



Chapter 9

Global Interactions: c. 1450 to c. 1750

I. CHAPTER OVERVIEW

By 1450 C.E., global interaction really got cranking. That's why this chapter only covers about 300 years, whereas the previous chapter covered nearly 800 years, and the first chapter covered an astonishing 8,000 years. Since the time period covered in this chapter is narrower, the amount of detail provided is greater. The rise of Europe as a major player on the world scene was very important during this time period, and because the AP focuses so much on the interaction among cultures, most of the regions of the world in this chapter are discussed in terms of their relation to Europe.

As with previous chapters, we suggest that you read through this chapter once, and then go back and focus on the things that you're not entirely clear about. To help you do that, here's the chapter outline.

I. Chapter Overview

You're reading it now.

II. Stay Focused on the Big Picture

Organize the huge social, political, and economic changes that occurred during this time period into some big-picture concepts.

III. Major European Developments 1450 to 1750

This section focuses on developments that influenced all of Europe, as opposed to more localized developments that affected particular countries or empires. Of course, the developments discussed in this section had an impact beyond the borders of Europe, which is why they're so important to the study of world history. We've organized the major developments into two main groups.

- A. Revolutions in European Thought and Expression
- B. European Exploration and Expansion: Empires of the Wind

IV. Developments in Specific Countries and Empires 1450 to 1750

After you've studied the major social, religious, economic, and political developments that swept through Europe and beyond, you should be able to put developments in individual countries and empires in the proper context. In addition to reviewing developments that occurred within the individual European powers, we'll help you review the unique civilizations that existed elsewhere on the globe, particularly the Ottoman Empire, India, China, and Japan. In the next chapter, we'll review the impact of European expansionism on Africa and Asia in the nineteenth century. Here's how we've organized this section.

- A. The European Rivals
 - 1. Spain and Portugal
 - 2. England
 - 3. France
 - 4. German Areas (The Holy Roman Empire, Sort Of)
 - B. Russia Out of Isolation
 - C. Islamic Gunpowder Empires: Ottoman, Safavid, and Mughal
 - D. Africa
 - E. Isolated Asia
- V. Technology and Innovations 1450–1750
- Europe gets guns, builds big ships, and explores the world
- VI. Changes and Continuities in the Role of Women
- Concubines, queens, and business women
- VII. Pulling It All Together
- Refocus on the big-picture concepts now that you’ve reviewed the details
- VIII. Timeline of Major Developments 1450–1750
- Major developments organized by time and place

II. STAY FOCUSED ON THE BIG PICTURE

As you review the details of the developments in this chapter, stay focused on some big-picture concepts. As you read, keep in mind the following questions:

1. Why did Europe become a dominant power during this time period? Was it because European nations vied for world dominance while other civilizations didn’t, or because of technological superiority? Was it for some other reason? Why did some of the European nation-states develop vast empires while others did not? There are lots of legitimate answers to these questions, and the content of this chapter will help you think about some of them.
2. What were some of the differences among the ways in which non-European cultures interacted with Europe? What influences contributed to these differences? What were the consequences? You’ll notice that European powers penetrated different parts of the globe to different degrees. Pay attention to why this was true—it will not only tell you a lot about Europe, but also about those individual non-European cultures as well.

3. How did the global economy change during this time period? What was the impact on the world's civilizations? As you read, notice how economic considerations drove much of the world's interactions. Pay attention to how the larger global economy impacted the various regions of the globe.
4. What were the impacts of global interaction on the environment? Conversely, what were the impacts of the environment on human societies? What ideas, diseases, plants, and animals traveled the globe along with human settlement? The need for new resources brought massive changes, but at the same time, the environment acted on human societies, sometimes with disastrous consequences. Pay attention to the effects of the 500 year period of global cooling that began around 1500 and resulted in shortages of crops, famines, and susceptibility to diseases.

III. MAJOR EUROPEAN DEVELOPMENTS 1450–1750

During the three centuries covered in this chapter, profound changes occurred on the European continent. These changes affected life on all levels: the way people viewed themselves (their past, their present, and their future potential), the way governments viewed their authority, the way religion intersected with politics and individuality, and the way Europeans thought about and interacted with the rest of the world.

By the end of these 300 years, the European countries will have used their new technologies, new ideas of governing, and new forms economic organization to become the dominant world powers. Much of their success was based on competition and rivalry as they raced to secure faster trade routes, new colonial possessions, and attempted to gain control of key resources. And much of their success came at the expense of the land-based empires of Asia and the declining empires in the Americas.

So while the previous chapter was all about interactions, this one covers the period of European maritime empire-building that resulted from those initial interactions across Asia and the Indian Ocean. As you review the enormous developments in Parts A and B below, think about how they were linked together and impacted each other.

A. Revolutions in European Thought and Expression

By the 1300s, much of Europe had been Christian for a thousand years. The feudal system had dominated the political and social structures for five hundred years, and the ancient classical civilizations of Greece and Rome had been almost entirely forgotten.

Life in the Middle Ages was dominated by local issues, concern for salvation, territorial disputes, the Black Death, a lack of education outside monasteries, and

small-scale trade. As you read in the last chapter, near the end of the Middle Ages, countries began to unify under centralized rule. The Crusades exposed Christians to the advanced Islamic civilizations, increased trade fueled contact with other parts of the world, and universities became great centers of learning. This increased contact with foreign powers, and scholasticism exposed Europeans not only to developments in the rest of the world but also to history. Recall that the Byzantine and Islamic Empires had preserved much of the heritage of ancient Greece and Rome, even as they built unique civilizations of their own and made huge contributions to ancient texts, especially in the areas of mathematics and science. As Europe expanded its worldview and interacted more frequently with these two empires, it rediscovered its own past.

The combination of a rediscovered past and a productive present led to major changes in the way Europeans viewed the world and themselves. These new perspectives led to four massive cultural movements: the Renaissance, the Protestant Reformation, the Scientific Revolution, and the Enlightenment. These revolutions in expression and thought changed the world. In a span of just a few hundred years, Europe went from being a backward, isolated, self-involved outpost on the perimeter of the major civilizations to the east to the dominant civilization in the world.

We'll talk about the details of European global exploration and expansion later in this chapter. In the meantime, you should understand that this exploration and expansion were partly causing—and partly caused by—the major developments in thought and expression that are listed below.

1. The Renaissance: Classical Civilization Part II

After the Black Death abated and the population of Europe once again began to swell, the demand for goods and services began to increase rapidly. Individuals moved to the cities. A middle class made up of bankers, merchants, and traders emerged due to increased global trade. In short, Europe experienced an influx of money to go along with its newfound sense of history. It shouldn't be too surprising that a sizeable chunk of this money was spent on recapturing and studying the past.

Humanism: A Bit More Focus on the Here and Now

In medieval Europe, thoughts of salvation and the afterlife so dominated personal priorities that life on Earth was, for many, something to be suffered through on the way to heaven rather than lived through as a pursuit of its own. As Europeans rediscovered ancient texts, they were struck with the degree that humanity—personal accomplishment and personal happiness—formed the central core of so much of the literature and philosophy of the ancient writers. The emphasis began to shift from fulfillment in the afterlife to participating in the here-and-now.

This is not to say that Europeans suddenly became hedonistic, focused only on worldly pleasures. To the contrary, the Catholic Church and a focus on the afterlife remained dominant. However, Europeans were fascinated with the ancient Greek and Roman concepts of beauty and citizenship, and as a consequence they began to shift their focus to life on Earth and to celebrating human achievements in the scholarly, artistic, and political realms. This focus on human endeavors

became known as **humanism**. Its impact was far-reaching because a focus on present-day life leads to a focus on individuals, and a focus on individuality inevitably leads to a reduction in the authority of institutions.



The Arts Stage a Comeback

The Renaissance literally means “rebirth,” and this was nowhere more apparent than in the arts. In Italy, where powerful families in city-states such as Florence, Venice, and Milan became rich on trade, art was financed on a scale not seen since the classical civilizations of Greece and Rome. The **Medici** family in Florence, for example, not only ruled the great city and beyond (several family members not coincidentally became popes!), but turned it into a showcase of architecture and beauty by acting as patron for some of the greatest artists of the time, including **Michelangelo** and **Brunelleschi**.

Unlike medieval paintings, which depicted humans as flat, stiff, and out of proportion with their surroundings, paintings of the Renaissance demonstrated the application of humanistic ideals learned from the ancients. Painters and sculptors such as **Leonardo da Vinci** and **Donatello** depicted the human figure as realistically as possible. Careful use of light and shadow made figures appear full and real. Many artists were so committed to this realism that they viewed and participated in autopsies to fully understand the structure of the human body.

Artists also employed a technique known as linear perspective, developed by Tommaso Masaccio and Filippo Brunelleschi, in which nearby objects were drawn bigger while far objects were drawn smaller; the lines of perspective merged into a distant focal point, giving the painting a three-dimensional quality. This use of perspective was a huge development toward realism.

The Catholic Church noticed the developments in artistic techniques, and soon the greatest artists were hard at work adorning the great palaces and cathedrals of Italy. For four years, 1508 to 1512 c.e., Michelangelo painted the now-famous ceiling of the Sistine Chapel while lying on his back on scaffolding. Meanwhile, Renaissance architects borrowed heavily from the Greek and Roman traditions to build huge domes on cathedrals in Florence and Rome.

The artistic movement that engulfed the Italian city-states also spread northward and westward through much of western Europe, although it was generally more subdued and often more religious there than it was on the Italian peninsula. Still, even in northern Europe, especially in artistic centers such as Flanders, the influences of the resurgent Western heritage could be felt. For example, the Dutch **Van Eyck** brothers and the German painter **Albrecht Dürer** adopted the naturalism of the Italian painters and gained fame as portraitists. While highly realistic in style, most northern paintings were religiously motivated, and therefore even secular paintings or portraits were filled with religiously symbolic objects and color choices that resonated with the Christian faithful.

Still, while the northern painters and sculptors were quite talented, they were outnumbered and in many cases outdone by their Italian counterparts. The bigger contribution of the northern Renaissance came not from the visual arts, but from literature.

Contrast Them: Art in the Middle Ages and the Renaissance
Medieval art was almost entirely religious; Renaissance art was religious and secular, combining both Christian and humanist elements. Medieval art existed mostly in cathedrals; Renaissance art was commissioned by both religious and secular leaders, and adorned public plazas and homes. Medieval art was flat and stiff; Renaissance art was realistic, softer, and more human. In short, Medieval art didn't try to be worldly; Renaissance art tried very much to be of this world.

Western Writers Finally Get Readers

Although printing was developed in China centuries earlier (remember which dynasty? The Song), moveable type wasn't invented in Europe until the mid-1400s, when **Johannes Gutenberg** invented the printing press. Prior to Gutenberg's invention, the creation of books was such a long and laborious task that few were made. Those that

were made were usually printed in Latin, the language of scholars and the Roman Catholic Church. As a result, the typical person didn't read.

With the invention of the **printing press**, all that changed. Books became easy to produce and thus were far more affordable. The growing middle class fueled demand for books on a variety of subjects that were written in their own **vernacular**, or native language, such as German or French. The book industry flourished, as did related industries such as papermaking, a craft that was learned from the Arabs (who learned it from the Chinese—gotta love those trade routes!). More books led to more literate and educated people. The newly literate people desired more books, which continued to make them more educated, which again increased their desire for books, and so on.

Many of the first books and pamphlets that were published were practical or political in nature. In 1517 C.E., **Machiavelli**, for example, published *The Prince*, a how-to book for monarchs who wanted to maintain their power. The work had a profound impact because it suggested that monarchy should be distinct from the church and that a leader should act purely in self-interest of the state rather than on the basis of vague moral tenets (since then, the term *Machiavellian* often has a negative connotation, implying a ruler who is ruthlessly selfish, scheming, and manipulative). But the printed word extended well beyond the courts of nobles. It changed life for the developing middle class because reading became a casual endeavor. Books were printed for no purpose other than entertainment or diversion, and this led to literature that increasingly focused on the daily lives of regular people, and humanized traditional institutions such as the military or the nobility.

Literature blossomed in the Renaissance of northern Europe, especially in the Low Countries (today known as the Netherlands, Luxembourg, and Belgium) and in England. In the early sixteenth century, **Erasmus**, one of the most well-known learned men of the time, counseled kings and popes. He wrote *In Praise of Folly*, which satirized what he thought were the most foolish political moves to date. At around the same time, **Sir Thomas More** of England wrote *Utopia*, which described an ideal society, in which everyone shared the wealth, and everyone's needs were met. More and Erasmus were Christian humanists, meaning that they expressed moral guidelines in the Christian tradition, which they believed people should follow as they pursued their personal goals. The Renaissance also produced **William Shakespeare**, arguably the most famous European writer from this time.

Shakespeare's works reflected the period well because they not only exemplified humanism in its extreme—focusing on character strengths and flaws, comedy and tragedy—but also illustrated the era's obsession with the politics and mythology of classical civilization. His play *Julius Caesar* and his poem *Venus and Adonis* are among his many works that explored the Classical world.

2. The Protestant Reformation: Streamlining Salvation

You might recall from the previous chapter that during the Middle Ages (600–1450), the Roman Catholic Church was an extremely powerful force in Europe. While political power was diffused under the feudal system, and while the various European princes and political powers frequently clashed with the pope, emperors and princes knew that their power increased if the church blessed their reign. As a consequence, the pope wielded considerable political power.

