Technological Innovations

The sailors, moreover, as they sail over the sea, when in cloudy weather they can no longer profit by the light of the sun, or when the world is wrapped up in the darkness of the shades of night, and they are ignorant to what point of the compass their ship's course is directed, they touch the magnet with a needle, which (the needle) is whirled round in a circle until, when its motion ceases, its point looks direct to the north.

-Alexander Neckham (1157-1217)

Essential Question: How did cross-cultural interactions spread

technology and facilitate changes in trade and

travel from 1450 to 1750?

Although land-based empires were important during this period, various inventions allowed Europeans to venture long distances on the ocean. The magnetic compass, originally created in China for fortune telling, helped steer a ship in the right direction, as described by Alexander Neckham. The astrolabe, improved by Muslim navigators in the 12th century, let sailors find out how far north or south they were from the equator. The caravel, a small, three-masted sailing ship developed by the Portuguese in the 15th century, allowed sailors to survive storms at sea better than earlier-designed ships. Cartography, or mapmaking, and knowledge of current and wind patterns also improved navigation.

Demographic pressures pushed Europeans into exploration and trade. As the population grew, not all workers in Europe could find work or even food. Not all sons of the wealthy could own land because **primogeniture laws** gave all of each estate to the eldest son. In the early 17th century, religious minorities searched for a place to settle where people were tolerant of their dissent. All of these groups, as well as those just longing for adventure and glory, were eager to settle in new areas. Those who left their homelands in search of work, food, land, tolerance, and adventure were part of a global shift in demographics.

Developments of Transoceanic Travel and Trade

Europe was never totally isolated from East and South Asia. The Indian Ocean trade routes had long brought silk, spices, and tea to the Mediterranean by way of the Red Sea. Islamic traders had long known of land routes from China to the cities of Baghdad and Constantinople and from there to Rome. Then, in the 16th century, more and more Europeans became active in the Indian Ocean, with hopes of finding wealth and new converts as their twin motives. However, Europeans faced competition from Middle Eastern traders based in kingdoms such as Oman. For example, the Portuguese set up forts in Oman but were repeatedly challenged by attempts to remove them. The Omani-European rivalry was one reason for Christopher Columbus's search for a new route to India.

The voyages by Columbus connected people across the Atlantic Ocean. European traders became go-betweens linking Afro-Eurasia and the Americas.

- From the Americas, they obtained sugar, tobacco, and rum.
- From Africa, they obtained enslaved people.
- From Asia, they obtained silk, spices, and rhubarb.

This extensive trade transformed Spain, Portugal, Great Britain, France, and Holland into **maritime empires**, ones based on sea travel.

Much of this trade was carried out by men. However, in Southeast Asia, Europeans conducted most of their business with women, who traditionally handled markets and money-changing services in those cultures.

Classical, Islamic, and Asian Technology

Western European countries such as Portugal, Spain, and England were developing their naval technology. They were aware of traditions of sailing that went back to the classical Greeks, such as using the stars to navigate. They combined this knowledge with new ideas developed by Islamic and Asian sailors and scholars, which they learned about because of the crosscultural interactions resulting from trade networks. Al-Andalus, in what is now Spain, was a place where Islamic ideas diffused into Europe.

The leading European figure in this development was Portuguese ruler Prince Henry the Navigator. While he never sailed far enough out to sea to lose sight of land, he strongly supported exploration. He financed expeditions along Africa's Atlantic Coast and around the Cape of Good Hope. With his backing, Portugal explored African coastal communities and kingdoms before other European powers.

Advances in Ideas As scholars gathered knowledge, they improved the safety of sailing on the ocean. For example, Newton's discovery of gravitation increased knowledge of the tides. As a result, sailors could reliably predict when the depth of water near a shore would be decreasing, thereby exposing dangerous rocks. As people kept increasingly accurate records on the direction and intensity of winds, sailors could sail with greater confidence.

Improvements in cartography also improved navigation. An astronomical **chart** is any map of the stars and galaxies. Mariners relied on these maps to guide ships' direction, especially before the introduction of the compass, using the skies to help them determine their location. Ancient astronomers in Babylonia and Mesopotamia had created star charts as early as the 2nd millennium B.C.E. Charts by Chinese astronomers date back to the 5th century B.C.E. Charts were also used widely by classical Greek astronomers. Using telescopes to help create astronomical charts began in 1609, and the practice was widely used to map the stars by the end of the 17th century. Astronomers typically divided the charts into grids to help locate specific constellations and astronomical objects.

Advances in Equipment Several developments in the equipment used on ships made sailing safer and faster than ever. Ships moved adroitly, aided by a new type of rudder, another idea imported from China. The astrolabe, improved by Muslim navigators in the 12th century, allowed sailors to determine how far north or south they were from the equator.

The compass is the primary direction-finding device used in navigation. It works either with magnets or a gyroscope, which is a wheel or disk mounted to spin rapidly around an axis in various directions. Other compasses determine the location of the sun or a specific star. The magnetic compass, originally invented in China, allowed sailors to steer a ship in the right direction. It is the oldest and most familiar. It was discovered by mariners in both China and Europe in the 12th century. This type of compass works as Earth itself acts as an enormous bar magnet. Earth's magnetic field is almost parallel to the northsouth axis of the globe, which means that freely moving magnets, such as those in a compass, take on the same orientation.

The lateen sail, or a ship sail in the shape of a triangle, was a pivotal piece of technology. Used by Arab sailors and in the Indian Ocean, it significantly affected medieval navigation and trade. The ancient square sails that preceded the lateen allowed sailing only in a single direction and had to be used with the wind. The lateen, however, could catch the wind on either side of the ship, allowing it to travel in different directions. When used with the square sail, the lateen allowed sailors to travel successfully into large bodies of water, including oceans, for the first time, thus expanding trade routes.



Source: Getty Images Lateen sails are still used on modern sailboats.

New types of ships also improved trade. By adjusting the ratio of length to width of a ship, adding or reducing the number of masts, and using different types of sails, builders could adapt ships to improve their efficiency. (Connect: Compare the technological advances of the Mongols and Chinese of the 12th and 13th centuries with those in the chart below. See Topic 2.1.)

Three Typ	Types of Ships				
Ship	Typical Length	Sails and Masts	Purpose	Primary Users	Centuries of Peak Use
Carrack	150 feet	Square and lateen on 3-4 masts	Trade	Portugal	14th to 17th
Caravel	75 feet	Lateen sails on 2 or 3 masts	Long voyages at great speed	Portuguese and Spanish	15th to 17th
Fluyt	80 feet	Square on 2 or 3 masts	Trade	Dutch	16th to 17th

Long-Term Results The long-term result of combining navigational techniques invented in Europe with those from other areas of the world was a rapid expansion of exploration and global trade. About the only part of the Afro-Eurasia world not affected by the rapid increase in global trade was Polynesia, since it was far removed from trading routes.

The introduction of gunpowder, another Chinese invention, aided Europeans in their conquests abroad. Soon enough, however, sea pirates also used the new technology, particularly the Dutch pirates known as Sea Beggars.

In North Africa and in the trading cities along Africa's east coast, Islam spread rapidly as a result of the growth of the Abbasid Empire, centered in Baghdad, and the activities of Muslim merchants. Interactions among various cultures inside and outside of Africa brought extensive trade and new technology to the continent.

Navigational techniques continued to spread throughout the 17th century. Russia's Tsar Peter the Great visited Western Europe in 1697 to observe military and naval technology. His interest in European technology led him to hire technicians from Germany and elsewhere to help build Russia's military and naval power.

KEY TERMS BY THEME		
ECONOMICS: Europe primogeniture laws Omani-European rivalry	TECHNOLOGY: Navigation cartography astronomical chart	GOVERNMENT: Europe maritime empires

Exploration: Causes and Events

You can never cross the ocean unless you have the courage to lose sight of the shore.

-Christopher Columbus (1451-1506)

Essential Question: What were the causes and effects of the statesponsored expansion of maritime exploration?

hanks in part to improved navigation techniques, Italian cities with ports on the Mediterranean had a monopoly on European trade with Asia. By controlling access to the trade routes, the Italians controlled prices of Asian imports to Europe, driving Spain and Portugal, and later France, England, and the Netherlands, into the search for new routes to Asia. Explorers hoped to find riches overseas, especially gold and silver. In addition to these economic and political reasons, explorers were interested in converting others to Christianity. Also, technological breakthroughs in sailing and navigation made bold new voyages possible.

Christopher Columbus, quoted above and credited with "discovering the New World," was fortunate in 1492 to gain the support of the Spanish monarchs, Queen Isabella and King Ferdinand, for his voyages across the Atlantic. His journeys helped increase the interest in discovery, and the English, French, and Dutch supported later exploration.

The Role of States in Maritime Exploration

European states were seeking ways to expand their authority and control of resources in the era of empire-building. Conquests brought new wealth to states through the collection of taxes and through new trading opportunities. In time it also brought great material wealth, especially in silver, to European states. Rivalries among European states stoked efforts to expand before another power might claim a territory. Religion was also a motivating force for exploration and expansion. Many Europeans believed that it was their Christian duty to seek out people in other lands to convert them.

For all these reasons, states were centrally involved in maritime exploration. Voyages such as those Columbus undertook were expensive, and without the financial support of a state, they would most likely have been too expensive

for explorers and even most merchants to be able to afford. Since religion was tightly woven into the government of most European states, preserving and spreading a state's religion became another reason for state involvement.

Also, in the 17th century, Europeans generally measured the wealth of a country in how much gold and silver it had accumulated. For this reason, countries set policies designed to sell as many goods as they could to other countries—in order to maximize the amount of gold and silver coming into the country—and to buy as few as possible from other countries—to minimize the flow of precious metals out of the country. This theory, known as **mercantilism**, required heavy government involvement.

Expansion of European Maritime Exploration

In no nation were the interests of the state and the interest of explorers as closely tied as they were in Portugal, which led the way in European exploration as it had in maritime innovations. (See Topic 2.3.)

Portuguese in Africa and India The small kingdom of Portugal, bounded on the east by the Spanish kingdoms of Castile and Aragon, could expand only overseas. Three people led its exploration:

- Prince Henry the Navigator (1394–1460) became the first European monarch to sponsor seafaring expeditions, to search for an all-water route to the east as well as for African gold. Under him, Portugal began importing enslaved Africans by sea, replacing the overland slave trade.
- Bartholomew Diaz sailed around the southern tip of Africa, the Cape of Good Hope, in 1488, into waters his crew did not know. Diaz feared a mutiny if he continued pushing eastward, so he returned home.
- Vasco Da Gama sailed farther east than Diaz, landing in India in 1498. There he claimed territory as part of Portugal's empire. The Portuguese ports in India were a key step in expanding Portugal's trade in the Indian Ocean and with points farther east.

Portuguese in Southeast and East Asia Early in the 16th century, the ruthless Portuguese admiral Afonso de Albuquerque won a short but bloody battle with Arab traders and set up a factory at Malacca in present-day Indonesia. He had previously served as governor of Portuguese India (1509– 1515), sending strings of Indians' ears home to Portugal as evidence of his conquests.

China's exploration of the outside world came to an end after Zheng He's final voyage in the 1430s. (See Topic 2.3.) However, less than a century later, in 1514, the outside world arrived on China's doorstep in the form of Portuguese traders. At that time, Portugal's superior ships and weapons were unmatched among the Europeans. As a result of this advantage, the Portuguese had already won control of both the African and Indian coasts. They had won a decisive victory over a Turkish-Egyptian-Venetian fleet at Diu, India, in 1509.

