eighteenth century, however, governments had begun expanding their navies and set out to suppress the buccaneers. The British admiralty discouraged privateering because it lured sailors away from serving in the navy. The age of informal

warfare came to a close and accounts of the bandits' careers retreated to literary works that romanticized their lives. For example, literary pirates made their victims walk the plank; real pirates would not have wasted time on such rituals. If they wanted to kill their captives, they unceremoniously threw them overboard.

THE WORLD TRANSFORMED

The booming world market that stimulated the movement of goods and the enterprise of pirates also served to spread other aspects of European culture around the world. During the sixteenth century, more than 200,000 Spanish people, 10 percent of them women, migrated to Latin America. In the next century, comparable numbers of English, French, and Dutch settled in North America. These immigrants became a new ruling class that transfused much of European culture into the New World. They built cities featuring the grid pattern that marked Renaissance urban planning and placed their churches in the city centers.

European Culture Spreads

The new immigrants brought their languages and religions, but also unique livestock, tools, plants, and other goods that transformed the lives of native peoples. When European horses escaped (or were stolen), for example, some indigenous peoples took them into their midst. The Plains Indians in the southwest of North America soon made horses central to their way of life. In time, guns, liquor, and many other goods also found their way into the many native cultures.

Plants from Europe, some of them intentionally cultivated, made their mark on the New World as well. For example, Europeans brought wheat to make the bread that had long served as their dietary staple. Along with their domesticated plants, they transported their traditional farming methods.

Figure 12.13 shows Amerindians cultivating wheat on a Spanish plantation. The laborers use the same kinds of tools, including the overburdened donkey in the lower-left corner, that their European peasant counterparts had employed.

Europeans unwittingly altered the ecology of the New World in many other ways. As we have seen, they brought diseases that ravaged native populations. Less destructive but equally ubiquitous, plants transported to the New World spread with vigor. A sixteenth-century Inca observer (Garcilaso de la Vega) described how quickly the ecology of Peru had been transformed by invasive plants: “Some of them are

EXPLORING THE WORLD

- 1492** Columbus sails to North America
- 1494** Treaty of Tordesillas
- 1497** John Cabot lands in North America
- 1498** Vasco da Gama rounds Africa
- 1499** Amerigo Vespucci maps New World
- 1514** Portuguese reach China
- 1519–1521** Magellan's crew circumnavigates globe
- 1522** Cortés conquers Aztec Empire
- 1531** Virgin of Guadalupe appears
- 1532** African slave trade begins
- 1532** Pizarro conquers Inca Empire
- 1534** Jacques Cartier explores Canada
- 1577–1580** Francis Drake circumnavigates the world
- 1607** Jamestown colony founded
- 1620** English establish colony at Plymouth, Massachusetts



FIGURE 12.13 New Plants and Animals

The spread of Europeans reshaped the New World's ecology. This image shows one such change as Amerindians plant wheat, a European crop, with metal tools, aided by an imported donkey.

becoming mischievous, such as the mustard, mint, and camomile, which have spread . . . [and] the first endives and spinach multiplied in such a way that a horse could not force its way through them." Inadvertent transportation of weed seeds also displaced native species. Dandelions are a particularly apt example of a European weed that spread accidentally as people, plants, and animals moved across the sea.

Europeans traveling and trading in Africa and Asia took New World plants to other regions of the world, transforming local consumption habits and economies. Africa, for example, received sweet potatoes and maize in the sixteenth century. In the Congo, the Portuguese introduced maize, although at first the tribes dismissed the vegetable as more suitable for pigs than human beings. In time, these plants became so central to the local culture that people no longer remembered that they were once strange imports. Because the societies of east Asia kept most Europeans at arm's length, they were less influenced by European culture than were the peoples of North and South America, and it would take several more centuries for European trade to exert its full impact in that region.

Finally, the populations themselves mixed as immigrants settled among native societies. Because European men greatly

outnumbered women from their home continent, many of them married native and slave women or kept them as concubines. Generations of children born of mixed background, called *mestizos*, preserved aspects of both their parents' cultures. These generations ultimately made the Americas vastly different from Europe in spite of common languages, religions, and political structures.

Figure 12.14 reveals much about the cultural blending that marked the Americas.

European Culture Transformed

Europeans were as much transformed by contact with the New World as the original Americans were by their European conquerors. In one of the less savory examples of this exchange, the earliest explorers to the New World probably brought back a virulent form of syphilis. New archaeological excavations have revealed that some form of syphilis existed in Europe from classical times, but this new strain of the sexually transmitted disease ravaged Europe until the twentieth century, when the advent of penicillin offered a cure. The disease never took the kind of toll on Europeans that plagues such as smallpox and measles imposed on native populations. Nevertheless, its presence caused much misery and made some people more cautious about sexual activity.