The church was the one institution that the people of western Europe had in common. It was a unifying force, an institution believed to be sanctioned by God. With such widely accepted credentials, the church held itself out as not only the undisputed authority on all things otherworldly, but also the ultimate endorsement on all things worldly. With one foot on Earth and the other in heaven, the pope—and with him the hierarchy of the Catholic Church—acted as the intermediary between man and God. Nearly everyone in Europe understood this clearly: To get to heaven, you had to proceed by way of the Catholic Church.

The church understood the power it had over the faithful. When it needed to finance its immense building projects plus pay for the huge number of Renaissance artists it kept in its employ, it began to sell **indulgences**. An indulgence was a piece of paper that the faithful could purchase to reduce time in purgatory (the place Roman Catholics believed they would go after death). There, they would expiate (look it up!) their sins and then be allowed to enter heaven. Because purgatory was not a happy place to go, people greatly valued the concept of reducing their time there. Selling indulgences was not only a means of generating income but also a way for the church to maintain power over the masses.

During this time, land-owning nobles grew increasingly resentful of the church, which had amassed an enormous amount of power and wealth and exploited a huge number of resources at the expense of the nobles. This resentment and mistrust fueled anti-church sentiments. The selling of indulgences propelled the frustration into the ranks of the peasant class and helped set the stage for confrontation. The selling of indulgences also confirmed to many the corrupt nature of the church.

Martin Luther: Monk on a Mission

In 1517, a German monk named **Martin Luther** supposedly nailed a list of 95 theses on a church door—a list that was distributed quickly and widely by aid of the newfangled printing press. His list outlined his frustrations with current church practices, including the church's practice of selling indulgences, which he said amounted to selling salvation for profit. Luther's frustrations had been building for some time. He had traveled to Rome, and was unnerved by the worldly nature of the city and the Vatican (the seat of the Catholic Church), which was in

the midst of getting a Renaissance makeover—upgrades that were clearly paid for with money from churchgoers in far-away places.

Among Luther's many complaints was his insistence that church services should be conducted in the local languages of the people, not in Latin, a language that the German people didn't understand. To help in this effort, he translated the Bible into German so that it could be read and interpreted by everyone, as opposed to making people dependent on the church for biblical understanding. Luther's most significant claim was that salvation was given directly by God through grace, not through indulgences, and not through the authorization of the church. In other words, Luther suggested that the Bible teaches that people could appeal directly to God for forgiveness for sins and salvation. This revolutionary concept significantly reduced the role of the church as the exclusive middleman between God and man. In essence, the church was marginalized to an aid for salvation as opposed to the grantor of salvation.

Pope Leo X was outraged, and ordered Luther to recant, or formally retract, his theses. Meanwhile, Luther's ideas were spreading through much of northern Europe as the printing presses continued to roll. When Luther refused to recant, he was excommunicated. When he was allowed to address church leaders and princes at an assembly in Worms (1521), he refused to abandon his convictions. The pope called for his arrest, but a nobleman from Luther's hometown protected him, and Luther continued to write and spread his ideas.

Christianity Splits Again

The consequences of Luther's actions were enormous. Luther's followers began to refer to themselves as **Lutherans**, and began to separate themselves from the Catholic Church. What's more, other theologians began to assert their own biblical interpretations, some of which were consistent with Luther's; others were wildly different. Once the floodgates were opened, Luther had no control over the consequences.

John Calvin from France led a powerful Protestant group by preaching an ideology of predestination. Calvinist doctrine stated that God had predetermined an ultimate destiny for all people, most of whom God had already damned. Only a few, he preached, would be saved, and those people were known as the Elect. In the 1530s, the city of Geneva in Switzerland invited Calvin to construct a Protestant theocracy in their city, which was centrally located and near France. From there, Calvinist teachings spread, and were as influential to successive Protestant Reformations as were the doctrines of Luther. **Calvinism**, for example, greatly influenced religious development in Scotland under John Knox, and in France with the growth of the Huguenots.

In time, the Reformation spread to England, motivated by political as well as religious reasons. **King Henry VIII** did not have a son as heir to his throne and sought to abandon his wife, Catherine of Aragon, because of it. When the pope denied an annulment of the marriage, Henry VIII renounced Rome and declared himself the head of religious affairs in England. This sat well with those in England who already were becoming Protestants, but much of England remained Catholic. Nevertheless, Henry pushed forward and presided over what was called

the **Church of England**, also known as the Anglican Church. Henry VIII went on to marry five more wives and to father a son, who died young. His daughter Elizabeth, also a Protestant, rose to the throne, but more on that later when we discuss political developments in England.

Focus On: Independent Thinking

The **Protestant Reformation** was a huge deal in world history. Its significance went well beyond the religious arena. While previous skirmishes between the pope and the nobles had been about papal political authority, Luther's challenges were theologically based and directed at the pope's religious role. Luther asserted that the people did not need the Catholic Church, or its priests, in order to interact with God; they only needed their Bibles. If the religious authority of the pope could be so openly and brazenly challenged, and commonly accepted understandings of God's relationship to man could be re-evaluated and rearticulated, then people's understanding of other concepts might need to be re-evaluated as well. Put simply, by challenging the pope, Luther made it acceptable to question the conventional wisdom of the church. With newly printed Bibles available in their own languages, lay people could learn how to read and form their own relationships with God. As the common masses became literate and better educated, more and more Europeans began to question both the world around them and the authority of the church. Europeans desired to search for their own answers to the questions of the universe. In short, the Protestant Reformation paved the way for revolutions in education, politics, and science.

The Counter-Reformation: The Pope Reasserts His Authority

During the **Catholic Reformation** (also known as the **counter-reformation**) of the sixteenth century, the Catholic Church itself reformed, while also succeeding in winning back some of the souls it had lost to the fledgling Protestant denominations.

At first, the Catholic Church responded ineffectively to the new religious trends. But when Luther refused to recant and German princes started to convert to Lutheranism, the Catholic Church began to institute reforms, which were led by Spain, a dedicated Catholic country. By banning the sale of indulgences, consulting more frequently with bishops and parishes, and training its priests to live the Catholic life instead of merely preaching it, the Catholic Church regained some of its lost credibility. However, make no mistake, the counter-reformation was as much about reaffirming as it was about reforming, and the church made it clear that it was not bowing to Protestant demands, but rather clarifying its position. Weekly mass became obligatory, and the supreme authority of the pope was re-established. During this time, a former Spanish soldier and intellectual, **Ignatius Loyola**, founded the society of Jesuits, which was influential in restoring faith in the teachings of Jesus as interpreted by the Catholic Church. The **Jesuits** practiced self-control and moderation, believing that prayer and good works led to salvation. The pious example of the Jesuits led to a stricter training system and higher expectations of morality for the clergy. Because of their oratorical and political skills, many Jesuits were appointed by kings to high palace positions.

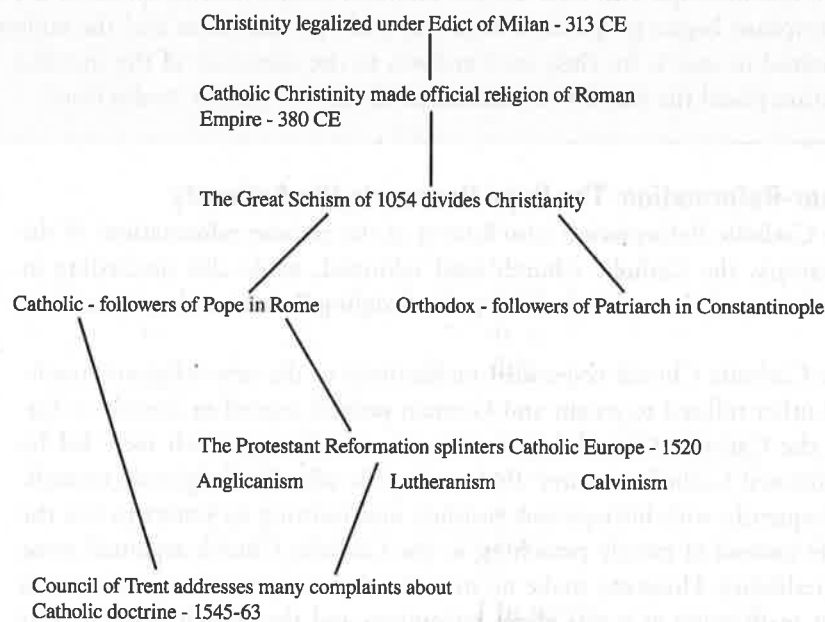
A group of church officials held a series of meetings known as the **Council of Trent** to direct the counter-reformation period from 1545 to 1563, dictating and defining the Catholic interpretation of religious doctrine and clarifying the Catholic Church's position on important religious questions, such as the nature of

salvation. During this period, “heretics” were once again tried and punished, and the Catholic Church re-established Latin as the language to be used in worship.

The result? The Catholic Church staged an amazing comeback. The counter-reformation proved successful in containing the southward spread of Protestantism. By 1600, southern Europe (especially Italy, Spain, and Portugal), France, and southern Germany were heavily Catholic. Northern Germany and Scandinavia were mostly Lutheran. Scotland was Calvinist, as were pockets within central Europe and France. And England, as mentioned previously, was Anglican.

The result of the result? Wars, of course. But more on that when we discuss developments in individual countries.

Evolution of Christianity: A Timeline



3. The Scientific Revolution: Prove It or Lose It

Prior to the Scientific Revolution, Europe and most of the world believed, as Aristotle asserted, that Earth was the center of the universe and that the sun, stars, and planets revolved around the earth. There certainly were numerous inconsistencies observed by scientists with regard to this theory, but most scientists continued to attempt explaining the inconsistency rather than investigating the theory itself.

During the Middle Ages, the Catholic Church and the political structure reinforced the lack of scientific investigation. The church focused everyone’s attention on salvation, while the feudal system focused everyone’s attention on mundane, local concerns. In other words, the lives of the vast majority of Europeans, in-

cluding the nobility, were not engaged in big-picture concepts beyond military conquest and eternal salvation.

But as Europe changed dramatically due to the Renaissance and the Protestant Reformation, and as the growth of universities gave structure to burgeoning questions about the world, educated Europeans began to examine the world around them with new vigor. The results were revolutionary.

The Copernican Revolution: A Revolution About Revolutions

Just as the counter-reformation was gaining momentum, Nicolaus Copernicus developed a mathematical theory that asserted that the earth and the other celestial bodies revolved around the sun and that the earth also rotated on its axis daily. This was pretty shocking stuff to many in the “establishment.” Although most educated people had accepted the world was a sphere for centuries, even well before Columbus’s voyage in 1492, the earth’s position at the center of the universe was widely accepted. Copernicus’s heliocentric theory of the solar system brought about much debate, and much skepticism. In 1543, Copernicus published *On the Revolutions of the Heavenly Spheres* to prove his points, but it wasn’t until Galileo—who discovered the moons of Jupiter with his telescope—that the Copernican model really took off.

In 1632, Galileo published his *Dialogue Concerning the Two Chief Systems of the World*. He wrote the work in Italian in order to reach a wide audience and hopefully defeat the defenders of Ptolemy (the scientist who promoted the earth as the center of the universe). He showed how the rotation of the earth on its axis produced the apparent rotation of the heavens, and how the stars’ great distance from the earth prevented man from being able to see their changed position as the earth moved around the sun. His proofs made it difficult to continue accepting the Ptolemaic model, which just so happened to be the model sanctioned by the Roman Catholic Church. The church put Galileo on trial before the Inquisition in Rome for heresy and he was forced to recant. His book was placed on **The Index**, a list of banned heretical works (where, astonishingly, it remained until 1822!). Nevertheless, while under house arrest, Galileo continued to research and document his findings.

The Scientific Method: In Search of Truth

Recall that during the High Middle Ages and the early Renaissance, the scholastic method of reasoning was deemed the most reliable means of determining scientific meaning. Scholasticism was based on Aristotelianism and therefore used reason as the chief method of determining truth. Sometimes reason led to heresies, other times reason was used to explain and complement faith, as was the case with Thomas Aquinas.

The scientific method was born out of the scholastic tradition, but it took it to considerable new levels. Reason alone wasn’t good enough. Under the scientific method, one had to prove what the mind concluded, document it, repeat it for others, and open it up to experimentation. At its highest stage, the scientific method required that any underlying principles be proven with mathematical precision.

Copernicus and Galileo, of course, were two fathers of the scientific method, but it took more than a century for the method to be widely used. There were many contributors. **Tycho Brahe** (1546–1601) built an observatory and recorded his observations, and **Francis Bacon** (1561–1626) published works on inductive logic. Both asserted that scientists should amass all the data possible through experimentation and observation and that the proper conclusions would come from these data. Then, **Johannes Kepler** (1571–1630) developed laws of planetary motion based on observation and mathematics. **Sir Isaac Newton** took it one step further. In *The Mathematical Principles of Natural Philosophy* (1697), he invented calculus to help prove the theories of Copernicus, Galileo, Bacon, and others. He also developed the law of gravity.