Initial Portuguese visits had little impact on Chinese society. But the traders were followed by Roman Catholic missionaries, mainly Franciscans and Dominicans, who worked to gain converts among the Chinese people.

The Jesuits soon followed and tried to win over the Chinese court elite. Scientific and technical knowledge were the keys to success at the court. Jesuit missionaries in Macau, such as Matteo Ricci (an Italian, arrived 1582) and Adam Schall von Bell (a German, arrived 1619), impressed the Chinese with their learning. However, they failed to win many converts among the hostile scholar-gentry, who considered them barbaric.

Trading Post Empire To ensure control of trade, the Portuguese had constructed a series of forts stretching from Hormuz on the Persian Gulf (built in 1507) to Goa in western India (built in 1510) to Malacca on the Malay Peninsula (built in 1511). The aims of the fort construction were to establish a monopoly (complete control over a market) over the spice trade in the area and to license all vessels trading between Malacca and Hormuz. The forts gave Portugal a global trading post empire, one based on small outposts, rather than control of large territories. The Portuguese also restricted Indian Ocean trade to those who were willing to buy permits.

Portuguese Vulnerability The Portuguese succeeded in global trade for several decades, but Portugal was a small nation, lacking the workers and the ships necessary for the enforcement of a large trade empire. Many Portuguese merchants ignored their government and traded independently. Corruption among government officials also hampered the trading empire. By the 17th century, Dutch and English rivals were challenging the Portuguese in East Asia, including islands that are today part of Malaysia and Indonesia.

The Dutch captured Malacca and built a fort at Batavia in Java in 1620. From Batavia, the Dutch attempted to monopolize the spice trade. As a result, the English focused on India, pushing the Portuguese out of South Asia.

In the early 16th century, the Portuguese also travelled to Japan to trade, followed by Christian missionaries in 1549. They formed large Catholic settlements until the 1600s, when Japanese rulers outlawed Catholicism and expelled the missionaries.

Spanish in the Philippines Portuguese explorers such as Vasco da Gama were the first Western Europeans to reach the Indian Ocean by sea by going around the southern tip of Africa. Spanish ships, however, became the first to circumnavigate the globe when the government sponsored the voyage of Ferdinand Magellan. He died on the voyage in the Philippine Islands in 1522, but one of the ships in his fleet made it around the world, proving that the earth could be circumnavigated.

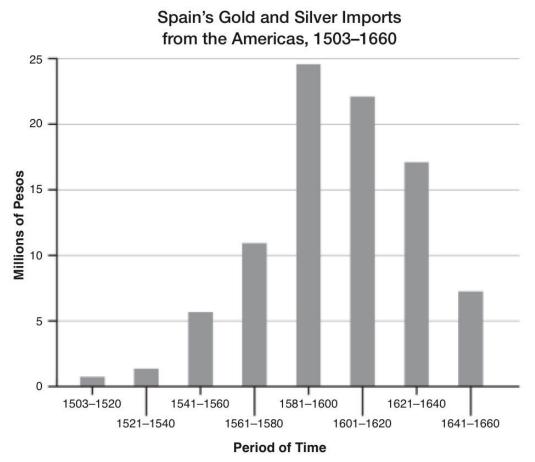
Spain annexed the Philippines in 1521 when Magellan's fleet arrived there. The Spanish returned in 1565 and started a long campaign to conquer the Filipinos, who put up fierce resistance. Manila became a Spanish commercial center in the area, attracting Chinese merchants and others. Because of the Portuguese and Spanish occupations, many Filipinos became Christians.

The Lure of Riches

Columbus and other European explorers sought a new route to Asia and hoped to find gold, silver, and other valuable resources. The Spanish found so little of value in their first two decades of contact that they considered stopping further exploration. The English, after sponsoring voyages in the 1490s, made little attempt to explore or settle for almost a century.

However, European interest in the Americas was rekindled when the Spanish came into contact with the two major empires in the region, the Aztecs in Mesoamerica and the Incas in South America. These empires had the gold and silver that made exploration, conquest, and settlement profitable. In addition, Europeans soon realized that, by using enslaved Native Americans and later enslaved Africans, they could grow wealthy by raising sugar, tobacco, and other valuable crops.

Trade Across the Pacific China was a particularly enthusiastic consumer of this silver from the Western Hemisphere. Silver, for example, made its way from what is now Mexico across the Pacific Ocean to East Asia in heavily armed Spanish ships known as galleons that made stops in the Philippines. At the trading post in Manila, Europeans exchanged silver for luxury goods such as silk and spices, and even for gold bullion. The impressive Manila galleons allowed the silver trade to flourish. Indeed, the Chinese government soon began using silver as its main form of currency. By the early 17th century, silver had become a dominant force in the global economic system.



Source: Earl J. Hamilton "Imports of American Gold and Silver into Spain, 1503-1660." The Quarterly Journal of Economics. 1929

Spain's rivals in Europe also explored and claimed regions in the Americas. French, English, and Dutch explorers all looked for a **northwest passage**—a route through or around North America that would lead to East Asia and the precious trade in spices and luxury goods.

French Exploration In the 1500s and 1600s, the French government sponsored expeditions in search of a northwest passage. In 1535, for example, French explorer Jacques Cartier sailed from the Atlantic Ocean into the St. Lawrence River at today's northern U.S. border. He did not find a new route to Asia, but he did claim part of what is now Canada for France. Eventually, explorers such as Cartier and Samuel de Champlain (explored 1609–1616) realized there were valuable goods and rich resources available in the Americas, so there was no need to go beyond to Asia.

Like the Spanish, the French hoped to find gold. Instead, they found a land rich in furs and other natural resources. In 1608, they established a town and trading post that they named **Quebec**. French traders and priests spread across the continent. The traders searched for furs; the priests wanted to convert Native Americans to Christianity. The missionaries sometimes set up schools among the indigenous peoples. In the 1680s, a French trader known as La Salle explored the Great Lakes and followed the Mississippi River south to its mouth at the Gulf of Mexico. He claimed this vast region for France.

Unlike the Spanish—or the English who were colonizing the East Coast of what is now the United States—the French rarely settled permanently. Instead of demanding land, they traded for the furs trapped by Native Americans. For this reason, the French had better relations with natives than did the Spanish or English colonists and their settlements also grew more slowly. For example, by 1754, the European population of **New France**, the French colony in North America, was only 70,000. The English colonies included one million Europeans.

English Exploration In 1497, the English king sent an explorer named **John Cabot** to America to look for a northwest passage. Cabot claimed lands from Newfoundland south to the Chesapeake Bay. The English, however, did not have enough sea power to defend themselves against Spanish naval forces—although English pirates called "sea dogs" sometimes attacked Spanish ships. Then in 1588, the English surprisingly defeated and destroyed all but one third of the Spanish Armada. With that victory, England declared itself a major naval power and began competing for lands and resources in the Americas.

At about the same time the French were founding Quebec, the English were establishing a colony in a land called Virginia. In 1607, about one hundred English colonists traveled approximately 60 miles inland from the coast, where they built a settlement, **Jamestown**, on the James River. Both the settlement and the river were named for the ruling English monarch, James I. Jamestown was England's first successful colony in the Americas, and one of the earliest colonies in what would become the United States. The first colonies in the present-day United States were Spanish settlements in Florida and New Mexico.

Comparing	Comparing Transoceanic Voyages, c. 1300–c. 1800				
Sponsoring Empire	Explorer	Key Voyages	Purpose	Impact	
China	Zheng He	IndiaMiddle EastAfrica	To open up trade networks with India, Arabia, and Africa and to spread Chinese culture	China decided not to continue exploring	
England	John Cabot	• North America	To find a sea route to the East going west from Europe	Claimed land in Canada for Britain and established a shorter, more northerly route across the Atlantic than Columbus's route.	
Portugal	Vasco da Gama	West coast of Africa India	To open a sea route from Europe to India and China	Portugal expanded trade and cultural exchange between India and Europe	
Spain	Christopher Columbus	Caribbean islandsCentral America	To find a sea route to India and China going west from Europe	Spain led the European exploration and colonization of the Americas	
Spain	Ferdinand Magellan	South America Philippines	To demonstrate that Europeans could reach Asia by sailing west	Spain established links between the Americas and Asia across the Pacific Ocean	

Dutch Exploration In 1609, the Dutch sent **Henry Hudson** to explore the East Coast of North America. Among other feats, he sailed up what became known as the Hudson River to see if it led to Asia. He was disappointed in finding no northwest passage. He and other explorers would continue to search for such a route. Though it would travel through a chilly region, it offered the possibility of being only half the distance of a route that went around South America.

Though Hudson did not find a northwest passage, his explorations proved valuable to the Dutch. Based on his voyage, the Dutch claimed the Hudson River Valley and the island of Manhattan. On the tip of this island, they settled a community called New Amsterdam, which today is known as New York City. Like many port towns, New Amersterdam prospered because it was located where a major river flowed into the ocean.

New Amsterdam became an important node in the Dutch transatlantic trade network. Dutch merchants bought furs from trappers who lived and worked in the forest lands as far north as Canada. They purchased crops from lands to the south, particularly tobacco from Virginia planters. They sent these goods and others to the Netherlands in exchange for manufactured goods that they could sell throughout colonial North America (Connect: Explain how one of the European explorers in 4.2 compares to Marco Polo. See Topic 2.5.)

KEY TERMS BY THEME

ECONOMICS: Europe

mercantilism trading post empire Manila

GOVERNMENT: Portugal Prince Henry the Navigator

TECHNOLOGY: Maritime

galleons

GOVERNMENT:

Exploration

Christopher Columbus Bartholomew Diaz Vasco Da Gama Ferdinand Magellan northwest passage Jacques Cartier

Samuel de Champlain

John Cabot Henry Hudson **GOVERNMENT:** Colonies

Quebec New France Jamestown New Amsterdam

Columbian Exchange

We are crushed to the ground; we lie in ruins. There is nothing but grief and suffering in Mexico and Tlatelolco, where once we saw beauty and valor.

> -from "Flowers and Songs of Sorrow," anonymous Aztec poet, (c. 1521-1540)

Essential Question: What were the causes of the Columbian Exchange and its effects on the Eastern and Western Hemispheres?

As the excerpt from the poem above suggests, initial contact and the subsequent conquest and colonization of the Americas proved disastrous for the native peoples. Overpowered by superior weapons and decimated by disease, many native populations declined, dissipated, or were forced to submit to new rulers and a new religion.

Although European conquest seriously damaged entire native societies and their ways of life, eventually new ways of life developed out of the interaction of three broad traditions of culture: indigenous American, European, and African. In the process, the Eastern and Western Hemispheres became linked in a new way, sharing disease, foods, and animals. For the role Christopher Columbus played in establishing the link, these interactions became known as the Columbian Exchange.

The Columbian Exchange had far-reaching effects beyond dramatic changes in population and biodiversity. It also contributed to a changing global economy, sometimes with unintended consequences. For example, Spain successfully mined silver in the Americas. However, this silver sparked inflation in Spain, which contributed to the downfall of the Spanish Empire.

Diseases and Population Catastrophe

Until the arrival of Columbus, the peoples of the Western and Eastern Hemispheres had been almost completely isolated from each other. For that reason, the indigenous people of the Americas had no exposure—and therefore no immunity—to the germs and diseases brought by Europeans. Although European horses, gunpowder, and metal weapons helped conquer indigenous Americans, disease was responsible for the majority of deaths.