New foods changed Europeans' diets and even the landscape. It is difficult to imagine Ireland without the hardy, nutritious potatoes that flourish today in that rocky land, but until the conquest of the Incas, the population of Ireland had to struggle to sustain itself. The tomato—a New World fruit that people first rejected as poisonous—was eventually embraced as an aphrodisiac and became an often-used ingredient in European cuisine. Maize spread more slowly, for Europeans, like the Africans, did not initially view it as a food fit for humans. However, as early as 1500, it began thriving in Spain, from where it soon spread to Italy (near Venice) and eventually to the rest of Europe. Maize had immediate use as animal feed and peasant fare and allowed farming families to sell their more expensive wheat.

In addition to new staples, certain food stimulants from the Americas proved enormously popular in Europe. Chocolate, for example, came to Spain from Aztec Mexico in about 1520 in the form of loaves and tablets that were boiled into a drink. A luxury at first, chocolate had become a common beverage by the eighteenth century. Tea, too, had been a rare treat in the Middle Ages, when some traders brought small amounts from China. Over

New foods

New stimulants

Population mixing



FIGURE 12.14

Festival Scene Painted on a Screen, Mexico, ca. 1650

Many artists have a talent for portraying life at a particular time and documenting its distinguishing aspects. This painting by an unknown artist captures the blending of cultures that took place in the villages of Mexico in the seventeenth century. Notice the mestizos spinning on a pole in a traditional Amerindian celebration, and the hazy, dreamlike Spanish castles in the background.

Analyze the Source

1. What other festival features can you identify, and how might such celebrations have served to join the community together?
2. What might the artist have intended by placing the castles of his homeland in this picture?
3. What conclusions can you draw about the blending of cultures in Mexico from this painting?

time, more and more Europeans developed an unquenchable thirst for tea, making the East India Company rich in the process.

Coffee appeared in Europe for the first time in the early seventeenth century and replaced tea and chocolate as the most popular stimulant drink. Coffee seems to have first come from Africa and then spread to the Muslim lands—it was in Mecca by 1511, and Istanbul in 1517. By 1615, coffee had reached Venice, and merchants spread the product rapidly through Europe from there. Physicians praised the drink as medicinal for many ailments, from heart disease to “short breath, colds which attack the lungs, and worms.” By the eighteenth century, coffee was so central to European society that even the social life of the West began to be centered at coffee shops.

But it was tobacco that made the biggest impression on European culture. Columbus saw Amerindians smoking it and brought the plant back home as an object of curiosity. Europeans cultivated tobacco at first for medicinal purposes—

Tobacco

one sixteenth-century Parisian claimed that it cured all ills—and the plant then spread rapidly all over the world. By the mid-seventeenth century, it had reached as far as China, where virtually the entire population took up the smoking habit. The difficulties of planting tobacco also stimulated settlement expansion. Because the crop rapidly depletes the soil, in an age without chemical fertilizers colonists seeking to profit from the lucrative crop constantly had to annex and cultivate new lands.

The New World’s reshaping of European culture unfolded slowly. New products became available gradually, whetting appetites for yet more novelties. The commercial revolution stimulated the movement of goods all over the world, creating more and more demand, which fueled further explorations and commerce. Ironically, the demand for spices, and particularly pepper, that had originally served as the main force behind the voyages of exploration waned by the eighteenth century. Europeans had found other,



FIGURE 12.15 "Spiders and Ants on a Guava Tree," *Metamorphosis*, plate 18, ca. 1705

Maria Sibylla Merian's careful study and drawings of New World plants and animals generated excitement and awakened scientific curiosity in Europe. She was one of many such observers.

more intriguing products to satisfy their restless desire for culinary novelties.

A New Worldview

When Europeans first set off across the seas, they had a false, though highly imaginative, view of what they would find. The world proved larger and far more diverse than they had ever imagined, and travelers began to study and write about the new reality.

Amerigo Vespucci, the Italian mapmaker and chronicler we met earlier, wrote with awe in 1499 about New World flora: "The trees were so beautiful and so

fragrant that we thought we were in a terrestrial paradise. Not one of those trees or its fruit was like those in our part of the globe." Such early descriptions were followed by systematic studies in the seventeenth century. For example, in 1648 a Dutch prince sponsored an expedition that published the *Natural History of Brazil*, followed by many other books by naturalists cataloging the wonders of the Americas.