Together, these men and others developed a widely used system of observation, reason, experiment, and mathematical proof that could be applied to every conceivable scientific inquiry. With precise scientific instruments, like the microscope and the telescope, a scientist could retest what another scientist had originally tested. Many scientific inquiries were conducted with practical goals in mind, such as the creation of labor-saving machines or the development of power sources from water and wind. Francis Bacon, for example, argued that science was pursued not for science's sake but as a way to improve the human condition.

All of this led to the Industrial Revolution, which will be discussed in the next chapter. In the meantime, however, you need to understand that the Scientific Revolution led to a major rift in society. While many Christians were able to hold on to their beliefs even as they studied science, many also began to reject the church's rigid pronouncements that conflicted with scientific findings. Many of these people either became **atheists** (who believe that no god exists) or **deists** (who believe that God exists but plays a passive role in life).

Deism: God as a Watchmaker

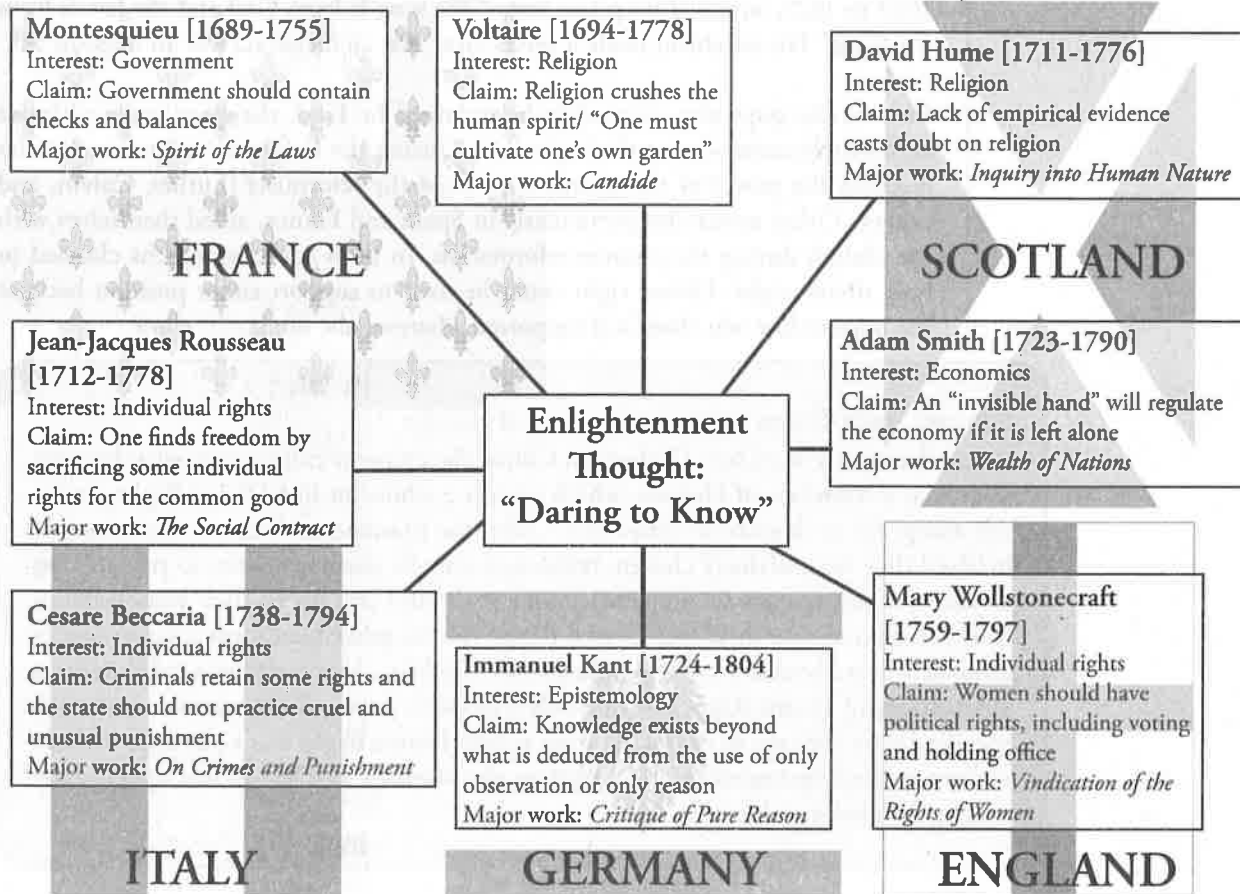
The Scientific Revolution contributed to a belief system known as deism, which became popular in the 1700s. The deists believed in a powerful god who created and presided over an orderly realm but who did not interfere in its workings. The deists viewed God as a watchmaker, one who set up the world, gave it natural laws by which to operate, and then let it run by itself (under natural laws that could be proved mathematically). Such a theory had little place in organized religion.

Focus On: The Church Defends Itself on Two Fronts
Both the Protestant Reformation and the Scientific Revolution challenged the absolute authority of the pope. The Reformation challenged the pope's authority on theological grounds; the Scientific Revolution challenged his authority on scientific and mathematical grounds. Don't presume that the Protestant Revolution was the main instigator of religious change during this time period. The religious implications of the Scientific Revolution were just as huge.

4. The Enlightenment: Out of Darkness, Into the Light

While the scientists put forth revolutionary ideas, the philosophers and social critics had a revolution of their own. The Enlightenment of the seventeenth and eighteenth centuries focused on the role of mankind in relation to government, ideas which greatly influenced the framers of the U.S. Constitution. Because the U.S. Constitution has since been a model for so many others across the globe, it's safe to say that the writers of the Enlightenment period changed the world.

Who were these Enlightenment writers? Here's an overview:



First a Little Background: Divine Right

During the High Middle Ages and through the Renaissance and counter-reformation, the church allied itself with strong monarchs. These monarchs came to power by centralizing authority, uniting people under a common banner of nationalism, forming empires by promoting exploration and colonization (much more on this later), and ruling with absolute authority. Because the vast majority of their populations were Christian, the best way to rule was to align oneself with God. Monarchs became convinced that God had ordained their right to govern, and that meant that people had a moral and religious obligation to obey them. This concept was known as the **divine right** of monarchs. James I of England, who ruled from 1603 to 1625, summed it up this way: “The king is from God and the law is from the King.” His statement made it pretty clear that an illegal act was an ungodly act.

Because the pope also claimed to be ordained by God, the question of ultimate authority became very confusing indeed. During the Reformation, monarchs who resented the power of the church supported the reformists (Luther, Calvin, and others). Other monarchs, particularly in Spain and France, allied themselves with the church during the counter-reformation. In both cases, monarchs claimed to have divine right. Divine right could be used to support either position because the bottom line was that God supported whatever the monarchs chose.

Contrast Them: Divine Right and Mandate of Heaven

Recall that under the Chou Dynasty in China, the emperor ruled under what became known as a **Mandate of Heaven**, which sounds a whole lot like Divine Right, and it was except for an important difference. Under the Mandate of Heaven, the emperors believed they were divinely chosen, but would only be given authority to rule so long as they pleased heaven. If they didn't rule justly and live up to their responsibility, heaven would ensure their fall. Divine Right, on the other hand, was used to justify absolute rule without any corresponding responsibilities. Monarchs who ruled under a strict theory of Divine Right saw themselves as God's personal representatives, chosen specifically for the task of ruling. In other words, Divine Right was a privilege without any corresponding responsibilities, whereas the Mandate of Heaven was upheld only so long as rulers acted justly.

The Social Contract: Power to the People

During the seventeenth century, philosophers and intellectuals began to grapple with the nature of social and political structures, and the idea of the social contract emerged. The social contract held that governments were formed not by divine decree, but to meet the social and economic needs of the people being governed. Philosophers who supported the social contract theory reasoned that because individuals existed before governments did, governments arose to meet the needs of the people, not the other way around. Still, because different philosophers looked at human nature differently, they disagreed about the role of government in the social contract.

Thomas Hobbes (1588–1679), who wrote *Leviathan*, thought that people by nature were greedy and prone to violent warfare. Accordingly, he believed the role of the government under the social contract should be to preserve peace and stability at all costs. Hobbes therefore advocated an all-powerful ruler, or Leviathan, who would rule in such a heavy-handed way as to suppress the natural war-like tendencies of the people.

John Locke (1632–1704), who wrote *Two Treatises on Government*, had a more optimistic view of human nature, believing that mankind, for the most part, was good. Locke also believed that all men were born equal to one another and had natural and unalienable rights to life, liberty, and property. Since mankind was good and rational, and thus capable of self-rule, Locke believed the primary responsibility of the government under the social contract was to secure and guarantee these natural rights. If, however, the government ever violated this trust, thus breaking the social contract, the people were justified in revolting and replacing the government.

Jean-Jacques Rousseau (1712–1778) took the social contract theory to its furthest extreme, arguing that all men were equal and that society should be organized according to the general will, or majority rule, of the people, an idea he outlined in his famous work *The Social Contract* (1762). In a rational society, he argued, each individual should subject himself to this general will, which serves as the sovereign or ruling lawmaker. Under this philosophy, the individual is protected by the community, but is also free (or as free as one can be in organized society). He argues the essence of freedom is to obey laws that people prescribe for themselves. Needless to say, Rousseau's beliefs not only had a tremendous effect on revolutionary movements in the colonies of the European empires, but also inspired the anti-slavery movement.

In addition to philosophers, there were many Enlightenment writers. **Voltaire** espoused the idea of religious toleration. **Montesquieu** argued for separation of powers among branches of government. In all cases, Enlightenment writers didn't presume that government had divine authority, but instead worked backward from the individual and proposed governmental systems that would best serve the interest of the people by protecting individual rights and liberties.

While the real fruits of the Enlightenment were the revolutionary movements in the colonies and later in Europe, the new political ideas also affected the leadership of some eighteenth-century European monarchs. The ideals of tolerance, justice, and improvement of people's lifestyle became guidelines for rulers known as **Enlightened Monarchs**, such as Joseph II of Austria and Frederick II of Prussia. To be sure, they still ruled absolutely, but they internalized the Enlightenment philosophy and made attempts to tolerate diversity, increase opportunities for serfs, and take on the responsibilities that their rule required.

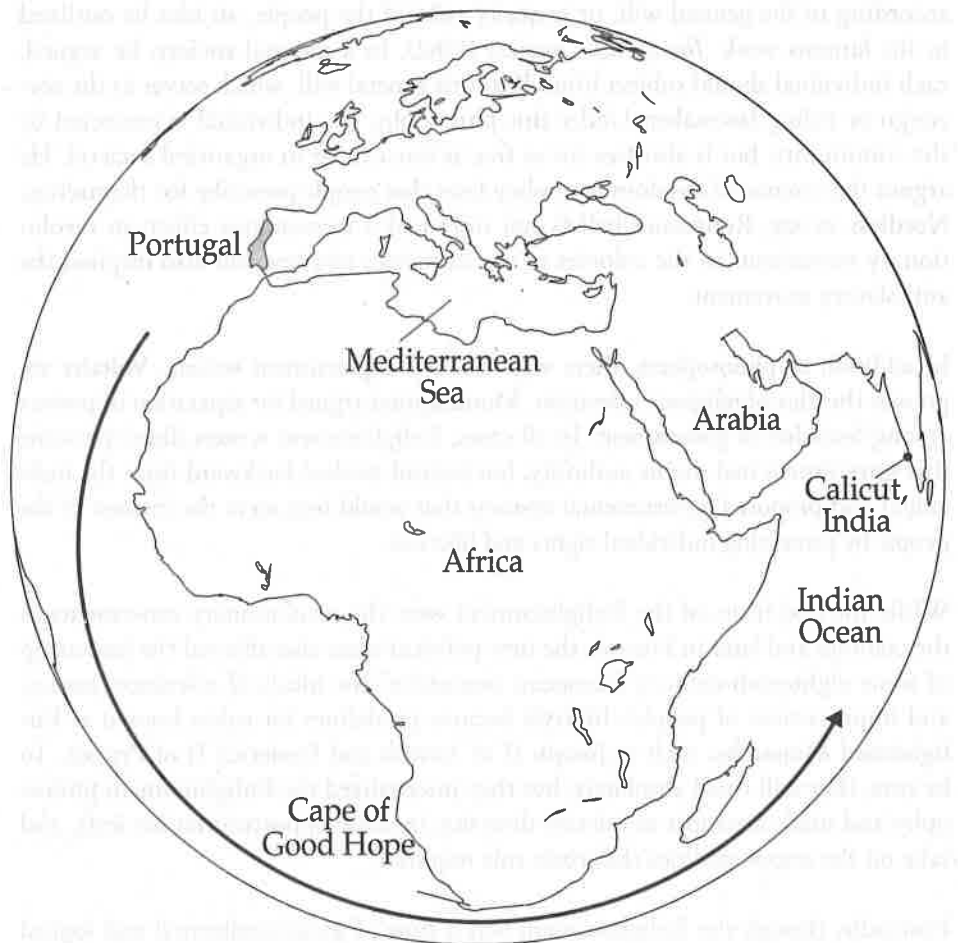
Ironically, though the Enlightenment was a time of great intellectual and logical advancement, it was also a time of artistic regression. The **Neoclassical Period**, which began in the middle of the eighteenth century, imitated the balanced, symmetrical style of ancient Greek and Roman architecture. This is the reason that

many American federal buildings in Washington, D.C. are designed to look like Greek temples—that was the style when our country was founded.