Spanish soldiers, called **conquistadores**, such as Francisco Pizarro and Hernán Cortés, brought **smallpox** with them. Smallpox pathogens are spread through the respiratory system. When Europeans, who were largely immune after millennia of exposure in Afro-Eurasia, had face-to-face contact with indigenous populations, they infected these populations with the deadly disease.

As colonists began to settle in the Americas, so did insects, rats, and other disease-carrying animals. Measles, influenza, and malaria, in addition to smallpox, also killed many native peoples of the Americas.

The indigenous population of the Americas fell by more than 50 percent through disease alone in less than a century. Some American lands lost up to 90 percent of their original populations. It was one of the greatest population disasters in human history.



Source: Wikimedia Commons

Deadly diseases such as smallpox that came from Europe spread rapidly in the Americas.

Animals and Foods

Germ and disease transmissions were only one part of the Columbian Exchange. Another major component of the exchange was the sharing of new crops and livestock in both directions. Before the exchange began around 1500, Mesoamerican peoples consumed very little meat. Although contemporary Mexican food sold in the United States is reliant on pork, beef, and cheese, the indigenous people of Mexico knew nothing of pigs or cows until Europeans introduced them. These animals, along with Mediterranean foods such as wheat and grapes, were introduced to the Western Hemisphere and eventually became staples of the American diet.

Another domesticated animal the Europeans brought to the Americas, the **horse**, transformed the culture of the American Indians living in the Plains region. With the arrival of the horse, Indians could hunt buffalo on horseback so efficiently—and over a larger region—that they had a surplus of food. That efficiency gave them more time for other pursuits, such as art and spirituality. However, competition and even armed conflict among tribes increased, with those having the most horses having the most power.

At the same time, European explorers took back Mesoamerican maize (corn), potatoes, tomatoes, beans, peppers, and cacao to their home countries, where people started to grow them. Potatoes became so popular in Europe that they are often thought of as being native to certain regions, such as Ireland. The introduction of these vegetable crops caused tremendous population growth in Europe in the 16th and 17th centuries.

Cash Crops and Forced Labor

People themselves also became part of the exchange. The coerced arrival of enslaved Africans to the Americas brought biological and demographic changes. For example, Africans brought okra and rice with them to the Americas. Tobacco and cacao produced on American plantations with forced labor were sold to consumers in Europe, Africa, and the Middle East.

Even though slave traders kidnapped millions of Africans from their homelands, populations actually grew in Africa during the 16th and 17th centuries. That population growth happened because of the nutritious foods that were introduced to the continent. Yams and manioc, for example, were brought to Africa from Brazil.

The Lure of Sugar While Spain and Spanish America profited from silver, the Portuguese empire focused its endeavors on agriculture. Brazil, the center of the Portuguese-American empire, with its tropical climate and vast tracts of land, was perfect for **sugarcane** cultivation. As disease had decimated the indigenous population, however, there were not enough laborers available to do the cultivation. Moreover, many of the people who were forced to labor in the sugar fields escaped to the uncharted Brazilian jungle. In response, the Portuguese began to import enslaved people from Africa, especially from the Kongo Kingdom and cities on the Swahili coast.

Slavery Sugar's profitability in European markets dramatically increased the number of Africans captured and sold through the transatlantic slave trade. Sugar cultivation in Brazil demanded the constant importation of African labor. African laborers were so numerous in Brazil that their descendants became the majority population of the region. Slave importers sent more than 90 percent of slaves to the Caribbean and South America. Only about 6 percent of slaves went to British North America. Until the mid-1800s, more Africans than Europeans went to the Americas.

Slaves often died from backbreaking working conditions, poor nutrition, lack of adequate shelter, and tropical heat and the diseases that accompanied such heat. Sugar plantations processed so much sugar that they were referred to as engenhos, which means "engines" in Portuguese. Because of the engenhos' horrible working conditions, plantation owners lost from 5 to 10 percent of their labor force per year. Slavery is discussed in more detail in the Topic 4.4.

Growing Cash Crops The Spanish noticed Portugal's success with plantation agriculture and returned to the Caribbean to pursue cash crop cultivation, such as sugar and tobacco. Cash crops are grown for sale rather than subsistence. Soon, sugar eclipsed silver as the main moneymaker for the European empires. (Connect: Write a paragraph comparing the economic practices of Spain in the Americas and Portugal in South, Southwest, and Southeast Asia. See Topic 4.2.)

African Presence in the Americas

African cultures were not completely lost once captives arrived in the Americas. In fact, during the African Diaspora (dispersion of Africans out of Africa), enslaved Africans retained some aspects of their cultures.

Languages With a few exceptions, Africans were not able to transplant their languages to the Americas. The captives were forced away from their communities, and they soon found themselves on ships among captives from all across West Africa (and, on some slave ships, from across East Africa as well).

Since captives were taken from myriad African cultural groups, most did not share a common language. Understandably, they found it difficult, if not impossible, to communicate en route. Because of their linguistic isolation on the ships and in the Americas, most Africans lost their languages after a generation. In spite of this forced isolation from their cultures, West Africans managed to combine European colonizers' languages (English, Spanish, French, or Portuguese, for example) with parts of their West African languages and grammatical patterns to create new languages known broadly as creole.

Because the Caribbean islands had a larger concentration of enslaved Africans than did North America, creole languages dominate there even today. In the United States, which had a smaller percentage of Africans in comparison to the total population, few examples of creole languages exist. One notable exception is the Gullah or Geechee language of coastal South Carolina and Georgia, in places where slaves once composed 75 percent of the population.

Music Africans brought their music with them. The syncopated rhythms and percussion they used influenced later styles. These include gospel, blues, jazz, rock and roll, hip-hop, rap, samba, reggae, and country music.

One reason many African descendants maintained their musical traditions was because enslaved Africans in America used them as a means of survival, singing tunes from home to help them endure long workdays as well as to communicate with other slaves, such as when planning an escape. They blended European Christian music with their own religious songs, known today as Negro spirituals—essential elements of American folk music history. Enslaved people also invented the banjo, which is very similar to stringed instruments found in West Africa.

Food In addition to rice and okra, Africans brought their knowledge of how to prepare these foods. The dish known as gumbo, popular in the southern United States, has roots in African cooking. With influences on language, music, food, and much more, African culture has had a profound and lasting impact on life in the Americas.

Columbian Excha	ange: Eastern Hemis	sphere to Western Hemisphere
Type of Exchange	Examples	Effects on the Western Hemisphere
Crops	• Sugar • Wheat • Barley • Okra • Rice • Oranges * Grapes • Lettuce • Coffee	 Deforestation to make way for sugar, wheat, barley, okra, rice, and other crops Soil depletion from growing the same crops repeatedly on the same land
Animals	 Horses Oxen Pigs Cattle Sheep Goats Mosquitoes Rats Chickens 	 Overgrazing by cattle, sheep, and goats Soil erosion because of overgrazing Spread of diseases from mosquitoes, rats, and livestock
People	Europeans Africans	Racial diversityChattel slaverySocial structures based on race and ethnicity
Diseases	Smallpox Measles Typhus Bubonic plague Influenza	Spread of disease Millions of deaths among Native American populations
Technology and Ideas	Alphabetic writing Firearms	Improved communication New methods for hunting and warfare

Columbian Exchange: Western Hemisphere to Eastern Hemisphere			
Type of Exchange	Examples	Effects on the Eastern Hemisphere	
Crops	• Potatoes	Better nutrition	
	Maize	Increase in population	
	Manioc	Greater wealth	
	• Tobacco		
	• Cacao		
	Peanuts		
Animals	Turkeys	More diverse diet	
	• Llamas	New types of textiles	
	Alpacas		
	Guinea pigs		
Diseases	Syphilis	Increased health risks	
People	Native Americans	Ethnic diversity	
Technology and Ideas	• Rubber • Quinine	Rubber was first used as an eraser Quinine provided a treatment for malaria	

Environmental and Demographic Impact

Contact between Afro-Eurasia and the Americas brought dramatic changes to both. Most changes resulted from the Columbian Exchange. In addition, though, Europeans used agricultural land more intensively than did American Indians. For example, colonists cut down trees to clear areas for planting crops, and they created large fields that they cultivated year after year. As a result, deforestation and soil depletion became problems in the Americas. In addition, Europeans often lived in more densely populated communities than did American Indians. This increased the strain on water resources and created more concentrated areas of pollution.

KEY TERMS BY THEME			
ENVIRONMENT: Disease smallpox ENVIRONMENT: Animals horse GOVERNMENT: Empire conquistadores	ENVIRONMENT: Foods maize cacao okra rice sugarcane CULTURE: African creole gumbo	ECONOMY: Exchanges Columbian Exchange transatlantic slave trade engenhos cash crop SOCIETY: Population African Diaspora	

Maritime Empires Link Regions

You grow your peanuts And plenty millet The king sets a hand on everything And says it is not yours anymore! In the deepest of your sleep The king beats his drum And says wake up! You are not free anymore –

-Anonymous West African griot (storyteller) song

Essential Question: How were the empires of European states established

between 1450 to 1750, and what economic and labor

systems fueled them?

European nations, driven largely by political, religious, and economic rivalries, established new maritime empires and administered trading posts in Asia and Africa and colonies in the Americas. Asian trade frequently exchanged silver and gold for luxury goods such as silk and spices, while newly developed colonial economies in the Americas often depended on agriculture.

American plantations relied on existing labor systems and also introduced new labor systems. Among these were **indentured servitude**, arrangements through which servants contracted to work for a specified period of years in exchange for passage. Another was chattel slavery, a system in which individuals were considered as property to be bought and sold. The appalling shock of free people being seized and enslaved is captured in the griot (storyteller) song of the West African Wolof people. The growth of the plantation economy increased the demand for slaves in the Americas, leading to significant demographic, social, and cultural changes.

State-Building and Empire Expansion

The explorations of European states (see Topic 4.2) were the foundation of maritime empires. States claimed lands and established the basis of an empire in the areas they explored.

Trading Posts in Africa and Asia

Certain regions of East and West Africa were the targets of European conquest during the late 15th century. Portuguese ruler Prince Henry the Navigator was keenly interested in navigational technology. (See Topic 4.2.) He financed expeditions along Africa's Atlantic Coast and around the Cape of Good Hope, exploring African coastal communities before other European powers.

With the cooperation of local rulers, first Portuguese and then other European traders set up trading posts along Africa's coasts. Some local rulers traded slaves to the Europeans in exchange for gunpowder and cannons, giving those coastal governments a military advantage when battling neighboring villages. Some African city-states grew wealthy by selling enslaved Africans to Europeans. In particular, the Kingdom of Dahomey grew stronger because it raided other villages to enslave people, and sold them to European merchants.

African States In central West Africa, Portuguese explorers, traders, and missionaries made inroads into the Kongo and Benin kingdoms. Artwork from these societies bears signs of European as well as African cultural influences. As early as the 16th century, Benin artisans incorporated images of the European "intruder" into their carvings and sculptures. Yet the expansion of maritime trading networks supported the growth of some African states, including the Asante Empire and the Kingdom of the Kongo. Their participation in trade led to an increase in their influence.

In 1498, Portuguese explorer Vasco da Gama (see Topic 4.1) invaded the Swahili city-states of East Africa, most of which were thriving commercial centers in the Indian Ocean trade. The Portuguese took over trade in Kilwa, Mombasa, and other city-states by sending heavily armed ships and building fortresses. This takeover threw the region into a devastating decline.