Figure 12.15 shows an illustration from *Metamorphosis of the Insects of Surinam* by Maria Sibylla Merian (1647–1717) (see Biography). In this painstakingly rendered illustration, one can see both the detail that marked these kinds of studies and the artist's



FIGURE 12.16 Mercator Map, 1608

The explorers mapped the world and in doing so replaced Ptolemy's vision, shown in Figure 12.2. However, the popular Mercator map kept Europe in the center and skewed the perspective of the rest of the world.

fascination with the exotic. Merian drew a guava tree (one of the fruits that Vespucci had found so strange) populated with spiders and ants. In the drawing, most of the spiders are eating ants. One of them, however, is shown attacking a nest of hummingbird eggs. Here Merian was illustrating a story told to her by the Surinam locals. (In fact, spider attacks on birds' nests are extremely rare.) This illustration, with its blend of careful attention to detail and elements of fantasy, typifies the European fascination with the newly discovered world.

The new maps created as explorers traveled the global coastlines and great rivers were almost as precise as the naturalists' drawings. These representations offered a much more realistic picture of the world than Ptolemy's map that guided Columbus. The map in Figure 12.16 shows the globe flattened out. This

Mercator maps

projection method, which let sailors plot straight-line courses, was developed by the Flemish cartographer Gerhard Mercator (1512–1594), who first published it in 1569. Many modern European maps are still based on this technique.

The Mercator projection was a huge step forward in mapmaking, but it still allowed for some measure of geographic illusion. By flattening out the map and placing Europe in the center, mapmakers could not help distorting their graphic representation of the world. Greenland, for example, appears much larger than it is, India becomes smaller, and Asia is divided, thus seeming to have less mass than it really does. Not surprisingly, the Mercator map encouraged the illusion that Europeans occupied the center of the world. This idea shaped Europeans' future mapmaking techniques and their attitudes and actions toward the rest of the globe.

LOOKING BACK & MOVING FORWARD

Summary By the early sixteenth century, Western culture was no longer contained within Europe. Lured by faith, fame, and fortune, Europeans sailed all over the world. They also settled in the newfound lands, conquering and colonizing the Americas and establishing trading posts in the East. Merchants and entrepreneurs followed the explorers and established a world market that stimulated the growth of commercial capitalism, new banking techniques, and widespread popular interest in economic opportunity. Some governments began to set economic policy and tried to control the flow of money to and from their countries.

In this great movement of peoples and confrontation of cultures, Europeans generated enormous wealth—and equally unprecedented misery. Native populations were virtually eliminated by warfare, disease, and abuse, and hundreds of thousands of Africans were enslaved and taken by force from their homelands. The resultant blending of peoples, ideas, and goods profoundly affected the entire world and whetted European appetites for yet more exploration and conquest.

KEY TERMS

quadrant p.362

astrolabe p.362

conquistadors p.371

encomienda p.374

haciendas p.374

capitalists p.379

entrepreneurs p.379

joint-stock company p.380

mercantilism p.381

privateers p.382

Mercator

projection p.388

REVIEW, ANALYZE, & CONNECT TO TODAY

REVIEW THE PREVIOUS CHAPTERS

Chapter 10—“A New Spirit in the West”—analyzed the revolution in thought that we have come to call the Renaissance, and in Chapter 11—“Alone Before God”—we saw how the new ideas were put into practice in religion. Chapter 11 also told the story of the struggles of European states as they competed with one another to claim superiority.

1. Review the characteristics of Renaissance thought and consider how they contributed to the sixteenth-century interest in discovering previously unknown areas of the world.
2. Review the Chapter 11 discussion of sixteenth-century European warfare and religious reforms. How did these wars and reforms affect the global exploration that was occurring at the same time?

ANALYZE THIS CHAPTER

Chapter 12—“Faith, Fortune, and Fame”—describes and analyzes the European explorations and conquests that spread Western culture around the world and, in turn, transformed Europe.

1. Review the areas of Spanish and Portuguese exploration, and consider where these early efforts forced England, France, and the Netherlands to focus their attention. Which areas turned out to be most profitable in the long run? Why?
2. Consider the complex relationship between technology, commercial exchange, and the lure of exploration and conquest, and review how this relationship was expressed in this chapter.
3. What advantages did the Spanish have in their conquests in the New World? How did the Spanish perceptions of the natives shape their treatment of them?

CONNECT TO TODAY

Think about the ways in which the medieval world was changed through sudden globalization—the movement and spread of peoples, ideas, religions, and goods.

1. Have the high levels of global trade and immigration in contemporary times led to a similarly escalated global transformation? Explain.
2. Which of the transformations described in this chapter has had the largest influence on today's world? Why?