B. European Exploration and Expansion: Empires of the Wind

Exploration before the late fifteenth century was largely limited to land travel. To be sure, ships were used on the Mediterranean and Indian Ocean trade routes for centuries, but they were linked up to land routes through Persia, Arabia, northern Africa, or central Asia on the Silk Road.

Eager to eliminate Muslim middlemen and discover more efficient trade routes to Asia, the Portuguese and their Iberian rivals, the Spanish, set out to sea. Advances in navigation, shipbuilding, and the development of gunpowder weapons allowed for increased sea travel. These “floating empires of the wind” soon controlled major shipping routes in the Indian Ocean, Indonesia, and the Atlantic Ocean.



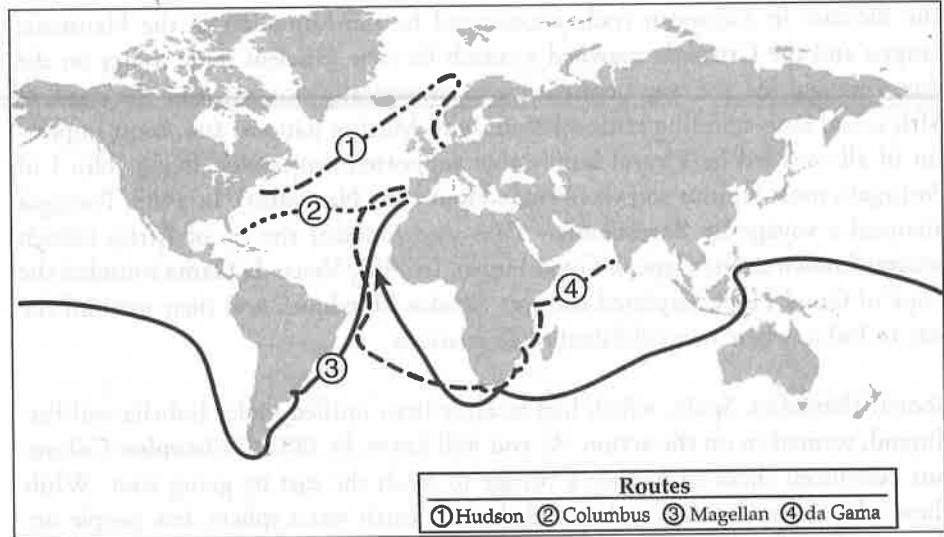
Portuguese Exploration in the 1500s

The increase in European trade encouraged by the formation of the Hanseatic League and the Crusades spawned a search for new, efficient trade routes on the seas. Portugal led the way because it was strategically situated near the coast of Africa, had long-standing trade relations with Muslim nations, and, most important of all, was led by a royal family that supported exploration (King John I of Portugal's most famous son was **Prince Henry the Navigator**). In 1488, Portugal financed a voyage by Bartholomew Dias who rounded the tip of Africa (which became known as the Cape of Good Hope). In 1497, **Vasco da Gama** rounded the Cape of Good Hope, explored the east African kingdoms, and then went all the way to India, where he established trade relations.

Shortly thereafter, Spain, which had recently been unified under Isabella and Ferdinand, wanted in on the action. As you well know, in 1492 **Christopher Columbus** convinced them to finance a voyage to reach the east by going west. While those who were educated understood that the earth was a sphere, few people understood how large it was. Despite the fact that some scholars had accurately estimated the earth's size, most people, including Columbus, thought it was smaller. As a result, Columbus thought that China and India were located where the American continents are. He sailed, found Cuba and the islands that came to be known as the West Indies, and the exploration of the Americas was underway.

By 1494, Portugal and Spain were already fighting over land in the newly found Americas. To resolve their differences, the two countries drew up the **Treaty of Tordesillas**, which established a line of demarcation on a longitudinal (north-south) line that runs through the western Atlantic Ocean. They agreed that everything to the east of the line belonged to Portugal; everything to the west belonged to Spain. The western side was enormous (they had no idea how enormous at the time) so Spain became a mega-power quickly. Brazil happened to lie to the east of the line, which is why modern-day Brazilians speak Portuguese instead of Spanish.

Soon, England, the Netherlands, and France launched their own expeditions. These seafaring nations competed with each other by rapidly acquiring colonies and conquering new lands. The cost and risk associated with these explorations made it necessary for explorers to rely on the backing of strong and wealthy states. In addition, merchants wanted protection for their trade routes, which could also be acquired through allegiance to a particular sovereignty. Colonialism and the expansion of the trade routes contributed to the rise in nationalism and the development of strong monarchies.



European Exploration in the Early Sixteenth Century

A quick list of other explorers

- **Amerigo Vespucci**—He explored South America on several trips around 1500; realized that the continent was huge and not part of Asia; America was named for him.
- **Ponce de Leon**—In 1513, he explored Florida for Spain in search of the fountain of youth.
- **Vasco de Balboa**—In 1513, he explored much of Central America for Spain; laid sight on the Pacific Ocean.
- **Ferdinand Magellan**—In 1519, he sailed around the tip of South America to the Pacific Ocean for Portugal. He made it as far as the Philippines, where he died; his crew continued, however, and became the first to circumnavigate the globe.
- **Giovanni da Verrazzano**—In 1524, he explored the North American coast for France.
- **Sir Francis Drake**—In 1578, he became the first Englishman to circumnavigate the globe.
- **John Cabot**—In 1597, he explored the coast of North America for England.
- **Henry Hudson**—Beginning in 1609, he sailed for the Dutch, looking for a Northwest Passage to Asia. He explored the Hudson River and made claims to the area for the Dutch.

And Now a Word from Our Sponsors

Why, all of a sudden, were so many explorers sailing around the globe? Why didn't this happen sooner? In the late fifteenth century, innovation was combined with determination to apply new technologies to political and economic goals. In addition to advanced mapmaking techniques, the Age of Exploration was brought to you by the following fine products:

- **The Sternpost Rudder**—Invented in China during the Han Dynasty, the sternpost rudder allowed for better navigation and control of ships of increasing size. How did it end up in the hands of the Europeans? Trade, of course.
- **Lateen Sails**—These sails, invented during the early Roman Empire, allowed ships to sail in any direction, regardless of the wind. This was a huge improvement to ships that were dependent on the wind, especially in the Indian Ocean waters, where monsoons kept ships docked for long periods of time. Once these sails were used regularly on the Indian Ocean routes, they quickly became standard on transatlantic voyages.
- **The Astrolabe**—Sailors used this portable navigation device, developed in the Hellenic world around 150 B.C.E., to help them find their way. By measuring the distance of the sun and the stars above the horizon, the astrolabe helped determine latitude.
- **The Magnetic Compass**—Borrowed from the Chinese, who developed it during the Han Dynasty, the magnetic compass traveled west through trade with Arabs and allowed sailors to determine direction without staying in sight of land.
- **Three-Masted Caravels**—These large ships employed significantly larger lateen sails and could hold provisions for longer journeys in their large cargo rooms.

To be sure, many of these inventions existed prior to the fifteenth century, but so much of history is about timing. In the late fifteenth century, these inventions had converged on one continent, a continent that was fiercely competitive about trade routes, newly wealthy, increasingly organized under strong leaders, and racing with the innovation and imagination of the Renaissance. We've said it before and we'll say it again: The events of this time period are so interrelated that you can't separate them. The era needs to be understood as one giant glob of inseparable, indistinguishable forces.

The New World: Accidental Empire

Although Columbus failed to locate gold or spices in the Americas, the next generation of Spanish explorers found great wealth in the Aztec and Inca Empires.

In 1519, **Hernan Cortes** landed on the coast of Mexico with a small force of 600 men. He found himself at the heart of the Aztec Empire, which you read

about in the previous chapter. As you might recall, the Aztecs used the conquest of neighboring communities to secure humans for religious sacrifices. Many of these neighboring states loathed the Aztecs and were more than willing to cooperate with the Spaniards. Cortes alternatively subjugated or slaughtered those that were not.

Cortes, aided and guided by the resentful neighbors, first approached the magnificent Aztec capital of Tenochtitlan on horseback. Horses were as yet completely unknown in America (and in fact were introduced to the continent by Spanish conquistadores). He sent a gift of gold to appease this newcomer to his lands, but unfortunately for the Aztecs, this offering only fueled the appetite of the new conquerors. Because the Spaniards' sole motivation for exploring the New World was to acquire gold and spices, the Spanish didn't hesitate to seize Montezuma and begin a siege of Tenochtitlan.

Disease: The Ultimate Weapon of Mass Destruction

Although the Aztecs resisted the occupation and fought to rid their capital of the invaders, the Spanish had incredibly powerful weapons on their side, including diseases such as smallpox. These infections were completely new to the Americas, thanks to their geographic isolation prior to Europeans' arrival, and quickly decimated the Aztecs, who had no natural resistance to them. The combination of disease, superior weapons, and assistance from Aztec enemies reduced the native population of the region from well over 20 million in 1520 to fewer than 2 million by 1580. Because so many of the deaths occurred in the first few years, the Spaniards were able to seize control of the empire by around 1525.

A similar fate met the Inca Empire. In 1531, **Francisco Pizarro** set out in search of the Incas with a tiny force of 200 men. Disease, superior weapons, and help from enemies quickly destroyed what little resistance the Incas could mount. In addition, Pizarro happened to land shortly after a very destructive civil war that had left the current emperor of the Incas in a shaky political position. By 1535, Pizarro was in control of the region.

Contrast Them: Expansion in the Americas versus Empire-Building Elsewhere

We've talked about a lot of empires that expanded into far-reaching territories: the Romans, the Mongols, the Muslims, and the Macedonians, for example. In each of these cases, the empires either allowed existing cultural traditions to remain intact, or converted the existing population to their way of doing things, forcibly or not. By contrast, in the case of the Americas, the existing populations were largely wiped out. In addition, huge numbers of people moved in, far outnumbering the number of natives that survived. Even the Mongols, who didn't hesitate to wipe out communities in their paths, didn't totally supplant the native populations the way the Europeans did in the Americas. Never before had an empire moved into such a vast territory that was so unpopulated (or, more accurately, depopulated). All of the other empires had to merge with, convert, or be converted by the existing populations. In the Americas, the Europeans created two new continents strictly in their own image.

The *Encomienda* System: American Feudalism

Once Spain established a foothold in the New World, thousands of Spaniards arrived to build a new colonial empire. The colonial society was a hierarchical organization. At the top were the **peninsulares**, the select group of Spanish officials sent to govern the colonies. Below them, the *crillos* or **creoles**, were people born in the colonies to Spanish parents. Because they weren't born in Spain, they were looked down upon by the Spanish monarchy and were consequently barred from high positions. Yet, because they were the children of Spaniards, the creoles were educated and wealthy, and after many generations, they were able to organize and demand recognition. They later became the leaders of the independence movements (more on that in the next chapter). Below the *crillos* were **mestizos**, those with European and Native American ancestry, followed by the **mulattos**, those with European and African ancestry. Finally, there were the native Americans, who had little or no freedom and worked on estates or in mines.

To run the empire, the **viceroy**s, who were appointed governors of each of the five regions of New Spain, established the *Encomienda* System, which was sort of like a feudal system. The system provided the peninsulares with land and a specified number of native laborers. In return, the peninsulares were expected to protect the natives and convert them to Christianity. Shocked at the treatment of some of the natives, Christian missionaries appealed to the viceroys, emperor, and the Catholic Church to improve the natives' lot. Some in the empire agreed that reform was needed, but disastrously, the reform that was viewed as most important was the need for more workers. They agreed to reduce the strain on the natives by bringing in new workers for the hardest jobs. Those new workers were African slaves. Not only was this a cruel and ironic way to solve the problem (relieve the burden on one group of victims by creating a second group), it ended up not improving the lot of the natives. Within a few decades, both slaves and natives were at the bottom of the social structure, and neither had significant rights.

The African Slave Trade: The Love of Money at the Root of Evil

Even before transatlantic voyages began, Europeans had begun exploiting a system of slavery that already existed in Africa. While many African tribes and nations practiced a form of slavery by requiring prisoners taken in battle to serve their captors for a period of time before being eventually released (when their captors judged that prisoners' honor, lost in battle, had been restored by their service), Europeans traded guns and other goods to African leaders in exchange for their surplus slaves but did not understand (or chose to ignore) the custom of eventual release. By the mid-fifteenth century, the Portuguese were also capturing slaves while exploring the coasts of Africa. When the plantations (and mines) of the New World demanded more labor, the money-hungry empire builders knew where to go. And so began a forced migration of people that would forever change the fate of millions of lives and the history of the New World.