Japan Just as European states were expanding their trade networks, Japan was sharply restricting its networks. Japan had tolerated the first Portuguese and Dutch traders and missionaries in the mid-16th century. Thousands of Japanese converted to Christianity. Some Christians, intolerant of other faiths, destroyed Buddhist shrines. In response, in 1587, the Japanese government banned Christian worship services. Over the next 40 years, Japan took additional steps to persecute Christians and limit foreign influences. By the 1630s, the government had expelled nearly all foreigners, banned most foreign books, and prohibited Japanese people from traveling abroad.

For more than two centuries, Japan was partially isolated from the rest of the world. They allowed some Dutch merchants to live on a small island in Nagasaki harbor, in almost total seclusion. In addition, Japan continued some trade with the Chinese, mostly carried out by regional lords who were far from the capital city with easy access by sea to Korea, Taiwan, and Okinawa. The Japanese thought that they were through with the "uncouth" Europeans. However, Europeans and Americans would return in the mid-19th century.

China After the voyages of Zheng He in the 15th century, the Ming **Dynasty** tried to limit outside influence on China by restricting trade. The

Ming prohibited private foreign trade, destroyed some dockyards, limited the size of ships that could be built, and began reconstructing the Great Wall. These changes were part of a broader pattern of conservatism under the Ming to undo the influence of the Mongol Yuan Dynasty that ruled China before them. For example, the Ming reemphasized the importance of Confucianism and reinvigorated the traditional exam system. Many of the limits on trade were eventually reversed, and China resumed its important role in global trade.

European Rivalries on Five Continents

European rivalries fueled by political, economic, and religious motives shaped the expansion of empires. Several powers established trading posts in India:

- The British East India Company had begun a commercial relationship with the Mughal Empire in the 17th century.
- Portugal controlled a coastal trading post in the southwestern state of Goa.
- France controlled Pondicherry, a city in the southeastern state of Tamil Nadu.

During the mid-18th century, France and Great Britain, along with their respective allies, competed for power on five continents in the Seven Years' War. Britain's victory in that war in 1763 drove the French out of India. The Portuguese remained in India until driven out in the mid-20th century.

British in India At first, British trading posts in India were typical of those established by Europeans in India and elsewhere. The East India Company (EIC) established small forts on the coasts that focused solely on making a profit through trade. Limited by the power of India's Mughal Empire, the EIC posts controlled very little territory.

However, the EIC then began to expand. It took advantage of the tensions between Muslims and Hindus in India and began to increase its political power through treaties with local rulers. With the help of European-trained Indian private forces called sepoys, the East India Company moved inland, spreading its influence. Ultimately, Britain intervened in India politically and militarily to such an extent that it controlled much of the subcontinent.

The British Global Network The British also set up trading posts in West Africa, where the Asante Empire limited their impact. Trading posts in Africa, India, and elsewhere paved the way for globalization. Each post became a node, an intersection of multiple points serving as a trade center for goods from many parts of the world.

Europeans in the Americas

Before the arrival of Europeans in the late 15th century, the Aztec Empire in Mexico and the **Inca Empire** in South America each included 10 million to 15 million people. However, the spread of European diseases caused their populations to plummet. Both empires collapsed quickly when attacked by Spanish forces.

In Mexico, helped by groups that the Aztecs had conquered, Cortés's forces overthrew the Aztec by 1521 and established the colony of New Spain. The Spaniards melted down the Aztecs' treasures and sent the gold back home. They destroyed Tenochtitlán and built their own capital, Mexico City, on its ruins.

In the Andes of South America, Francisco Pizarro and his crew attacked the Inca and captured their ruler, Atahualpa. Pizarro offered to release Atahualpa if the Inca would fill a large room with gold. The Inca complied. However, in 1533 the Spanish killed Atahualpa anyway. By 1572, the Spaniards had completed their conquest of the Inca Empire.

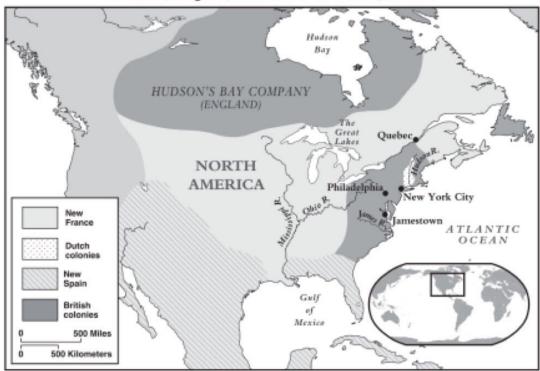
Spain Versus Portugal In the Treaty of Tordesillas of 1494, Spain and Portugal divided the Americas between them. Spain reserved all lands to the west of a meridian that went through eastern South America. Portugal reserved all lands east of this line. This arrangement put Brazil under Portugal's rule, while Spain claimed the rest of the Americas.



Spanish and Portuguese Colonies, c. 1600

In addition to establishing colonies in Mesoamerica and South America, Spain explored other parts of North America north of present-day Mexico. The explorer Pedro Menéndez de Avilés established a fort in St. Augustine on the east coast of Florida in 1565, which became the oldest continuous settlement in what later became the United States. Spain would not be able to control all of North America, however, because the French, British, and Dutch later made claims and settlements there.

France Versus Britain France and Britain continued to vie for dominance in North America. As British settlers moved into former Dutch territory in upper New York, they began to form ties with the powerful Iroquois, who had been in conflict with the French over trade issues for decades. The British hoped that the Iroquois could frustrate French trade interests. Over time, the Iroquois began to realize that the British posed more of a threat than the French. In a shift of alliances, the Iroquois and French signed a peace treaty known as the Great Peace of Montreal in 1701. In the same war in which Britain drove France out of India, the British drove France out of Canada as well. The North American portion of this war is sometimes called the French and Indian War.



French, English, and Dutch Colonies, c. 1650

Continuity and Change in Economic Systems

Although the intensification of trade and the increasing influence of Europeans brought some disruption to the Indian Ocean trading networks, on the whole, the system absorbed the changes and continued its familiar ways of doing business. Merchants in the Indian Ocean networks were used to paying taxes and fees to states controlling sea lanes and ports and operated often through

religious and ethnic ties. They did not use arms to protect their trade, and if the fees in one trading center became too high, they were free to move elsewhere.

Europeans in the Indian Ocean Trade The Portuguese, however, arrived with superior naval forces, religious zeal, and a determination to profit from the increasingly diverse products being traded, both from Asia to Europe and also within Asia. In addition to porcelain and silk from China, cloth from Gujarati weavers in western India, agricultural goods from Java, and spices from many places created an abundant market for trade and profit. In contrast to the ethnic and religious trading ties developed over hundreds of years, the Portuguese used their military superiority to take control of trade, creating a string of armed trading posts along the trade routes of the Indian Ocean. In 1509, for example, the Portuguese had a decisive victory in the Battle of Diu in the Arabian Sea over the combined forces of Gujaratis, the Mamluks of Egypt, and the Zamorin of Calicut with the support of Venice, Portugal's European competitor.

Despite the differences between the traditional trading networks and those controlled by European powers, merchants in the Indian Ocean trade networks continued as before in many ways—paying for the right to use certain ports or passageways and developing trade links through traditional networks.

Spain and Gold in the Americas The Western European search for profit began with Columbus. On his first voyage, he was convinced that gold was plentiful on **Hispaniola**, the name he gave the island now occupied by Haiti and the Dominican Republic. But gold was sparse in the Caribbean. Desiring to return home with something valuable, Columbus and his crew kidnapped Tainos, indigenous peoples, and took them, enslaved, to Spain.

In the early 1500s, the Spanish established a system called the **encomienda** to gain access to gold and other resources of the Americas. Encomenderos, or landowners, compelled indigenous people to work for them in exchange for food and shelter, as landowners required of serfs in Europe's manorial system. This coercive labor system was notorious for its brutality and harsh living conditions.

The Spanish crown often granted land to conquistadores as a reward for their efforts. The hacienda system arose when landowners developed agriculture on their lands—wheat, fruit, vegetables, and sugar. They used coerced labor to work the fields.

Silver While gold did not yield riches for Spanish conquistadores, the discovery of silver in Mexico and Peru revived economic fortunes—for both individual explorers and Spain. The use of mercury to separate silver from its ore increased the profitability of silver mining. By the end of the 16th century, the cities of Zacatecas, in Mexico, and especially Potosí, in the Andes Mountains in modern-day Peru, became thriving centers of silver mining.

For this industry to flourish, Spanish prospectors needed labor. The indigenous populations would do all but the most dangerous work in the mines. In response, Spanish authorities in Peru transformed the traditional Incan mit'a system of labor obligation, in which young men were required to devote a certain amount of labor to public works projects, into a coerced labor system. Villages were compelled to send a percentage of their male population to do the dangerous work in the mines for a paltry wage.

Silver and Mercantilism The silver trade not only made individual Spanish prospectors wealthy, it also strengthened the Spanish economy. European powers at the time were adopting mercantilism, an economic system that increased government control of the economy through high tariffs and the establishment of colonies, claimed lands settled by immigrants from the home country. In the case of Spain, the main purpose of the colonies in the Americas was to supply as much gold and silver as possible.

Another way to increase national wealth, according to the mercantilist system, was for a colonizing country to export more than it imported. A percentage of overseas silver production went directly to the Spanish crown. The empire used this wealth to build up the military and establish foreign trade.

Continuity and Change in Labor Systems

Different regions and different economies used different labor systems.

Types of La	Types of Labor in the Early Modern Period		
Laborer	Location	Type of Work	Freedoms/Limits
Slave	Americas Africa	Domestic labor Agricultural labor	Considered property Had few or no rights
Serf	• Europe • Asia	Subsistence farming Most of the yield belonged to the lord	Attached to the land: not free to move at will Had little or no legal protection
Indentured Servant	• All regions	Domestic labor Field work	 Employer paid for transport to a new location Individual worked without pay for up to seven years
Free Peasant	• Europe • Asia	Farming Craft labor (blacksmithing, weaving, etc.)	 Worked on their own land Sometimes owned a business Paid taxes to the lord Paid tithes to the church
Nomad	• Europe • Asia • Africa	Animal breedingPastoralismHerding	Did not own land permanentlyUsed land temporarilyHad freedom to move
Guild Member	• Europe	Skilled craft labor Workers organized to set standards for quality and price	Started as an apprentice Could eventually work independently

During this era, Europeans sought sources of inexpensive labor in the Americas. Western European countries such as Portugal, Spain, and England were developing their naval technology, but Portugal was ahead of the others. In West Africa during the latter part of the 1400s, Portuguese trading fleets arrived in the Kingdom of the Kongo seeking slaves. Initially they took the enslaved Africans back to Europe to work as domestic servants.

Slavery existed in Africa—including the extensive enslavement of women as household workers—well before Europeans sought labor for their investments in the Americas. For example, in many societies, the entire community shared the land. In order to establish positions of wealth and power, individuals not only showcased the property they owned, but also showcased the enslaved people they owned.

Europeans were also not the first foreigners to seek out African labor. Arab merchants during the Postclassical Era (600-1450) often bought enslaved people during their travels to the Swahili Coast of East Africa. However, it was the Atlantic slave trade that wreaked the most havoc on African societies. (Connect: Compose a graphic organizer comparing slavery during Sub-Saharan Africa's early colonial period with slavery from 600 to 1450. See Topic 2.3.)

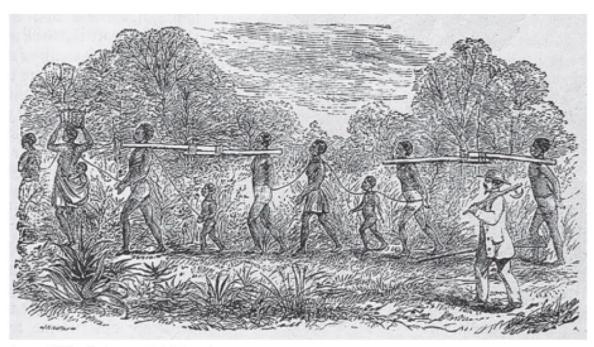
Why Africans? Several factors converged to make Africa a target for slave raids by Europeans after 1450. Slavery in Latin America and the Caribbean began toward the end of the 16th century, when European conquistadores sought fortunes in gold, silver, and sugar. Land was plentiful, but labor to make the land profitable was scarce.

Europeans initially forced indigenous people to do the hard labor of mining and farming, but European diseases wiped out large portions of these coerced laborers. The indigenous slaves who survived often escaped bondage because, in comparison with the Europeans, they were more familiar with the territory, had social networks that could protect them, and could easily camouflage themselves within the native population. Repeated efforts to enslave Native Americans failed, although other efforts to coerce labor did have some success.

Labor for Plantations In North America, plantation owners recruited European indentured servants who would come to work, mostly to grow tobacco, for a specified period in exchange for passage, room, and board. However, most of these people were not used to the backbreaking agricultural working conditions and the climate of the Americas. In addition, indentured servants were required to work for only about seven years. If they survived their indenture, they became free laborers. Thus, landowners did not think of indigenous captives and European indentured servants as ideal workers.

Capture and Shipment of Slaves to the Americas Capturing Africans for slavery was invariably violent. When African leaders along the coast realized that their kingdoms could economically benefit from the slave trade, they invaded neighboring societies in a quest for slaves to take back to the coast. At times, African rulers were also willing to hand over individuals from the lower rungs of their own societies, such as prisoners of war, servants, or criminals.

However, King Afonso of Kongo understood that slave raids were not easily controllable. Though he had initially allowed slave trading in his kingdom, he had no intention of giving up his society's elite to slavery, nor did he want Kongo to be depopulated. King Afonso also saw that his authority was undermined because his subjects were able to trade slaves for European goods without his involvement. Before the Europeans came, he had been able to control all trade in his domain.



Source: Wikimedia Commons, Public Domain Slaves being transported in Africa, 19th century engraving

The Horrors of the Journey Captive Africans, swept away from their families, were taken to holding pens in West Africa known as barracoons, or "slave castles." The modern country of Ghana has preserved these "Points of No Return," where thousands upon thousands of Africans saw their homeland for the last time. Today, people can visit one such holding prison—the so-called House of Slaves on Ile de Gorée (Gorée Island), on the coast of Senegal.

From these holding pens, slave traders next crammed their captives into the dank cargo section of a ship, providing them little water, food, or even room for movement. The grueling journey across the Atlantic was known as the **Middle Passage**, because it was the middle part of the captives' journey. Many captured Africans attempted rebellions at sea, but most uprisings were crushed.

During the journey to the Americas, which usually took about six weeks, up to half of a ship's captives might die. Over the hundreds of years of the Atlantic slave trade, from the early 1500s to the mid-19th century, 10 to 15 percent of all African captives perished before reaching the Americas. (Connect: Write an outline of the effects of the Atlantic slave trade on Africa. See Topic 4.3.)

Destination of Enslaved Afric by Colonial Region	estination of Enslaved Africans / Colonial Region		
Destination	Percentage		
Portuguese Colonies	39%		
British West Indian Colonies	18%		
Spanish Colonies	18%		
French Colonies	14%		
British Mainland Colonies	6%		
Dutch West Indian Colonies	2%		
Other	3%		

Source: Stephen D. Behrendt et al. Africana: The Encyclopedia of the African and African American Experience.

Demographic, Social, and Cultural Changes The growth of the planation economy and the expansion of slavery in the Americas led to significant changes that affected not only countless individual lives but also broad patterns of history. The physical migration of captives had significant impact on the demographics of both their African homes and the countries of their captivity. The exportation of enslaved people that was required to keep the population continuing in the country of captivity caused a century-long decline in population in African home countries.

In addition to physical migration, slavery resulted in a migration of status, from free person to enslaved, setting up social classes that remain influential in post-slavery countries. Further, it disrupted family organization, since families were often separated, and more men than women were taken captive. Polygyny (having more than one wife) became more common. With people treated as commodities, as chattel slavery, social and family groupings were determined more by supply and demand than by the familial bonds of kinship.

Each region in which slavery was introduced was affected in a unique way. However, in all of them, people with African roots helped shape and enrich the language and culture of the societies into which they were brought. The mixing of ethnic groups resulted in new groups of multiracial people, such as mestizos and mulattos.

The Indian Ocean Slave Trade While most Africans who were enslaved and transported to the Americas came from west and central Africa, there was a long-running slave trade in the eastern part of the continent. By routes overland or in the Indian Ocean, slaves from eastern Africa were sold to buyers in northern Africa, the Middle East, and India. Many were transported to the islands off the southeast coast of Africa, such as Madagascar. The trade reached its peak in the 18th and 19th centuries.

Slaves taken in the Indian Ocean trade suffered different fates from those taken across the Atlantic. Slaves in the Indian Ocean were more likely to work in seaports as laborers in the shipping industry and as household servants. Some worked as sailors or even soldiers. Living in towns or cities, they had some opportunity to develop communities and to work alongside free laborers. Slaves who ended up in Islamic communities had certain rights, such as the right to marry. As a result of the Indian Ocean slave trade, African words, musical styles, and customs can be found in Oman, India, and elsewhere.

KEY TERMS BY THEME

GOVERNMENT: African States

Asante Empire Kingdom of the Kongo

GOVERNMENT: East Asian States

Ming Dynasty

GOVERNMENT: Americas

Aztec Empire Inca Empire New Spain Mexico City Francisco Pizarro Atahualpa Treaty of Tordesillas Hispaniola

conquistadores

ECONOMY: Products

silver

ECONOMY: Economic Systems

mercantilism colonies

ECONOMY: Labor Systems

indentured servitude chattel slavery encomienda encomenderos coercive labor system hacienda system mit'a system Middle Passage

Maritime Empires Develop

All of the residents of these United Provinces [the Netherlands] shall be allowed to participate in [the Dutch East India] Company and to do so with as little or as great an amount of money as they choose.

-Charter, Dutch East India Company, 1602

Essential Question: What economic strategies did maritime empires use

to increase their power, and how did the developing empires affect political, economic, religious, and

cultural dynamics?

Maritime (sea-based) empires transformed commerce from local, smallscale trading, mostly based on barter, to large-scale international trade using gold and silver. These empires employed new economic models, such as jointstock companies, through which investors financed trade by buying shares in corporations such as the East India Company, supporting increased trade in Asia. New ocean trade routes were opened, aiding the rise of this extended global economy. The Atlantic trading system involved the movement of labor including slaves—and the mixing of African, American, and European cultures and peoples, with all groups contributing to a cultural synthesis. Silver, sugar, and slavery were the keys to the development of these mercantilist empires.

Economic Strategies

In the 17th century, Europeans generally measured the wealth of a country in how much gold and silver it had in its coffers. To achieve this wealth, countries used economic strategies designed to sell as many goods as they could to other countries in order to obtain maximum amounts of gold and silver. To keep their wealth, countries would also spend as little of their precious metals as possible on goods from other countries.

The accumulation of **capital**, material wealth available to produce more wealth, in Western Europe grew as entrepreneurs entered long-distance markets. Capital changed hands from entrepreneurs to laborers, putting laborers in a better position to become consumers—and even investors, as the above quote suggests. Despite restrictions by the Church, lending money at high rates of interest became commonplace. Actual wealth also increased with gold and silver from the Western Hemisphere.

Commercial Revolution

The transformation to a trade-based economy using gold and silver is known as the **Commercial Revolution**. The Commercial Revolution affected all regions of the world and resulted from four key factors: the development of European overseas colonies; the opening of new ocean trade routes; population growth; and inflation, caused partly by the pressure of the increasing population and partly by the increased amount of gold and silver that was mined and put in circulation. The high rate of inflation, or general rise in prices, in the 16th and early 17th century is called the **Price Revolution**.

Aiding the rise of this extended global economy was the formation of joint-stock companies, owned by investors who bought stock or shares in them. People invested capital in such companies and shared both the profits and the risks of exploration and trading ventures. Offering limited liability, the principle that an investor was not responsible for a company's debts or other liabilities beyond the amount of an investment, made investing safer.

The developing European middle class had capital to invest from successful businesses in their home countries. They also had money with which to purchase imported luxuries. The Dutch, English, and French all developed joint-stock companies in the 17th century, including the British East India Company in 1600 and the Dutch East India Company in 1602. In Spain and Portugal, however, the government did most of the investing itself through grants to certain explorers. Joint-stock companies were a driving force behind the development of maritime empires as they allowed continued exploration as well as ventures to colonize and develop the resources of distant lands with limited risk to investors.

Commerce and Finance The Dutch were long the commercial middlemen of Europe, having set up and maintained trade routes to Latin America, North America, South Africa, and Indonesia. Dutch ships were faster

and lighter than those of their rivals for most of the 17th century, giving them an early trade advantage. The Dutch East India Company was also highly successful as a joint-stock company. It made enormous profits in the Spice Islands and Southeast Asia.



Source: Wikimedia Commons The Dutch ship Vryburg on Chinese export porcelain, 1756

Pioneers in finance, the Dutch had a stock exchange as early as 1602. By 1609, the Bank of Amsterdam traded currency internationally. The Dutch standard of living was the highest in Europe as such goods as diamonds, linen, pottery, and tulip bulbs passed through the hands of Dutch traders.

France and England were not so fortunate. Early in the 18th century, both fell victim to speculative financial schemes. Known as financial bubbles, the schemes were based on the sale of shares to investors who were promised a certain return on their investment. After a frenzy of buying that drove up the price of shares, the bubble burst and investors lost huge amounts of money, sending many into bankruptcy and inflicting wide damage to the economy.

Triangular Trade The Europeans' desire for enslaved workers in the Americas coupled with Portugal's "discovery" of West Africa meant that Africa became the source for new labor. Enslaved Africans became part of a complex Atlantic trading system known as the **triangular trade**, because voyages often had three segments. A ship might carry European manufactured goods such as firearms to West Africa, and from there transport enslaved Africans to the Americas, and then load up with sugar or tobacco to take to Europe. Sugar was the most profitable good from the Americas. By the 1700s, Caribbean sugar production and rum (made from sugar) were financing fortunes in Britain, and to a lesser extent, in France and the Netherlands.

Triangular Trade

GREAT raw goods manufactured goods sugar, molasse **SPAIN** NORTH AMERICA TLANTICOCEAN rum enslaved Africans **AFRICA SOUTH** 1,000 miles

1,000 kilometers

AMERICA

Rivalries for the Indian Ocean Trade

After Europeans stumbled on the Americas, trade over the Atlantic Ocean became significant. However, states continued to vie for control of trade routes on the Indian Ocean as well. The Portuguese soundly defeated a combined Muslim and Venetian force in a naval battle in the Arabian Sea in 1509 (see Topic 4.4) over controlling trade. They met a different fate, though, when they tried to conquer Moroccan forces in a battle on land in 1578.

Its coffers depleted after the victory, Morocco looked inland to capture the riches of the Songhai Kingdom, despite the prohibition of waging war on another Muslim state. With thousands of soldiers, camels, and horses, as well as eight cannons and other firearms, Moroccan forces traveled months to reach Songhai. In 1590, in a battle near Gao, the Songhai—despite their greater number of fighters—were overcome by the force of firearms. The empire crumbled. The Spanish and Portuguese soon overtook much of this territory.