Some African rulers cooperated with the slave trade, while others protested, but they were in a difficult position—as demand for the transatlantic slave trade increased, Europeans became increasingly ruthless in their methods, kidnapping Africans in their own raids or pitting groups against one another through control

of the weapons trade. Kings and other leaders faced the choice of cooperating with the Europeans or seeing their people seized or slaughtered. So the slave trade expanded. Africans were rounded up, forced onto ships, chained together, taken below deck, and forced to endure the brutal **Middle Passage** to the Americas. By historians' best estimates, at least 13 million Africans were taken from the continent and carried to the New World; approximately 60 percent went to South America, around 35 percent to the Caribbean, and about 5 percent to North America. Along the way, some suffocated from the hot, unventilated conditions below deck, others starved or died from outbreaks of disease, and yet others were killed attempting revolt or jumped overboard to their deaths, preferring suicide to the dishonor of slavery. Based on slave traders' existing records, historians believe average mortality rates were around 20 percent, though some voyages lost a much larger portion of their human cargo. Those that survived the journey were taken to the auction blocks, sold into slavery, and forced to work in plantation fields or in mines until their deaths, as were their children and their children's children.

Focus On: Demographic Shifts

The demographic changes of the sixteenth and seventeenth centuries were, in a word, huge. The Aztecs and Incas were wiped out. Huge cities were depopulated. Europeans moved by the hundreds of thousands. Africans were forced to migrate by the millions. Cities in Europe swelled as the feudal system evaporated and urban, middle class merchants lined their pockets with the fruits of trade and empire. By 1750, the continents of Europe, Africa, North America, and South America were unrecognizable from their 1450 portraits.

The Columbian Exchange: Continental Shift

One consequence of the Spanish and Portuguese empires in the New World was what became known as the Columbian Exchange—the transatlantic transfer of animals, plants, diseases, people, technology, and ideas among Europe, the Americas, and Africa. As Europeans and Africans crisscrossed the Atlantic, they brought the Old World to the New and back again. From the European and African side of the Atlantic, horses, pigs, goats, chili peppers, and sugarcane (and more) flowed to the Americas. From the American side, squash, beans, corn, potatoes, and cacao (and more) made their way back east. Settlers from the Old World carried bubonic plague, smallpox, typhoid, influenza, and the common cold into the New, then carried Chagas and syphilis back to the Old. Guns, Catholicism, and slaves also crossed the Atlantic. Never before had so much been moved across the oceans, as ship after ship carried the contents of one continent to another.

The American food crops (cassava, corn, peanuts, and potatoes) that traveled east made population increases possible throughout Europe, Asia, and Africa. Urban populations and commercial interests grew throughout Europe and led to increased cultivation and enclosure of land. With increased cultivation came increased use of previously rural areas. Despite some threat of famine, shortages due to a long cooling period or “little ice age,” and out-migration, overall the trend throughout much of northern Europe was that of a growing population.

Two key products of the Columbian Exchange were **sugar** and **silver**. Sugarcane roots had arrived in the Caribbean from India with Columbus, who saw an opportunity to monopolize a profitable crop in a new environment. Sugarcane production resulted in the development of plantations throughout the Spanish colonies and an increased need for enslaved or forced labor once the Native populations of the islands declined. The results of the plantation system were brutal, dangerous labor and a transformation of the natural landscape.

The Spanish also monopolized the world's silver market from the mines they controlled in Mexico and in the Andes Mountain of Peru. This industry also resulted in a harsh system of forced labor: the previously mentioned *encomienda*. Like the sugar plantations, early silver mining depended on Native labor until that grew too scarce to make a profit, when labor shifted to African slaves provided by Portuguese traders.

More importantly, Spanish control of Latin American silver opened doors in Ming China. Spanish access to the Philippines, China and the Pacific Ocean trade routes made the world a much smaller place.

The Commercial Revolution: The New Economy

The trading, empire building, and conquest of the **Age of Exploration** was made possible by new financing schemes that now form the basis of our modern economies. Though many elements had to come together at once for the new economy to work, timing was on the side of the Europeans, and everything fell into place.

First, the church gave in to state interests by revising its strict ban on what are now standard business practices, like lending money and charging interest on loans. Once banking became respectable, a new business structure emerged: the **joint-stock company**, an organization created to pool the resources of many merchants, thereby distributing the costs and risks of colonization and reducing the danger for individual investors. Investors bought shares, or stock, in the company. If the company made money, each investor would receive a profit proportional to his or her initial investment. Because huge new ships were able to carry unprecedented cargoes, and because the goods were often outright stolen from their native countries, successful voyages reaped huge profits. A substantial middle class of merchants continued to develop, which in turn attracted more investors, and the modern-day concept of a stock market was well under way.

These corporations later secured royal charters for colonies, like the Jamestown colony in Virginia, and funded them for business purposes. Even when they didn't establish colonies, monarchies granted monopolies to trade routes. The **Muscovy Company** of England monopolized trade routes to Russia, for example. The **Dutch East India Company** controlled routes to the Spice Islands (modern-day Indonesia).

Increased trade led to an early theory of macroeconomics for the nations of Europe. Under the theory of **mercantilism**, a country actively sought to trade, but tried not to import more than it exported; that is, it attempted to create a favorable balance of trade. Trade deficits forced dependencies on other countries, and therefore implied weakness. Of course, one country's surplus had to be met with

another country's deficit. To resolve this dilemma, European countries were feverish to colonize. Colonies gave the mother country raw resources (not considered imports because the mother country "owned" them), while creating new markets for processed exports. To further aid the effort, monarchies promoted domestic industry and placed tariffs on imports from competing empires. As you'll see in the next chapter, once the Industrial Revolution was under way, mercantilism really took off.

It shouldn't be surprising that mercantilism fostered resentment in colonies. The colonial resources were shipped back to Europe while the colonists were forced to pay for products from Europe. Add taxes, and you've got major resentment. You already know that the American Revolution was in part due to colonial fury over this arrangement. One by one, beginning with America, European colonies revolted against the abuses by the unforgiving mercantilist economies of the European powers.

Oh Yeah...Remember Asia?

Recall that the original Portuguese explorers were trying to figure out a shortcut to India and China. Once they stumbled upon a couple of continents along the way and began wiping out native civilizations, building empires, and forcibly transporting millions of Africans to do hard labor, they forgot the original purpose of their exploration. In time, European explorers, armed with bottomless resources of energy and greed, remembered and pursued the East.

Asian colonization didn't really get rolling until the nineteenth century, so that will be covered in the next chapter. From the sixteenth through the eighteenth centuries, however, the Europeans managed to establish trade with the Asian empires, although it was more limited than they would have liked due to Asian protectionist policies and the difficulty of travel.

After making their way around the Cape of Good Hope, the Portuguese set up a trading post in Goa on the west coast of India. They also gained control over the Spice Islands by establishing naval superiority in the Straits of Malacca. In less than a century, however, other European powers coveted Asian riches. The Dutch, under the backing of the newly formed Dutch East India Company, conducted deliberate raids on Portuguese ships and trading posts. In the seventeenth century, the Dutch became the biggest power in the spice trades. Meanwhile, England and France set up trading posts in India.

As for China and Japan, both empires severely limited trade with the Europeans. Throughout this time period, the two Asian empires couldn't have been more unlike their European counterparts. They were highly isolationist. Not only did they not go out and try to find the rest of the world, they also pushed the rest of the world away when it came to find them. You'll read more about China and Japan in the next section.

IV. DEVELOPMENTS IN SPECIFIC COUNTRIES AND EMPIRES 1450–1750

It's dangerous to presume that because the Renaissance, the Protestant Reformation, the Scientific Revolution, the Enlightenment, and the Age of Exploration eventually had enormous consequences that they did so quickly, broadly, or in equal proportions. In reality, the major movements impacted different parts of Europe at different times and took a long time to penetrate all circles of society. Most people with power guarded it jealously, regardless of the intellectual or religious movements that brought their power into question. What's more, most of the peasant class didn't participate in the intellectual, scientific, or commercial developments because they weren't educated or in a position to be immediately impacted by the consequences.

Outside of Europe, the major developments of the time period also had widely varying consequences. In the previous section, we discussed the consequences on the Americas and on much of Africa. But lest you think the rest of the world remained passive in the face of European growth, it is important to note that powerful and centralized states were established (or reestablished) in the Middle East, India, China and Japan. The empires of Asia, too, had unique experiences, which are discussed in detail later in the chapter. As you review the developments in the European empires, keep in mind that most nations were led by monarchs, or sovereigns, who felt that the right to govern was ordained by God. Under this idea of divine right, it was essential for royal families to retain pure bloodlines to God, so intermarriage among royal families of different nations was common. Thus, the monarchies of one country also gained international influence as the ties of marriage and inheritance led to alliances.

Monarchies also contributed to the development of strong national loyalties, which led to many conflicts, internally and externally. The European wars of this time fall into three categories: religious fights between Protestants and Catholics, internal civil wars between a monarch and disgruntled nobles, and battles stemming from the trade disputes between rival nations. In the beginning of this era, Spain became the world's strongest nation with a powerful naval fleet and an extensive empire. As the balance of power in Europe shifted, the rival nations of England and France emerged as great powers.

A. The European Rivals

1. Spain and Portugal

As you read in the previous chapter, in 1469, **King Ferdinand**, from the Christian Kingdoms in northern Spain, and **Queen Isabella**, from the more Muslim regions of southern Spain, initiated the consolidation of Spanish authority under one house, and thereby created a nation-state that would become one of the world's most powerful forces over the next century. By aggressively supporting exploration (initially

by underwriting Columbus's exploration and then later by establishing empires in the New World), Ferdinand and Isabella had a long-term impact on cultural world developments—they ensured the survival and expansion of the Spanish language and culture, including Roman Catholicism, by extending them across the Atlantic. Ferdinand and Isabella also built a formidable naval fleet, allowing Spain to rule the seas for the next century.

As Spain focused on western exploration and its empire in the New World, the Portuguese continued their domination of coastal Africa, the Indian Ocean, and the Spice Islands. A small country with limited manpower, Portugal had to be content as the middleman of a “floating empire.” It was an early player in the transatlantic slave trade, controlled sea routes, and garrisoned trading posts, but was unable to exert control over large sections of the interior of Africa and India. Inevitably, Portugal could not maintain control of its far-flung colonies and lost control of them to the Dutch and British who had faster ships with heavier guns.

The international importance of Spain grew under **Charles V**, who inherited a large empire. Charles was a Hapsburg, a family that originated in Austria and, through a series of carefully arranged marriages (recall that divine right promoted intermarriage among royalty), created a huge empire stretching from Austria and Germany to Spain. While one set of Charles's grandparents were Hapsburgs, his other grandparents were Ferdinand and Isabella, who themselves had married to solidify the Spanish empire. Talk about family connections.

Anyway, in 1519, Charles was elected Holy Roman Emperor by German princes, which meant that he then held lands in parts of France, the Netherlands, Austria, and Germany in addition to Spain. These possessions, plus the new colonies in the Americas, brought wars as well as riches. Spain fought France for control of Italy and the Ottoman Turks for control of eastern Europe, which led to an expansion of Ottoman rule into much of Hungary (more on that later). In Germany, Charles defended Catholicism from the encroachment of Protestantism (recall that Spain was allied with the Catholic Church during the counter-reformation). Frustrated over trying to manage such an enormous empire at a time of expansion in the New World and revolution in Europe (the Protestant Reformation and Scientific Revolution, for example), he decided in 1556 to retire to a monastery and thereby abdicate the throne. He gave control to his brother, **Ferdinand I**, over Austria and the Holy Roman throne of Germany. To his son, **Philip II**, he conferred the throne of Spain and jurisdiction over Burgundy (in France), Sicily, and the Netherlands as well as Spain's claim in the New World. We'll talk more about Ferdinand's half of the empire later in this chapter. Phillip II also gained control over Portugal.

Under Philip II, the Spanish Empire in the west saw some of its greatest expansion in the New World and a rebirth of culture under the Spanish Renaissance, but it also started showing signs of decay. A devoutly religious man, Philip oversaw the continuation of the **Spanish Inquisition** to oust heretics, led the Catholic Reformation against Protestants, and supported an increase in missionary work in the ever-expanding empire in the New World. Increasingly Protestant and increasingly eager to develop their own empire, the Dutch (of the Netherlands) revolted. By 1581, the mostly Protestant northern provinces of the Netherlands gained their

independence from Spain and became known as the Dutch Netherlands. The mostly Catholic southern provinces remained loyal to Spain (this region would later become Belgium).

Exhibiting further signs of weakness, Spanish forces fighting for Catholicism in France fared poorly, and to the shock of many Spaniards, the English defeated and devastated the once mighty Spanish Armada as it tried to attack the British Isles. The defeat invigorated the English, who by the late sixteenth century were expanding their own empire, and signaled containment of Spanish forces.

Although Spain amassed enormous sums of gold from the New World, it spent its wealth quickly on wars, missionary activities, and maintenance of its huge fleets. By the mid-seventeenth century, Spain still had substantial holdings, but its glory days had passed. England and France were well poised to replace it as the dominant European powers.

2. England

As you read above in the discussion of the Protestant Reformation, **King Henry VIII**, who ruled from 1509 to 1547, nullified the pope's authority in England, thereby establishing (under the 1534 **Act of Supremacy**) the Church of England and placed himself as head of that church. This was so that he could divorce his wife and marry Anne Boleyn in an effort to father a male heir. He didn't succeed in getting a male heir. Instead, he got another daughter, **Elizabeth I**, who oversaw a golden age in the arts known as the Elizabethan Age.