Change and Continuities in Trade Networks

The trading networks involved a new global circulation of goods, wealth, and labor. Silver from the Spanish colonies in the Americas flowed to Asia, where Asians were eager to exchange their goods—silks, porcelain, steel products for silver. Asian goods were eagerly purchased in the Atlantic markets.

New Monopolies One way these patterns of trade were maintained was through **monopolies** chartered by European rulers. Monopolies granted certain merchants—usually through a joint-stock company—or the government itself the exclusive right to trade. For example, the Spanish government established a monopoly first over all the domestic tobacco grown and then over all the tobacco grown in its American colonies. The profits from this monopoly greatly enriched the Spanish government. The income from tobacco in Spain made up about one-third of total revenues.

Ongoing Regional Markets At the same time, traditional regional markets continued to flourish in Afro-Eurasia. However, improved shipping offered merchants the opportunity to increase their volume of products. The increasing output of peasant and artisan labor—wool and linen from Western Europe, cotton from India, and silk from China—exchanged hands in port cities with global connections.

Effects of the Atlantic Slave Trade

The Atlantic slave trade greatly weakened several West African kingdoms, such as Kongo. The loss of so many people slowed population growth. Trade competition led to violence among their societies, but also made African slave-raiding kingdoms economically dependent on goods from Europe. Such societies were slow to develop more complex economies in which they produced their own goods. Thus, the slave trade set the stage for European conquest and imperialism of the late 19th century. (See Topic 6.2.)

Economically, African societies that conducted slave raids, such as the **Dahomey** and the **Oyo**, became richer from selling their captives to Europeans. This trade also had political effects, because when a society such as the Dahomey exchanged slaves for guns, its raiders easily took advantage of rival societies that had no firearms. Without firearms, neighboring groups could not fight off slave raids, so raiding societies became even richer and more fortified with firearms. Intergroup warfare thus became more common and bloodier as a result of the slave trade.

Slavery and Gender Those most affected by the slave trade were the peoples and civilizations of West Africa in present-day Ghana and Benin, from which most Africans were kidnapped or sold. Gender distributions in those regions became severely imbalanced, because more than two-thirds of those taken were males. The resulting predominance of women prompted a rise in polygyny (the taking of more than one wife) and forced women to assume duties that had traditionally been men's jobs.

Impact of New Foods While the Atlantic trading system weakened Africa in many ways, it also ultimately spurred population growth through an improved diet. The Columbian Exchange introduced new crops to the continent, such as the American crops maize, peanuts, and manioc (also known as yucca or cassava), which became staples in the African diet.

Political and Cultural Changes for Indigenous Peoples

Earlier land-based empires, such as those of the Romans, Muslims, and Mongols, all grappled with how to deal with conquered people's traditions and cultures. These empires either allowed traditions to exist or they tried to graft their ways onto those of their subjects. European empires in the Americas stood in stark contrast to these land-based empires. The Spanish and Portuguese empires managed to erase the basic social structures and many of the cultural traditions of the indigenous Americans within a century of when the first European explorers arrived. Europeans' actions nearly depopulated the Americas.

Political Changes: Colonial Administration Indigenous political structures in Latin America were soon replaced by Spanish and Portuguese colonial administrations. Spanish royalty appointed viceroys to act as administrators and representatives of the Spanish crown. To keep these viceroys from operating independently of the crown, Spain established audiencias, or royal courts, to which Spanish settlers could appeal viceroys' decisions or policies. Slow transportation and communication networks between Europe and the Americas, however, made it difficult for the Spanish crown to exercise direct control over New Spain. As a result, the Spanish throne did not focus on colonial affairs in the Western Hemisphere.

Cultural Changes The indigenous peoples of the Americas lost a great deal of their culture and history at the hands of conquerors. Conquistadors, such as Cortés in Mexico, ordered the burning of native books, which were

thought to be unholy. Thus, very few original accounts written in Nahuatl, the language of the Aztec, exist today.

The scarcity of firsthand accounts from indigenous peoples has shaped how historians view this period. For example, because the Spanish burned nearly all Aztec documents, most of the information about the Aztec comes from documents that were written by Spanish conquistadores and priests after the conquest. The authors' biases and lack of familiarity with Nahuatl limits the value of these sources. However, some sources are considered reliable. For example, in 1545, a Spanish priest named Bernardino de Sahagún began compiling the Florentine Codex, one of the most widely cited sources about Aztec life before conquest. (A codex is a type of book.)

Spanish and Portuguese conquerors transplanted their own languages and religion into the Americas. The remnants of this cultural interaction are present today. Although indigenous languages thrive in certain regions—in Guatemala and in the mountains of Mexico, for example—Spanish predominates through much of Latin America, and Brazilians overwhelmingly speak Portuguese.

By 1750, those born in America of Spanish origin, or **creoles**, enjoyed political dominance in New Spain. They soon began clamoring for independence from the Spanish throne. (Connect: Create a two-column chart comparing the influence of Spanish and Portuguese maritime empires on native populations from the 16th and 17th centuries. See Topics 4.4)

Effects of Belief Systems

The increase and intensity of newly established global connections between hemispheres extended the reach of existing religions. In some areas, the new connections contributed to the development of syncretic belief systems and practices. In other areas, the connections contributed to religious conflicts.

Syncretic Belief Systems in the Americas

African religions in the Americas provide powerful examples of religious syncretism, or the combining of different religious beliefs and practices. Africans melded aspects of Christianity, usually Roman Catholicism, with their West African religious traditions, such as drumming, dancing, and a belief in spirits that could take over and act through a person:

- Santería means "the way of the saints." Originally an African faith, it became popular in Cuba and then traveled throughout Latin America and to North America.
- Vodun means "spirit" or "deity." This belief system originated with African peoples of Dahomey, Kongo, and Yoruba who were enslaved and living in Saint-Domingue, which is now Haiti.
- Candomblé means "dance to honor the gods." It is a combination of Yoruba, Fon, and Bantu beliefs from different parts of Africa. It developed in Brazil.

Enslaved Africans in the United States also laid the roots for the African American church, a hybrid of Christianity and African spiritual traditions that remains one of the oldest and most stable institutions in African American communities.

Islam About 1 in 10 of the enslaved Africans practiced Islam. While some of the men who sailed with Columbus may have been Muslims, these enslaved Africans became the first significant presence of Islam in the Americas.

Religion in Latin America Several Catholic religious orders in Europe, such as the Dominicans, Jesuits, and Franciscans, sent missionaries to Latin America to convert people to Christianity. The missionaries were so successful that today most Latin Americans are Roman Catholic Christians. In recent decades, Protestant denominations have begun to gain members.

Numerous examples of religious syncretism originated in the Spanish colonies. Catholic saints' days that coincided with days honored by indigenous people were especially celebrated. In Mexico, a cult developed around the dark-complexioned Virgin of Guadalupe, who was revered for her ability to perform miracles.

Global Interactions and Religious Conflicts

Syncretic religions also developed in Afro-Eurasia as global interactions intensified. Sufism, for example, with its focus on personal salvation, helped spread Islam and may have influenced Sikhism, which blended Muslim and Hindu belief systems. The Mughal leader Akbar (see Topic 3.2) tried to mediate conflicts between Muslims and Hindus under his control.

Religion also played a role in conflicts as global interactions increased. The split between Sunni and Shi'a Muslims worsened conflicts between the Ottoman and Safavid empires. (See Topic 3.1.) The split between Catholicism and Protestantism, and between official state religions such as Anglicanism and other Protestant sects, helped drive the settlement of North America as people sought freedom to worship as they saw fit.

KEY TERMS BY THEME			
ECONOMY: Strategies capital Commercial Revolution Price Revolution joint-stock companies limited liability East India Company Dutch East India Company triangular trade monopoly	culture: Blending syncretism polygyny creoles Santéria Vodun Candomblé Virgin of Guadalupe	GOVERNMENT: Latin America viceroys audiencias SOCIETY: Slave Trade Dahomey Oyo	

Internal and External Challenges to State Power

The English made them drunk and then cheated them in Bargains. -John Easton, A Narrative of the Causes Which Led to Philip's Indian War, 1858

Essential Question: How did the development of state power result in external and internal challenges in the period between 1450 and 1750?

As empires developed and changed, many social, political, and economic groups resisted state expansion through a variety of challenges to state power. Some of these revolts occurred in the home of the empire. For example, the **Fronde** civil disturbances in France between 1648 and 1653 attempted to curb growing royal power.

Other disturbances took place within colonies. For instance, **Metacom's** War (1675–1678), also called King Philip's War, was in part a result of English colonists using underhanded tactics (such as that described in the quote above) in their continuing pressure to control Native American lands. Several powers sought to create empires in the 16th and 17th centuries. They fought with one another and with indigenous peoples.

Resistance to Portugal in Africa

By the 17th century, the Dutch and the English had pushed the Portuguese out of South Asia. (See Topic 1.3.) The Portuguese looked to Africa, where it had carried out slave raids since the 15th century, to build a colony. In 1624, Ana Nzinga became ruler of Ndongo in south-central Africa (present-day Angola). In addition to the slave raids by Portugal, other African peoples were attacking Ndongo. In exchange for protection from neighboring powers and an end to Portugal's raiding for slaves, Nzinga became an ally of Portugal. Nzinga was baptized as Christian, with the governor of the Portuguese colony as her godfather. However, the alliance broke down. Nzinga and her people fled west, taking over the state of **Matamba**. She then incited a rebellion in Ndongo, allied with the Dutch, and offered runaway slaves freedom in Matamba. Nzinga ruled for decades, building Matamba into an economically strong state.



Source: Schomburg Center for Research in Black Culture, Photographs and Prints Division, The New York Public Library Lithograph of Ana Nzinga, queen of Matamba, by François Villain (1800)

Local Resistance in Russia

In contrast to the Portuguese empire, pressures on state power came from within Russia, not outside of it. While conditions had improved for serfs (see Topic 1.6) in Western Europe by the 14th century, the same was not true for the serfs in Russia. Wars during the 14th and 15th centuries weakened the central government and increased the power of the nobility.

As demand for grain increased, nobles imposed harsh conditions on serfs. But Russian serfs had long been oppressed. First the Mongols and later the Russian princes collected heavy tribute and taxes (for services such as protection or to support the government's army) from the peasants. As a result, the peasants' debts increased, and over time more peasants lost their lands and were forced into serfdom.

Serfdom, Power, and Control The practice of serfdom benefitted the government because it kept the peasants under control, regulated by the nobility. Serfdom also benefitted the landowners because it provided free labor. Although townspeople were also controlled and not permitted to move their businesses freely to other cities, the serfs were practically slaves, their labor bought and sold along with the lands of their owners.

As Russian territory expanded west to the Baltic and east to Siberia, the institution of serfdom expanded with it. An agricultural state, Russia kept serfs tied to the land long after the practice had ended, practically if not legally, in

Western Europe. For example, Elizabeth I freed the last remaining serfs in England in 1574. In contrast, a law of 1649 chained Russian serfs to the lands where they were born and ensured their service to their landlords, who could buy and sell them and administer punishments. The village communes, called mirs, also controlled even the small landholders among the peasants.

Cossacks and Peasant Rebellions Southwest of Moscow, near the Black Sea, peasants who were skilled fighters lived on the grassy, treeless steppes. Many were runaway serfs who lived in small groups, influenced by the ways of the neighboring nomadic descendants of the Mongols. These fierce Cossack warriors were sometimes at odds with the central, autocratic government of the tsars. However, these fiercely independent warriors could also be hired as mercenaries to defend "Mother Russia" against Swedish, Tartar, and Ottoman forces. The Cossacks were thus important in Russia's expansion to the Ural Mountains and farther east into Siberia.