The **Elizabethan Age** (1558–1603) boasted commercial expansion and exploration and colonization in the New World, especially after the English fleet destroyed the Spanish Armada in 1588. During this time, the **Muscovy Company** was founded as the first joint-stock company, and the **British East India Company** quickly followed suit. Drake circumnavigated the globe. The first English colonists settled in Roanoke colony in present-day Virginia. And to top it all off, Shakespeare wrote his masterpieces. Simply put, England under Elizabeth experienced a golden age.

The religious battles that were unleashed by the Protestant Reformation still unsettled the region. Anglicans (Church of England) were battling Catholics, while other Protestant groups such as the Puritans were regularly persecuted. When **James I** came to power in 1607 after the death of Elizabeth, a reign that brought together the crowns of England and Scotland, he attempted to institute reforms to accommodate the Catholics and the Puritans, but widespread problems persisted. The Puritans (who were Calvinists) didn't want to recognize the power of the king over religious matters, and James reacted defensively, claiming divine right. It was at this point that many Puritans decided to cross the Atlantic. The Pilgrims cross to Plymouth colony (1620) occurred during James's reign. Jamestown colony, as you might have guessed, was also founded during the reign of James I. The English aren't known for their innovative place names.

Charles I, son of James, rose to power in 1625. Three years later, desperate for money from Parliament, he agreed to sign the **Petition of Right**, which was a doc-

ument limiting taxes and forbidding unlawful imprisonment. But Charles ignored the petition after he secured the funds he needed and, claiming divine right, ruled without calling another meeting of parliament for eleven years.

In 1640, when Scotland's resentment toward Charles resulted in a Scottish invasion of England, Charles was forced to call Parliament into session. Led by Puritans, this Parliament was known as the **Long Parliament** because it sat for twenty years from 1640 through 1660. The Long Parliament limited the absolute powers of the monarchy. In 1641, the parliament denied Charles's request for money to fight the Irish rebellion, and in response he led troops into the House of Commons to arrest some of the members. This sparked a civil war. Parliament raised an army, called the Roundheads, to fight the king. The Roundheads, under the leadership of **Oliver Cromwell**, defeated the armies of Charles I, who were called Cavaliers. The king was tried and executed. Oliver Cromwell rose to power, not as a monarch, but first as leader of what was called the **English Commonwealth**, then after reorganizing the government, as **Lord Protector**.

When Cromwell ruled as Protector, he ruled with religious intolerance and violence against Catholics and the Irish. He encouraged Protestants to settle in Northern Ireland (this would cause many problems in future centuries). All of this caused much resentment, and after Cromwell died, Parliament invited Charles II, the exiled son of the now-beheaded Charles I, to take the throne and restore a limited monarchy. This is called the **Stuart Restoration** (1660–1688). A closet Catholic, Charles II acknowledged the rights of the people, especially with regard to religion. In 1679, he agreed to the **Habeas Corpus Act** (which protects people from arrests without due process). Following Charles II's death, his brother James II took over.

James II was openly Catholic, and he was unpopular. Like so many before him, he believed in the divine right of kings. In a bloodless change of leadership known as the **Glorious Revolution**, he was driven from power by Parliament, who feared he'd make England a Catholic country, and he fled to France. He was replaced in 1688 by his son-in-law and daughter, William and Mary, the Protestant rulers of the Netherlands, who promptly signed the **English Bill of Rights** in 1689. The Glorious Revolution ensured that England's future monarchs would be Anglican, and that their powers would be limited.

Focus On: The Enlightenment Writers

Keep in mind that the Enlightenment writers were busy at work by this time. Hobbes published *Leviathan* in 1651 in response to the English Civil War, a time during which the monarch, Charles I, was beheaded. Hobbes's violent view of human nature and desire for an all-powerful ruler to maintain peace are completely understandable within the context of the English Civil War. While Hobbes missed the peaceful resolution of the war in the Glorious Revolution and the English Bill of Rights (1688–1689), John Locke did not. Locke's more optimistic view of human nature can be viewed in the context of the bloodless transition of power between James II and William and Mary. In addition, Locke's writings in *Two Treatises on Government* justified this change of leadership by suggesting James II had violated the social contract. Political events in England during this time, and such events in general, cannot be separated from the development of social and political philosophy and visa versa.

3. France

After the Hundred Years' War (1337–1453) drove the English from France, the French began to unify and centralize authority in a strong monarchy. But, as elsewhere, religious differences stood in the way. France was largely Catholic, but during the Protestant Reformation, a group of French Protestants, known as **Huguenots**, developed into a sizeable and influential minority. Throughout the mid- to late-sixteenth century, Catholics and Huguenots bitterly fought each other, sometimes brutally, until, in 1598, **Henry IV** issued the **Edict of Nantes**, which created an environment of toleration. Henry IV was the first Bourbon king. The Bourbons ruled France until 1792, nearly two centuries.

Cardinal Richelieu, a Catholic, played an important role as the chief advisor to the Bourbons. His primary political role was to strengthen the French crown. While clashes erupted among Catholics and Huguenots (Protestants) in France, Richelieu did not seek to destroy the Protestants; he compromised with them and even helped them to attack the Catholic Hapsburgs of the

Holy Roman Empire, an empire that he wanted to end in order to make France a stronger power in Europe. A new bureaucratic class, the *noblesse de la robe*, was established under Richelieu. The bureaucracy that Richelieu and then later successor, **Cardinal Mazarin**, established prepared France to hold the strong position it would achieve in Europe under Louis XIV.

Louis XIV was four years old when he inherited the crown of France. His mother and Cardinal Mazarin ruled in his name until he reached adulthood, at which time he became one of the most legendary monarchs of European history. Louis XIV's long reign (1643–1715) exemplified the grandiose whims of an absolute monarchy. Calling himself the "Sun King" and "The Most Christian King," he patronized the arts as long as they contributed to the glorification of France and its culture, which became much admired and emulated. Ruling under divine right, he reportedly declared, "I am the State," and he built the lavish palace of Versailles to prove it. He never summoned the Estates-General, the lawmaking body, to meet. He revoked the Edict of Nantes, forcing many Huguenots to leave France. Perhaps most importantly, he appointed **Jean Baptiste Colbert** to manage the royal funds.

A strict mercantilist, Colbert wanted to increase the size of the French empire, thereby increasing the opportunity for business transactions and taxes. To accomplish this, France was almost constantly at war. For a while, warfare and mercantilist policies allowed France to increase its overseas holdings and gain the revenue needed for the extravagances of a king named for the sun. But the **War of Spanish Succession** (1701–1714) proved to be a disaster for the grand plans of France.

Contrast Them: England and France During the Seventeenth Century
Unlike England, France was ruled by a series of strong and able monarchs under the Bourbon Dynasty. After the death of Elizabeth, England went from monarchy to Commonwealth to Restoration to Glorious Revolution. Hardly stable. On the other hand, France's Estates-General (a governing body representing clergy, nobles, merchants, and peasants) was not nearly as powerful as the English Parliament. It didn't even meet for the bulk of the seventeenth century because the French kings ruled successfully under the justification of divine right.

Recall that European royalty was intermarrying and reproducing. It turned out that the twisted branches of the royal family trees led to a situation in which, in 1701, one of Louis XIV's grandsons inherited the Spanish throne. This alarmed the rest of Europe, who feared that Spain, although substantially weaker than it had been in the previous century, and France, already quite powerful, would form an unstoppable combo-power, especially given their American holdings at the time (France owned a huge chunk of North America, Spain the bulk of Central and South America). It's a complicated story, but England, the Holy Roman Empire, and German princes all united under the perceived common threat, and thirteen years later, the question of Spanish succession was settled. **Philip V**, the grandson, was able to rule Spain, but Spain couldn't combine with France, and France had to give up much of its territory to England, a country that then became even more powerful.

The bottom line is that Colbert and Louis XIV's many territorial invasions and wars proved costly and ineffective. France remained powerful, but by the eighteenth century, its position as a military power was weakening. Nevertheless, by 1750, its position as a center for arts was firmly established.

4. German Areas (The Holy Roman Empire, Sort of)

The situation in German and Slavic areas of central Europe during this time period was complicated. The Holy Roman Empire wasn't really in Rome but rather in present-day Austria and parts of Germany and surrounding regions because Italy was controlled by ruling families in the Italian city-states. The Holy Roman Empire geographically dominated the region, but was also still very feudal with lots of local lords running their own shows. Therefore, the Holy Roman emperor was pretty weak. This is further complicated by the rise of the powerful Hapsburg family of Austria, which, as we already stated, kept intermarrying so that it dominated not only substantial territory within the Holy Roman Empire but also Spain and parts of Italy. It was complicated even more by the fact that northern Germany was essentially a collection of city-states, such as Brandenburg, Saxony, and Prussia. Finally, remember that northern Germany went Lutheran during the Protestant Reformation, while southern areas of the Holy Roman Empire stayed Catholic, along with Spain and France. Got it? It's nutty, so we're only going to hit the highlights, or else your head will be spinning.

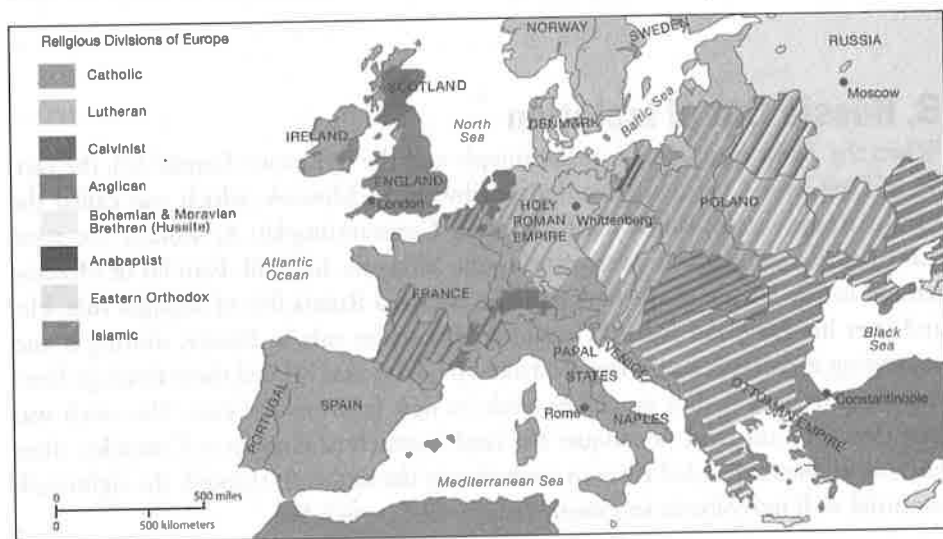
Contrast Them: "Germany" with Spain, England, and France

Germany unified under a central government much later than Spain, England, and France did. You'll read about German unification in the next chapter. You won't read about a huge German empire in the New World or a strong German monarchy, because for centuries it remained caught in a complicated web of rulers of the Holy Roman Empire, the Hapsburgs of Austria, and the princes of city-states. It was also a tangle of religious movements, because it was at the heart of the Protestant Reformation.

You need to grasp the following three things from this time period:

- The Holy Roman Empire lost parts of Hungary to the Ottoman Turks in the early sixteenth century (this is discussed in the section on the Ottoman Empire).
- The Thirty Years' War (1618–1648) devastated the region and significantly weakened the role of the Holy Roman emperors, which in the nineteenth century would finally lead to the rise of hundreds of nation-states in the region.
- By the eighteenth century, the northern German city-states, especially Prussia, were gaining momentum and power.

Now for a few of the details.



Religious Divisions Around 1550

In 1555, the **Peace of Augsburg** was intended to bring an end to the constant conflicts between Catholics and Protestants that engulfed the region during the Reformation and counter-reformation. The peace didn't last. The **Thirty Years' War** began in 1618 when the Protestant territories in Bohemia (which was under the rule of the Catholic Hapsburg clan) challenged the authority of the Holy Roman Catholic emperor, a situation that frequently arose prior to the Peace of Augsburg. This time, though, the conflict grew bigger than anything before it, and developed into a huge religious war, as well as a major political war. Everyone seemed to want a piece of the action, including other countries, like France (under Richelieu), Denmark, and Sweden. Although this grew into a war between major European powers, actual fighting stayed within the German empire, which meant that after 30 years of fighting, many parts of Germany were left depopulated and devastated. Some estimates suggest that the Holy Roman Empire lost one-third of its population during these 30 years, some 7 million people.

When the **Peace of Westphalia** was negotiated in 1648, the independence of small German states was affirmed, and Prussia became the strongest of them. The Holy Roman Empire was left barely limping along. Its territories had been reduced and its emperor, along with the Hapsburg family, was much less powerful. Somehow the Holy Roman Empire survived in name until 1806, but it hardly had any power after Westphalia.

The biggest beneficiary of the war was France. It became the most powerful country in Europe during the seventeenth century under Louis XIV, although, as you already read, by the eighteenth century it was weakened after the country overspent and overplayed its hand, particularly during the War of Spanish Succession. The other war beneficiary was Prussia, the German city-state centered in Berlin, which also controlled parts of Poland. Prussia eventually rose to dominate the German territories, unifying them into the powerful country of Germany, but you'll read about that in the next chapter.

B. Russia Out of Isolation

When the Turks conquered Constantinople and the Byzantine Empire fell, the center of Orthodox Christianity moved northward to Moscow, which was called the “Third Rome” (after Rome itself and then Constantinople). At around the same time, Russian leaders were overthrowing the Mongols. In 1480, **Ivan III** of Moscow refused to pay tribute to the Mongols and declared Russia free of Mongol rule. He, and later his grandson **Ivan IV**, established absolute rule in Russia, uniting it and expanding it ever eastward. They recruited peasants and offered them freedom from their feudal lords if they agreed to settle in new lands to the east. The catch was that these peasants had to conquer the land themselves! Known as **Cossacks**, these peasant-soldiers expanded Russian territories in the sixteenth through the eighteenth centuries well into Siberia and southward to the Caspian Sea.

Ivan IV was such a strong leader and held such absolute power that he became known as **Ivan the Terrible** (not necessarily meaning bad, but instead formidable or impressive). Taking on the title of czar (Russian for “Caesar”), Ivan the Terrible expanded Russia's holding, but not without cost to the Russian people. By the 1560s, he ruled under a reign of terror, regularly executing anyone whom he perceived as a threat to his power, including his own son (executed in 1580).

Contrast Them: Russia and Western Europe

Despite the centralization of authority under the Ivans, Russia remained very much a feudal arrangement, with local lords exercising considerable power. While western Europe basked in the glow of the Renaissance, explored and expanded its influence across oceans, and debated about religion, science, and government in a series of movements, Russia remained isolated from the west and pushed eastward instead. Its growth was territorial, but not intellectual or artistic. During the fifteenth, sixteenth, and most of the seventeenth centuries, it had nothing that could be labeled a Renaissance or Enlightenment. It wasn't part of the Renaissance because it was under the control of the Mongols at the time. It wasn't part of the Reformation because it wasn't part of the Catholic Church in the first place. So even though today we often see Russia as a European power, its history progressed along a very different path. It wasn't until the late seventeenth century that Russia turned its eyes westward.

After the death of Ivan IV in 1584, and with no strong heir to take the throne, Russia's feudal lords continually battled over who should rule the empire. The situation grew especially messy from 1604 to 1613, a period that historians refer to as the **Time of Troubles**, because one pretender to the throne would be killed by another pretender and yet another. In 1613, the madness subsided when **Michael Romanov** was elected czar by the feudal lords. The Romanov Dynasty added stability to the empire. It ruled until 1917.

Like the Ivans, the Romanovs consolidated power and often ruled ruthlessly. The peasants, now serfs, were practically slaves. By the late 1600s, the Romanovs had expanded the empire, with the help of the Cossacks, eastward through Siberia. By 1689, Russian territory spread from the Ukraine (west of Moscow) to the Pacific Ocean, north of Manchuria.

Compare Them: Forced Labor Systems

Although slavery was not a new system, the demands of the newly global economy resulted in an expansion of systems of forced labor in the empires. At the same time, Russia's attempts to control their large land mass relied on the forced labor of the peasants or serfs. All three systems took advantage of the laborers and were frequently managed by harsh and brutal overseers. In the Spanish part of the New World, *haciendas* were established in which Natives owed labor to their landlords—not unlike the feudalism of Europe. This system fell apart as the Native populations diminished due to disease, and as Natives converted to the Roman Catholic faith. The Portuguese took advantage of the already thriving intra-African slave trade and transformed it into a trans-oceanic one. The majority of transported Africans wound up on plantations in Brazil and the Caribbean where life expectancy was just three to five years. Russian serfdom differed in that the Russian economy was domestic and both the laborers and the landowners were Russian.

At around this same time, **Peter the Great**, who ruled from 1682 through 1725, came to power. He was convinced he needed to westernize Russia. He built Russia's first navy and founded St. Petersburg on the Baltic Sea as his new capital. The "window to the west," St. Petersburg became the home to hundreds of western European engineers, scientists, architects, and artists who were recruited specifically to westernize Russia. Women of the nobility were forced to dress in

western fashions. Men were forced to shave their beards. Most of the hard labor of building the great new city was accomplished, of course, by serfs turned slaves.

Under **Catherine the Great**, who ruled from 1762 until 1796, more enlightened policies of education and western culture were implemented. Still, Russia suffered because Catherine fiercely enforced repressive serfdom and limited the growth of the merchant class. Catherine continued the aggressive westward territorial expansion, gaining ground in Poland and, most significantly, territory on the Black Sea. This advance ensured Russia's access to the Mediterranean to its south and west.

Focus On: Westernization of Russia

Both Peter and Catherine are important because they positioned Russia for engagement with the rest of the world, particularly the Western world. By the late eighteenth century, Russia was in a significantly different position than it had been at the beginning of that century. It gained access to the west by both the Baltic and the Black Seas, and it gained cultural access to the West by actively seeking interaction. Unlike China and Japan, who repelled the West from their shores in the same time period, the Russians wanted to engage with and emulate the West.

C. Islamic Gunpowder Empires: Ottoman, Safavid, and Mughal

The history of the **Ottoman Empire** actually extends before 1450. You might recall from the previous chapter that the territories of the former Islamic Empire were overrun by

the ubiquitous Mongols in the thirteenth century. Recall also that the Byzantine Empire, centered in Constantinople, controlled most of Turkey and influenced southeastern Europe and Russia. As the Mongol Empire fell, the Muslim Ottoman Empire, founded by **Osman Bey**, rose in Anatolia (eastern parts of Turkey) to unify the region and challenge the Byzantine Empire. As it grew in the fourteenth century, the Turks (as the Ottomans were called) came to dominate most of modern-day Turkey and eventually, in 1453, invaded Constantinople, thereby ending the Byzantine Empire. Perhaps 1450 isn't such an artificial boundary after all.

The Ottomans made Constantinople their capital city, renamed it Istanbul, and converted the great cathedrals such as the Hagia Sophia into mosques. In the expanding empire, Christians and Jews were allowed to practice their religions, making the empire more tolerant than both the previous Islamic Empire and the other major regimes of the era. Within a hundred years, the Ottomans conquered the expanse of the old Byzantine Empire, save Italy, by the ancient Roman Empire, except for Italy westward. In other words, the Ottoman Empire extended from Greece eastward to Persia, and then all the way around the Mediterranean into Egypt and northern Africa.

As the empire grew, so too did religious persecution. To conquer large territories, the Ottomans enslaved children of their Christian subjects and turned them into fighting warriors, known as Janissaries. Much of this expansion occurred during the reign of **Selim I**, who came to power in 1512. Significantly, Selim claimed that he was the rightful heir to Islamic tradition under the Arab caliphs. With that claim, and with such a huge empire, Istanbul became the center of Islamic civilization.

Just eight years later, **Suleiman I** (a.k.a. Suleiman the Magnificent) rose to power. He not only built up the Ottoman military, but also actively encouraged the development of the arts. For this reason, the Ottoman Empire experienced a golden age under his reign, which lasted from 1520 until 1566. During this time, the Ottomans tried to push into Europe through Hungary. You already read that the Holy Roman Empire was weakening during the Protestant Reformation. The Ottomans took advantage of this weakness; after taking parts of Hungary, the Turks tried to move into Austria. In 1529, the empire laid siege to Vienna, a significant European cultural center. Had the Turks successfully taken Vienna, who knows what the history of western Europe would have been. From Vienna, the Turks could have easily poured into the unstable lands of the Holy Roman Empire. But it wasn't meant to be. Vienna was as far as the Turks ever got. Although Austrian princes and the Ottomans battled continually for the next century, the Ottomans were never able to expand much beyond the European territories of Byzantine influence.

Still, the Ottoman Empire lasted until 1922, making it one of the world's most significant empires. In that time, it greatly expanded the reach of Islam, while also keeping eastern Europe in a constant state of flux. This allowed the powers of western Europe to dominate, and once they started exploring the oceans, they were able to circumvent their eastern neighbors and trade directly with India, China, and their American colonies.

It is worth mentioning the chief rivals of the Ottoman were their eastern neighbors, the Safavids. This centralized state was based on military conquest and dominated by Shia Islam. Its location between the Ottomans and the Mughals, in what is modern-day Iran, resulted in often contentious relationships between the Muslim states, alliances with European against the Ottomans, and a continuation of the long-standing rift between the Sunni and Shia sects.

Remember the Mongols? After several false starts, in 1526, **Babur**, a leader who claimed to be descended from Genghis Khan but was very much Muslim, invaded northern India and swiftly defeated the Delhi Sultanate (also Muslim). Babur quickly established a new empire, known as the **Mughal Empire**, which dominated the Indian subcontinent for the next 300 years.

The Mughal Empire was distinctive for several reasons. First, within about 150 years, it had united almost the entire subcontinent, something that hadn't previously been done to the same extent. Recall that northern India experienced a series of invasions and empires, many of which you reviewed in previous chapters. The same was not true of southern India. The Deccan Plateau in southern India had remained mostly isolated. It was there that Hinduism became very firmly established.

Babur's grandson, **Akbar**, who ruled from 1556 to 1605, was able to unify much of India by governing under a policy of religious toleration. He allowed Hinduism and Islam to be practiced openly. He eliminated the *jizya*, the head tax on Hindus that had been a source of great anger to the people, and tried to improve the position of women by attempting to eliminate *sati*, the practice in which high-caste Hindu women would throw themselves onto their husbands' funeral pyres. He even married a Hindu woman, and welcomed Hindus into government positions. For nearly

100 years, Hindus and Muslims increasingly lived side-by-side and, consequently, became more geographically mixed. The result was a golden age of art, architecture, and thought. Under **Shah Jahan**, Akbar's grandson, the **Taj Mahal** was built. However, after Akbar, two developments forever changed India.

The first was that religious toleration ended. When a new emperor, Aurangzeb, who was a very pious Muslim, came to the throne, he enacted pro-Muslim policies and waged wars of expansion to try to conquer the remaining portions of India still not under Mughal control. The Muslim government reinstated the *ji-zya*; Hindu temples were destroyed. The consequences of this development were significant for later centuries, but for the moment, understand that by 1700, Muslims began to persecute Hindus and Hindus were organizing against their Muslim rulers and neighbors.

The second development was the arrival of the Europeans. In the early seventeenth century, the Portuguese and British were fighting each other for Indian Ocean trade routes. In the beginning, Portugal had established trade with the city of Goa, where it also sent Christian missionaries. By 1661, the British East India Company had substantial control of trade in Bombay. By 1691, the British dominated trade in the region and founded the city of Calcutta as a trading outpost. While the Mughal emperors were annoyed with the Europeans, they generally permitted the trade and regarded the Europeans as relatively harmless. Of course, the Industrial Revolution would turn Britain into an imperial superpower. But before 1750—the calm before the storm—India didn't feel particularly vulnerable to the Europeans, except in its port cities. It was a huge country with tons of resources united under strong Muslim rulers. It couldn't be conquered, right? At the time, Indians probably couldn't imagine that a century later, a British woman named Victoria would be crowned Empress of India.

D. Africa

Beginning in the tenth century, strong centralized states developed in southern and western Africa based on the wealth accumulated from trade. The trend of increased power continued with the trans-Atlantic slave trade and the establishment of powerful kingdoms by the **Songhai**, and in the kingdoms of **Kongo** and **Angola**, among others. While you are not expected to know each of these kingdoms in detail, you should recognize the pattern of state-building and the relationship of Africa to both the Islamic world and the Europeans.

The sub-Saharan empire of Songhai was mentioned briefly in the previous chapter. Like its predecessors, Ghana and Mali, this was an Islamic state with economic ties to the Muslim world through the trans-Saharan trade of salt and gold. Like other empires, this was built on conquests and military force. Sunni Ali (ruled 1464–1493) consolidated his empire in the valley of the Niger River using an imperial navy, established a central administration, and financed the city of Timbuktu as a major Islamic center. And like all great empires, Songhai fell, in this case to Moroccans with muskets, a superior military force.

On the west coast of Africa, the centralized kingdom of **Kongo** was bolstered by its trade with Portuguese merchants as early as the 1480s. The Europeans established close economic and political relationships with the king, which initially worked to everyone's advantage. The kings of the Kongo converted to Roman Catholicism, and **King Alfonso I** was particularly successful at converting his people. Over the long term, Portuguese tactics and the desire for slaves from the interior undermined the authority of the kings of Kongo and the state gradually declined. Eventually, there were outright hostilities and war between the two former allies and the kingdom was mostly destroyed.

South of Kongo, the Portuguese established a small trading post in **Ndongo**, or **Angola**, as early as 1575 for the sole purpose of expanding their trade in slaves from the interior. As a result, Angola grew into a powerful state and when the Portuguese attempted to further exert their authority and control, **Queen Nzinga** fiercely resisted. For 40 years, the warrior queen led her troops in battle, studied European military tactics, and made alliances with Portugal's Dutch rivals. Despite her efforts, in the end, she could not unify her rivals nor overcome the superior weaponry of the Portuguese.

E. Isolated Asia

1. China

By 1368, the Ming Dynasty booted out the last of the Mongol rulers in China and restored power over the empire to the native Chinese. The Ming Dynasty ruled until 1644. During this time, the Ming built a strong centralized government based on traditional Confucian principles, reinstated the civil service examination, and removed the Mongol influence by reinvigorating Chinese culture.