A Cossack known as **Yemelyan Pugachev** began a peasant rebellion against Catherine the Great in 1774 for giving the nobility power over the serfs on their lands in exchange for political loyalty, leaving the peasants without ties or recourse to the state. Falsely claiming to be Catherine's murdered husband, Peter III, Pugachev gathered a following of discontented peasants, people from different ethnic groups, and fellow Cossacks. At one point, these groups controlled the territory between the Volga River and the Urals. Within a year, though, the Russian army captured Pugachev and the Russian government executed him. The Pugachev Rebellion caused Catherine to increase her oppression of the peasants in return for the support of the nobles to help her avoid future revolts.

Rebellion in South Asia

In the 16th and 17th centuries, the Mughal empire controlled much of what is now India and Pakistan. (See Topic 3.1.) The Mughals centralized government and spread Persian art and culture as well as Islam. However, much of the population remained Hindu. The Maratha—a Hindu warrior group—fought the Mughals in a series of battles from 1680–1707. They created the Hindu Maratha Empire. It lasted until 1818, effectively ending the Mughal rule of India.

Revolts in the Spanish Empire

Spain also experienced rebellions within its territories. The **Pueblo Revolt** took place in 1680 against the Spanish in what is now New Mexico. The Pueblo and Apache, two indigenous groups, fought colonizers who were trying to force religious conversions. The indigenous people killed about 400 Spaniards, drove the rest out of the area, and destroyed churches. The Spanish reconquered the area in 1692.

Struggles for Power in England and Its Colonies

Although Spain colonized much of the Caribbean, England's power there grew stronger. England defeated Spanish colonists and took control of much of Jamaica in 1655. Slaves in the Caribbean and former Spanish territories in the Americas fought to gain freedom in what were known as Maroon wars (1728–1740 and 1795–1796).

Maroons were descendants of runaway African slaves in Jamaica. They escaped their owners and formed independent settlements. Queen Nanny, herself an escaped slave, united all the maroons of the island. Jamaicans later recognized her as a national hero.

Slave revolts were common in the Americas, especially in those locations where enslaved Africans outnumbered free Europeans. The first recorded slave revolt in what is now the United States was the Gloucester County Rebellion in Virginia in 1663. In this rebellion, enslaved Africans and white indentured servants conspired together to demand their freedom from the governor. Authorities found out about their plot, ambushed them, and arrested them.

Metacom's War, discussed earlier in this topic, was the final major effort of the indigenous people to drive the British from New England. The war spread throughout New England and resulted in the destruction of 12 towns. Some Native American groups, including the Mohegan and Pequot, sided with the English. Although Native American peoples continued to live in the region, the war ended with the subjugation of the Wampanoag people to the English colonists.

Struggles for power took place within England as well. In 1685, James II became king. James was Catholic, and his anti-Protestant measures enraged many English people. A group of nobles invited William of Orange, who was James's nephew and son-in-law, to invade England with an army and become the new king. He agreed, landing in England in 1688. James fled to France. In 1689, William and his wife Mary II (James's daughter) began their joint rule of England. Both William and Mary were Protestant, and the English throne remained in Protestant hands after that.

English people called this revolt the Glorious Revolution or the Bloodless Revolution. It strengthened the power of Parliament, which passed a law forbidding Catholics to rule England. That revolution took place without much violence, but religious tensions continued in England and throughout much of the world. (Connect: Create a graphic organizer of the rebellions that were beginning to challenge growing European empires.)

Internal an	d External Challenges to State Powers	
State	Internal/External Challenge	
Portugal	Dutch and English pushed Portugal out of South Asia (external) Rebellion in Ndongo allied with Dutch (external)	
France	Fronde civil disturbances against royal power (internal)	
Russia	Cossack rebellion (internal) Pugachev rebellion (internal)	
South Asia	Hindu Marathas ended Mughal rule (internal)	
Spanish Empire	Pueblo and Apache groups rebelled in present-day New Mexico (internal to the colonies)	
British Empire	 Maroon wars (internal to the colonies) Gloucester County Rebellion (internal to the colonies) Metacom's War (internal to the colonies) Glorious Revolution (internal) 	

ENVIRONMENT: Locations	GOVERNMENT: Leaders	SOCIETY: Revolts
Ndongo	and Rebels	Fronde
Matamba	Ana Nzinga	Metacom's War
Black Sea	Yemelyan Pugachev	Pugachev Rebellion
steppe	Queen Nanny	Pueblo Revolt
Maratha Empire	James II	Maroon wars
CULTURE: Social	William of Orange	Gloucester County
Organizations	Mary II	Rebellion
mirs	SOCIETY: Native American	Glorious Revolution
	Peoples	
	Mohegan	
	Pequot	
	Wampanoag	

Changing Social Hierarchies

We . . . order the said Jews and Jewesses of our kingdoms to depart and never to return or come back to them or to any of them.

-Ferdinand and Isabella, Edict of the Expulsion of the Jews, 1492

Essential Question: How were social categories, roles, and practices maintained or changed from 1450 to 1750?

As societies faced rebellions from outside and within, social hierarchies began to develop and transform. In Europe, the treatment of Jews showed that majorities treated non-majority ethnic groups in different ways. Jews had been expelled from England (1290), France (1394), and, as stated above, Spain (1492). The Ottoman Empire, however, provided a safe haven for Jews fleeing discrimination in Europe.

Throughout the world, civilizations developed distinctive social hierarchies. Different groups—including royalty, nobility, landowners, scholars, and soldiers—sought power and influence. In some societies, merchants and artisans began to form a middle class. And peasants, serfs, poor people, and slaves often struggled to stay alive.

Many states created policies that discriminated against some groups based on religion, ethnicity, or social class. For example, Huguenots—French Protestants in the predominantly Catholic country—suffered great persecution, and many fled to other European countries or to colonies. States also supported the formation of elite classes, including the boyars in Russia and the nobility in Europe. These elites both supported ruling power and challenged it.

Social Classes and Minorities in Gunpowder Empires

Tension between the military elite and absolutist rulers existed in three Islamic empires: the Ottoman (Turkey), the Safavids (Iran), and the Mughals (India). They are called *gunpowder empires* because they succeeded militarily by using guns and cannons when they first became widely available. (See Topic 3.1.)

Ottoman Society The Ottoman social system was built around a warrior aristocracy that soon began to compete for positions in the bureaucracy with the *ulama*, who were scholars and experts in Islamic law. Within the military, the Janissaries gained power and prestige. (See Topic 3.2.) Ultimately, the Janissaries tried to mount coups against the sultans.

As sultans became increasingly ineffective and incapable, strong advisors called viziers gained influential positions in government, where they spoke for the sultan. However, the sultan still had considerable powers. These included timar, a system in which the sultan granted land or tax revenues to those he favored. The sultan also used timar to reward soldiers and keep them loyal.

Treatment of Religious Minorities One reason for the success of the Ottoman Empire was its relative tolerance toward Jews and Christians. After the Spanish monarch exiled Jews from his kingdom in 1492, Sultan Mehmed II invited them to settle in Istanbul. Many did. Some Jews became court physicians and diplomats. Others contributed to the literary community and might have brought the printing press to the Ottoman Empire. While they were allowed to worship, they did not have full equality:

- They were permitted to live only in specified areas of the cities.
- They paid a tax called a jizya that was required of all non-Muslims in the empire.
- They could not hold top positions in the empire, which were reserved for Muslims.

Religious Toleration in the Mughal Empire The Mughal Empire in what is now India began in 1526. Probably its greatest emperor was Akbar the Great (ruled 1556–1605), remembered for his military successes and his administrative achievements. To help keep his huge, fractious empire together, Akbar, like Ottoman rulers, was tolerant of all religions. He ended the jizya tax. He gave grants of land and money to Hindus and Muslims, provided funds to build a Catholic church, and supported Sikhism. (For more on Akbar's religious toleration, see Topic 3.3.)

Women in the Ottoman Empire Women also played social and political roles at court. Many wives and concubines of the sultan tried to promote their own children as likely heirs to the throne. This practice led to "harem politics," a reference to the **harem**, a residence where a powerful man's wives and concubines lived.

One woman, Roxelana, became unusually powerful in the Ottoman Empire. When she was a young girl, Crimean raiders stole Roxelana from her home in Eastern Europe and sold her into slavery in the Ottoman Empire. She was forced to convert to Islam and entered the harem of Suleiman the Magnificent, sultan of the empire. Suleiman was notable for his military and administrative skill. Suleiman married Roxelana, which was highly unusual. She went from being a slave to commissioning ambitious public works projects.

Roxelana's son succeeded Suleiman. During the son's reign, viziers complained about a "sultanate of the women." They believed members of the harem had too much influence on politics. Roxelana's rise showed that it was possible—though rare—for people at this time to attain a different social class.

Other Social Classes Merchants and artisans formed a small middle class in the empire. Below the middle class were the peasants, who were usually poor—particularly because they had to pay tribute to the government

help support Ottoman armies. Below the peasants were slaves. They came from many areas as the Ottoman armies penetrated Central Eastern Europe, capturing prisoners of war in Ukraine and elsewhere. Barbary pirates, those who plied the seas near North Africa along the Barbary Coast (named for the Berbers who lived there) captured other European slaves in the Mediterranean and then sold them to the sultan or other highranking officials. Some people were impressed, or forced into service, in the navy as galley slaves. As many as one million people were impressed



Source: Titian, La Sultana Rossa, c. 1550. John and Mable Ringling Museum of Art. Wikimedia Commons

Roxelana became famous for her power as an Ottoman leader.

between the 16th and 19th centuries.

Manchu Power and Conflicts in the Qing Dynasty

China's Qing Dynasty lasted from 1644 until 1912. Under this dynasty, the Manchu people from Manchuria ruled over the majority Han Chinese and other ethnic groups. Like the Mongols some 400 years earlier, the Manchu were ethnically and culturally distinct from the people they ruled. However, they were less tolerant than the Mongol leaders, and they resolved to make their culture dominant in China.

Like the Mongols, the Qing put their own people in the top positions of government. Also like the Mongols, the Qing maintained continuity with some traditional Chinese practices. For example, they maintained the Chinese civil service exams and bureaucracy. They recruited Han Chinese to work under or alongside Manchus. In time, some—but not all—Chinese came to accept the Qing Dynasty as legitimate rulers of China.

Conflicts with the Han The Han ethnicity in China experienced Qing intolerance most severely. Although non-official Han civilians were allowed to wear Hanfu, or traditional Han clothing, all men were required to wear their hair in queues, the braided pigtail style of the Manchu. This policy was a test of loyalty for the Manchu, but it was also a humiliating reminder of the way Qing authority challenged traditional Confucian values. A man who refused to wear his hair in a queue could be executed.

The Qing used Han Chinese defectors to carry out massacres against Han who refused to assimilate to Qing practices. These defectors played a massive role in the Qing conquest of China. Han Chinese General Li Chengdong, for example, orchestrated three separate massacres in the city of Jaiding within one month. By the end of those four weeks, there was hardly a person left alive in the city. Later, Han Chinese defector Liu Liangzuo massacred the entire population of Jiangyin, killing between 74,000 and 100,000 people.

European Hierarchies

Like states in South and East Asia, European states also had a social hierarchy. In Europe the top level was royalty—members of a royal family. The aristocracy or **nobility** was the next highest level. Nobles were usually wealthy landowners. Nearly every state in Europe had laws that recognized a class of nobles and granted them special privileges. The nobility made up a small minority of the population but owned most of the land. They maintained their power through a system in which lands and titles passed down from one generation to the next through a system of inheritance.

The Nobility Makes Gains In the Netherlands and England, the nobility held power and took an active part in the government. Dutch landowners provided the stable support for local provincial government. In England, large landowners controlled Parliament. However, the landowners had to contend with radical religious sects and the middle class, which were two growing segments of the social order.

The Nobility Faces Losses Nobles struggled for power with royalty, the emerging middle class of merchants and skilled workers, the priestly class, and the common people. A failed uprising in France in the mid-1600s convinced **Louis XIV** that he must keep power from the common people and the nobility. The nobility also faced criticism from writers and thinkers of the time. The English statesman Thomas More wrote this about the nobility: "Living in idleness and luxury without doing society any good no longer satisfies them; they have to do positive evil."

Power of Royalty over Nobility Gunpowder, cannons, and other technological advances allowed rulers to destroy nobles' fortresses and seize their lands. Many rulers believed they deserved absolute power. Louis XIV is famous for saying, "I am the state." However, Frederick of Prussia saw things differently. He declared, "I am the first servant of the state." (Connect: Trace the changes in social hierarchy from feudal Europe to the 17th century. See Topic 1.6.)

Growing Acceptance of Jews Jews began to have a larger role in many countries starting in the 17th century. Their expulsion from Spain, by Ferdinand and Isabella, was particularly significant because so many Jews lived there. Many resettled in areas around the Mediterranean Sea, in northern Africa or the Middle East. Since the Hebrew word for Spain is *Sepharad*, Jews who trace their heritage back to Spain became known as **Sephardic Jews**. In contrast, Jews from central and eastern Europe became known as Ashkenazi **Jews**. Jewish scholars once used the term Ashkenazi to refer to Germany.

Under the influence of the scientific revolution and the Enlightenment, prejudices against Jews declined somewhat. Jews began to move more freely in Europe. They became particularly important in banking and commerce. The Netherlands was especially tolerant of religious dissent, and the Jewish minority faced less discrimination there than in most of Europe. Many Jews hoped the centuries of discrimination they had confronted were over.

Russian Social Classes

Moscow's social hierarchy continued that of Kievan Rus in the 11th century. The noble landowning class, the boyars, topped the social pyramid. Below them were the merchants. Last and most numerous were the peasants, who gradually sank into debt and. They became **serfs**, peasants who received a plot of land and protection from a noble. In return, they were bound to that land and had little personal freedom. If the noble sold their land, control of the serfs went with it. Though not technically slaves, serf led very hard lives.

The boyar class experienced tensions with the rulers similar to the tensions between nobles and rulers in Western Europe. Boyars of Novgorod opposed the expansionist policies of **Ivan IV**, known as "Ivan the Terrible" for murdering his own son, among other crimes. After Ivan's forces defeated Novgorod, Ivan confiscated the lands of his boyar opponents. He forced them and their families to move to Moscow, where he could keep them under surveillance.

Political and Economic Elites in the Americas

Social structures in the Americas changed drastically during this period because of the arrival of Europeans, the importation of African slave labor, and outbreaks of disease that killed tens of millions. The combination of European settlers, imported Africans, and the conquered indigenous populations led to the development of a new social hierarchy based on race and ancestry. Skin color became a signifier of power and status in many parts of the Americas and, in fact, in all European colonies. Racial and ethnic background defined social status in a formal way in the Spanish and Portuguese empires in the Western Hemisphere for centuries following the Europeans' arrival.

The Casta System in Latin America At the top of the social pyramid in Latin America stood the **peninsulares**, those who were born on the Iberian peninsula. Next down the pyramid were the criollos, those of European

ancestry who were born in the Americas. Below these two groups were the castas, people of mixed-race ancestry. At the top of this group were mestizos, those of mixed European and indigenous ancestry, followed by mulattoes, those of mixed European and African ancestry, and zambos, those of mixed indigenous and African ancestry. Indigenous peoples and enslaved Africans made up the bottom of the hierarchy.

People were assigned to their levels at baptism and could not move up except by intermarriage. People in the bottom layers of the hierarchy had to pay higher taxes and tributes, even though they could often least afford them.



Source: English Wikipedia

To show the importance of the casta system, the Spanish had paintings made delineating the groups within it. This painting shows a zambo, a person with one black parent and one indigenous parent.

KEY TERMS BY THEME

GOVERNMENT: Power and

Authority

Mehmed II

Akbar the Great

Roxelana

Qing Dynasty

Manchu

Li Chengdong

Liu Liangzuo

Louis XIV

Ivan IV

SOCIETY: Ottoman Empire

timar harem

SOCIETY: Russia

boyar

SOCIETY: Europe

nobility serf

SOCIETY: Latin America

peninsulares

criollo

castas

mestizos

mulattos zambos

ECONOMY: Piracy

Barbary pirates

impressed

CULTURE: Religion and

Ethnicity

queues

Sephardic Jew

Ashkenazi Jew

Continuity and Change from c. 1450 to c. 1750

The seams of [the world] were closing, drawn together by the sailmaker's needle.

-Alfred Crosby, historian who identified the Columbian Exchange, 1986

Essential Question: How did economic developments from 1450 to 1750 affect social structures over time?

B_v 1750, most of the world was integrated within a system of economic, political, and cultural connections. Better technology enabled the Eastern and Western hemispheres to connect. Meanwhile, Western European maritime powers created trading empires in the Indian Ocean trading network and in the Americas. Religions and other cultural practices continued to spread as a result of these interactions, but they also were transformed as new or syncretic forms developed. Coercive labor systems continued to exist in this newly connected world. However, new forms developed as new economic systems sought to exploit natural resources and to generate wealth for Western European nations.

Transoceanic Travel and Trade

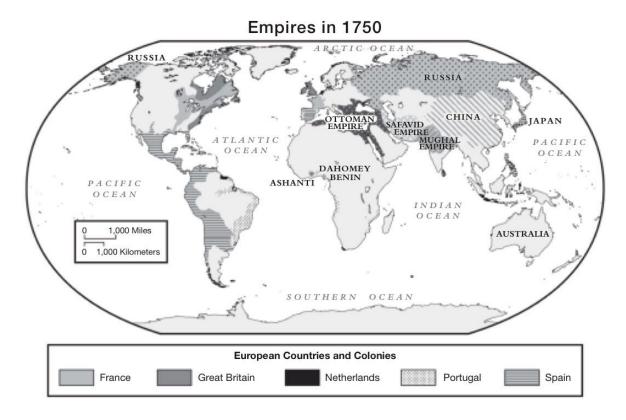
The most significant change to the global economy in this period was the integration of the Western Hemisphere into the global trading network. This change resulted from Western European states wanting to find a sea route to Asia. They borrowed and developed technology that made ocean travel easier:

- astronomical charts
- astrolabe
- compass
- magnetic compass
- lateen sail
- carrack
- caravel
- fluyt

The result was the Columbian Exchange: a biological exchange of crops, animals, people, and diseases between the Eastern and Western Hemisphere. The Columbian Exchange had wide-ranging effects on both hemispheres.

The Atlantic System The Columbian Exchange also caused the development of a transoceanic trading network called the Atlantic System. The Atlantic System was made up of the regions of Western Europe, Western Africa, and the Americas and involved the movement of goods and people among those regions. Columbian Exchange forever changed who grew what foods where and how they grew them. It also unleashed deadly diseases on populations that had no immunity to them. In addition, it led to massive migrations, many of them forced, and new social structures.

As people migrated or were forced to migrate within the Atlantic System, cultural changes occurred. For instance, religion spread and often created syncretic belief systems and practices.



Economic Changes

European transoceanic voyages resulted in the integration of the Western Hemisphere within the global trading network. This integration had profound effects on the global economy. Maritime trading empires emerged, led by the Portuguese and followed by the Dutch and the English. As a result, Europeans established trading ports and cities along the coasts of Africa and the Indian Ocean. This brought Europeans into contact—and often into conflict—with existing merchant networks.

One consequence of this contact and conflict was that Europeans came to dominate global trade at the expense of Arab, Indian, and Chinese merchants. Europeans, then, made considerable profits from transporting the goods from one region to another. (Connect: Identify the differences between the Atlantic System and trade on the Indian Ocean. See Topic 2.3.)

Colonies in the Americas In contrast to the trading empires in the Indian Ocean, Spain created an empire in the Americas. Soon Portugal, England, France, and the Netherlands established colonies there. The discovery of large deposits of silver in Spain's colonies helped further integrate Europeans into the global economy. Asian markets and merchants, especially in China, desired silver. Shipments of silver to Asia from the Americas became a regular feature of the global trade network and helped finance the increasing volume of trade between Asia and Europe. Some experts estimate that the amount of silver in the global economy tripled in the 16th century.

Mercantilism and Capitalism European rulers soon came to see the benefits of encouraging the expansion of trade, as the wealth that could be amassed was considerable. To ensure they participated in wealth accumulation from trade, many European monarchs devised mercantilist economic policies that would provide the ruler with a steady stream of income. While expanded international trade continued to be an important goal of European monarchs, mercantilism eventually gave way to capitalism as the predominant economic system in the new global economy. Investors formed joint-stock companies, also called chartered companies, so they could share the risks and rewards of global trading opportunities.

Effects of the New Global Economy

The new global flow of goods and profits produced some significant benefits. The flow of wealth into Europe helped to expand the middle class and provided the capital that would lead to the Industrial Revolution. However, the huge amounts of gold and silver flowing into Spain and China from the Americas also produced negative economic effects. In particular, the increase in the quantity of money in circulation caused inflation.



Source: Rijksmuseum Amsterdam, Wikimedia Commons Rembrandt, The Syndics of the Amsterdam Drapers' Guild, 1662. This shows a group of Dutch officials evaluating a carpet from Persia.

As a result of the activities of European merchants, regional markets in Europe, Africa, and Asia continued to prosper. Funding for the arts increased as merchants and governments used their rising profits and revenue to sponsor artists and authors. Some rulers used their sponsorship of the arts to produce art and architecture that helped to legitimize their rule. Other art symbolized the growing importance of global trade.

Demand for Labor Intensifies

The new global economy also brought about significant disruptions. The Columbian Exchange and the Atlantic System caused a demographic shift in Africa as the Atlantic slave trade intensified. Slavers captured and sold millions of African men. These African men ended up on American plantations, producing cash crops that included sugar, cotton, and tobacco. As a result, some African communities experienced a gender imbalance. Africa's population declined because of the Atlantic slave trade. Eventually, the population increased as people grew new crops, such as manioc.

Traditional forced labor systems, such as serfdom, continued in areas of Afro-Eurasia. However, other coerced labor systems developed in the Americas as a result of the Columbian Exchange and the Atlantic System, in addition to the chattel slavery of the Atlantic slave trade. Many European settlers first arrived in the Americas as indentured servants, contracted to work for a period of time before they were free to pursue other jobs or occupations. The encomienda and hacienda systems, as well as the adoption of the Inca mit'a system, are examples of other coerced labor systems in the Spanish American colonies.

New Social Structures As Europeans, Africans, and Native Americans coexisted in the new American colonies, the social structures of the Americas changed. New social systems appeared that were based on racial or ethnic identity. This division led to a rigid and hierarchial society, with white Europeans or Americans of European descent possessing the majority of wealth and political power. A new subculture appeared that consisted of people who were of mixed European and African heritage. Societal conflicts eventually led to revolutions.