In the early fifteenth century, the Chinese also did something quite extraordinary: They built huge fleets. **Zheng He**, a Chinese navigator, led fleets throughout southeast Asia and the Indian Ocean, all the way to East Africa, a century before the Europeans did the same. Had the Chinese continued to explore and trade, they may have become the dominant colonial power. But instead, within a few decades, the Chinese abruptly stopped their naval voyages. Increasingly, Chinese society turned inward.

The Ming government attempted to prop up their failing economy by changing easily counterfeited paper money to a "single-whip" system based on silver currency. Initially, Japan supplied the silver (much to the benefit of the shoguns in Japan), but with the discovery of American silver sources, China established trade relations with the Spanish through the Philippines. Although this exchange fueled a period of commercial expansion, inevitably, the silver flooded the Chinese market and the government was unable to control the resulting inflation.

By the sixteenth century, the Ming dynasty was already in its decline, just as the Europeans were beginning to sail toward China. Pirates increasingly raided port

cities, and the Portuguese set up shop in Macao. Still, the Chinese were able to keep the Europeans at a safe distance. However, internal problems persisted. By the seventeenth century, famines crippled the Chinese economy, and peasant revolts erupted against the increasingly powerless Ming rulers. In 1644, the Ming emperor invited a group of Qing warriors from nearby Manchuria to help him quell a peasant uprising, but instead, the Qing ousted the emperor. With that act, the Ming Dynasty ended and the Qing (or Manchu) Dynasty began. The Manchus ruled China until 1911.

Focus On: Environmental Change and Collapse

The new food crops that arrived in Europe, Africa, and Asia from the Americas (cassava, corn, peanuts, and potatoes) were high in calories, easy to grow in previously uncultivated areas, and, as a result, allowed for massive population increases. These crops along with new agricultural technologies, and political stability were initially a boon to China's economy and productivity. However, the new population levels could not be sustained over the long term, and a period of global cooling in the late seventeenth century put pressure on agricultural lands and hastened the collapse of the Ming Dynasty. In Europe, the arrival of potatoes finally stabilized a food supply and a population that had been devastated by centuries of cold weather, poor farming, and epidemic disease.

Because the Qing were from Manchuria, they were not ethnically Chinese. They attempted to remain an ethnic elite, forbidding the Chinese to learn the Manchu language or to marry Manchus. Yet, because the Manchus comprised a mere 3 percent of the population, they needed the help of ethnic Chinese to run the country. Therefore, the civil service examination gained new heights. Even members of the lower classes were able to rise to positions of responsibility as the Manchus opened up the floodgates to find the best talent.

Manchu emperors were well steeped in Chinese traditions. Both Kangxi, who ruled from 1661 to 1722, and his chief successor, Qianlong, who ruled from 1735 to 1796, were Confucian scholars. Both emperors not only supported the arts, but also expanded the empire. Kangxi conquered Taiwan and extended the empire into Mongolia, central Asia, and Tibet. Qianlong added Vietnam, Burma, and Nepal to the vassal states of China.

In all of this expansion, the Chinese did not aspire to conquer the rest of the world, or even interact with it very much. They stayed focused on China and its surrounding neighbors. The Manchus did trade with the Europeans, and granted rights to the Portuguese, Dutch, and British, but they were vigilant about and successful at controlling trade relations through the mid-eighteenth century. The Manchus were fierce protectors of their culture. When they felt threatened by European advances, they expelled them. In 1724, for example, Christianity was banned. In 1757, trade was restricted to just one city, Canton. Still, trade with Europeans was substantial. The Europeans bought large quantities of tea, silk, and porcelain. In exchange, the merchants received huge sums of silver, which created a new rising class of merchants in Chinese coastal cities.

2. Japan

During the sixteenth century in Japan, a series of shoguns continued to rule while the emperor remained merely as a figurehead. But as the century went on, Japanese feudalism began to wane and centralized power began to emerge. The shogun still ruled (as opposed to the emperor), but the power of the feudal lords was reduced. This coincided with Japanese exposure to the West. In 1542, the Portuguese established trade with the empire (they also introduced guns to the Japanese). Within a decade, Christian missionaries streamed in. By the end of the century, not only had a few hundred thousand Japanese converted to Christianity, but the Jesuits took control of the port city of Nagasaki and trade flourished. Japan was well on its way to westernization.

In 1600, the trend changed dramatically. In that year, **Tokugawa Ieyasu** established the Tokugawa Shogunate, a strict and rigid government that ruled Japan until 1868. The shogun further consolidated power away from the emperor and at the expense of the daimyo (feudal lords). Ieyasu claimed personal ownership to all lands within Japan and instituted a rigid social class model, inspired somewhat by Confucianism but in practice more like the caste system. Four classes (warrior, farmer, artisan, and merchant) were established and movement among the classes was forbidden.

The Tokugawa period—also known as the **Edo period** because Tokugawa moved the capital to Edo (modern-day Tokyo)—was marked by a reversal in attitudes toward Western influences. Within two decades, Christians were persecuted. By 1635, a **National Seclusion Policy** prohibited Japanese from traveling abroad, and prohibited most foreigners from visiting Japan (limited relations were kept with China, Korea, and the Netherlands). In other words, Japan became increasingly secluded. The policy remained in place for nearly 200 years.

Tokugawa was very serious about this policy. He was worried that Japan would be overrun by foreign influences. Keep in mind that Spain had claimed the nearby Philippines and that the English and Portuguese kept trying to make their way into China. So, in 1640, when a group of Portuguese diplomats and traders sailed to Japan to try to negotiate with the emperor and convince him to open up a dialogue, the shogun had every member of the Portuguese delegation executed on the spot. The message was clear. Japan was off limits.

The absence of foreign influences allowed Japanese culture to thrive. During this time period, Buddhism and Shinto remained at the center of culture, and unique Japanese art forms also prospered. **Kabuki** theatre and a new form of poetry, **haiku**, became very popular. Artists gave their lives to the creation of richly detailed scrolls, wood-block prints and paintings. In other words, under a strong central authority, Japanese culture underwent its own renaissance. Unlike the European Renaissance, however, it was strictly intended for domestic consumption.

Contrast Them: India, China, and Japan on European Aggression

No doubt about it, the Japanese under the Tokugawa Shogunate reacted most decisively against European colonialism. China and India both allowed trade and European occupation of port cities, although China increasingly limited it under the Manchus. India was the least suspecting of the Europeans, and it paid dearly. In the next chapter you'll see the consequences of these three attitudes toward the Europeans: India was overrun, China was partially overrun, and Japan, after briefly falling prey to outside influence, turned the tables and became a colonizing empire itself.

V. TECHNOLOGY AND INNOVATIONS 1450–1750

Europe became a powerful force during this time period because of their willingness to adapt and use three key innovations that existed in other parts of the world: gunpowder weapons, navigation and ship-building technology, and finally the printing press (which developed independently in Germany). But at a time when competition among the Europeans resulted in big risks and innovations, the Chinese and Japanese returned to more traditional lifestyles in order to maintain stability, and the Muslims, while retaining powerful land-based empires, allowed innovations in shipping and weaponry to pass them by.

The biggest impact of these new technologies was the expanded knowledge of the world that resulted from exploration by the European nations. Using their superior weapons and larger trading ships, the Europeans established new overseas trading empires, moved lots of plants and animals, enslaved and transported people across oceans, and generally transformed the interactions of the entire world. They fought wars with one another in Europe and—when they were unable to establish suitable trading relationships—went to war in the places they wished to conquer.

Increased contact meant the spread of new ideas and technology (such as the printing press), and the exposure to new cultures transformed both education and religion. The establishment of new Protestant churches in northern Europe increased the power of the kings and nation-states at the expense of the Catholic Church. Conversely, religious conflicts led to increased migrations from northern Europe and the resettlement of large numbers of colonists in the New World.

VI. CHANGES AND CONTINUITIES IN THE ROLE OF WOMEN

A number of powerful women took charge of the most powerful empires of this time. These included Elizabeth I of England, Isabella of Spain, and Nur Jahan of Mughal, India. With the exception of Elizabeth, who chose never to marry, most of these women shared power with their husbands. And in spite of the great power and visibility of these few elite women, for the most part, the status and freedoms of women changed little from the previous period—legally they were often considered property of their husbands, inherited less than sons or brothers, and had few rights in legal or political spheres.

The biggest change in the lives of women came from the mixing of previously unknown cultures. The result of global exploration and colonization, these new relationships produced offspring considered mixed or mestizo. Racial categories began to be more widely used in determining status or class hierarchy, and restrictions developed regarding marriages and legal relationships between classes. Changes in trade and production also placed a greater premium on male labor and jobs that women had traditionally held, like textile weaving, were increasing dominated by men.

Some regions of the world served as exceptions to these general patterns, but were still impacted by the global interactions. The forced migration of males in African societies resulted in a disproportionate number of females left behind in what were already matrilineal societies. These numbers reinforced polygyny or multiple marriages. Although large numbers of men also migrated from Europe, the predominately Christian societies did not allow multiple marriages, and as the number of unmarried women increased, this created a problem in societies that regarded marriage as the goal of all women.

The non-European areas of the world tended to regard older or widowed women with both respect and superstition. In both Africa and many Native American societies, councils of older women were part of the political decision-making process. However, older women were also to be feared as they couldn't necessarily be controlled. It was this need for control that led to a continuation of Neo-Confucianism values in eastern Asia. This social philosophy designated proper roles and virtues for women within the home with the understanding that if the home were stable so was the state.

In Europe, the revolutionary new ideas of the Renaissance and the Enlightenment included women, at least nominally. Education was more widely available to all classes, but opportunities for girls lagged far behind those of boys, and the highest levels of education were only open to males. Even the less-hierarchical new Protestant religions limited the roles of women to wife and mother and did not have convents or monastic systems as alternatives to traditional roles. Eventually, the Protestant countries grew even more puritanical in their regulation of sex, marriage, and illegitimacy.

VII. PULLING IT ALL TOGETHER

In the context of the Age of Exploration, “exploration” has lots of connotations. Of course, the most obvious is that it involved European exploration of the Americas, and the beginnings of direct contact with Asia. But more than that, its exploration was also internal. In the Renaissance, Europe explored its own lost history. During the Protestant Reformation it explored its relationship with God. During the Scientific Revolution Europe explored the universe and the laws by which the universe functioned. During the Enlightenment it explored the rights of man and the appropriate role of government, even as its empire depended on slavery. And during the Commercial Revolution, Europe explored its potential.

Combined, these explorations were going in all directions—outward, upward, inward, backward to the past, forward to the future—and it was all going on simultaneously. If you’re confused by the developments, you should be. It’s hard to figure out which movements in which combination impacted which events. Historians haven’t sorted it out either. It’s open to debate.

What we can say is this: During the time period discussed in the chapter, Europe was where the energy was. There was so much change, for so many reasons, that the boundaries of the continent literally couldn’t contain it. Unlike China and Japan, which largely looked inward, and unlike the Islamic world, which didn’t take to the seas or radically shake up religious and social orders, Europeans were dynamic at this particular time in history. They were analyzing everything and they were full of inconsistencies. Other civilizations at other times in history had at least as much energy and unrest, but because the Europeans had the technology, the political motivation, and the financial structure, they were able to quickly explode onto the world scene. Add in the evangelical nature of Christianity (an explicit desire to convert the world) and it’s clear that the desire for expansion ran deep.

Some would say that European monarchs ruled absolutely during this time period and adopted a controlling, ethnocentric attitude with regard to the cultures they dominated. Perhaps this was precisely because Europe was in such cultural chaos itself. Who knows? We’ll leave that to your further studies. In any case, it’s hard to deny that even as Europeans explored their own history, culture, and structures to unprecedented degrees, they had little trouble marginalizing the complexities of others.

What About the Non-European Cultures?

Why Was Their Interaction with the West So Varied?

There are lots of ways to answer these questions, but we'll get you started. China and Japan were both highly organized, confident civilizations. The contingencies of Europeans on their shores were modest. Because the Japanese and Chinese wanted desperately to preserve their own cultures, and because they had the power and sophistication to keep the Europeans, for the moment, at bay, that's precisely what they did. Why didn't the others?

In Africa, the societies were fragmented. No centralized power existed, so the Europeans were harder to fend off. What's more, the Europeans weren't initially obsessed with penetrating the entire continent. Because they didn't have to overtake entire civilizations to achieve their goals, they were able to trade goods and abduct individuals one by one, with little concern for long-term impact on the continent.

In the Americas, of course, civilizations were quickly overwhelmed by European technology and disease. And in the Ottoman Empire and Arabia, the interaction was somewhat limited because the Europeans weren't as dependent on the overland routes in their efforts to trade with India and China. This diminished the importance of the Middle East to the Europeans. What's more, because the Crusades ended unsuccessfully for the Europeans, trade with the Muslims was important but conquest of the region was off the radar.

Finally, What About the Global Economy?

How Did It Change?

In short, sailing, mercantilism, and private investment changed the global economy. In a few more words: Improvements in sailing diminished the need for the Asian land routes and connected the world like never before. Mercantilism and its dependence on the establishment of imperialism married economic and political developments. And the establishment of joint stock companies took major economic motivation out of the hands of governments and put it into the hands of the private sector. This meant that now thousands, tens of thousands, or even hundreds of thousands of people had a direct stake in trade routes and conquest. Because the benefits of economic prosperity were diffused among a larger group of individuals than ever before, governments began to lose their grip on controlling their own economies.

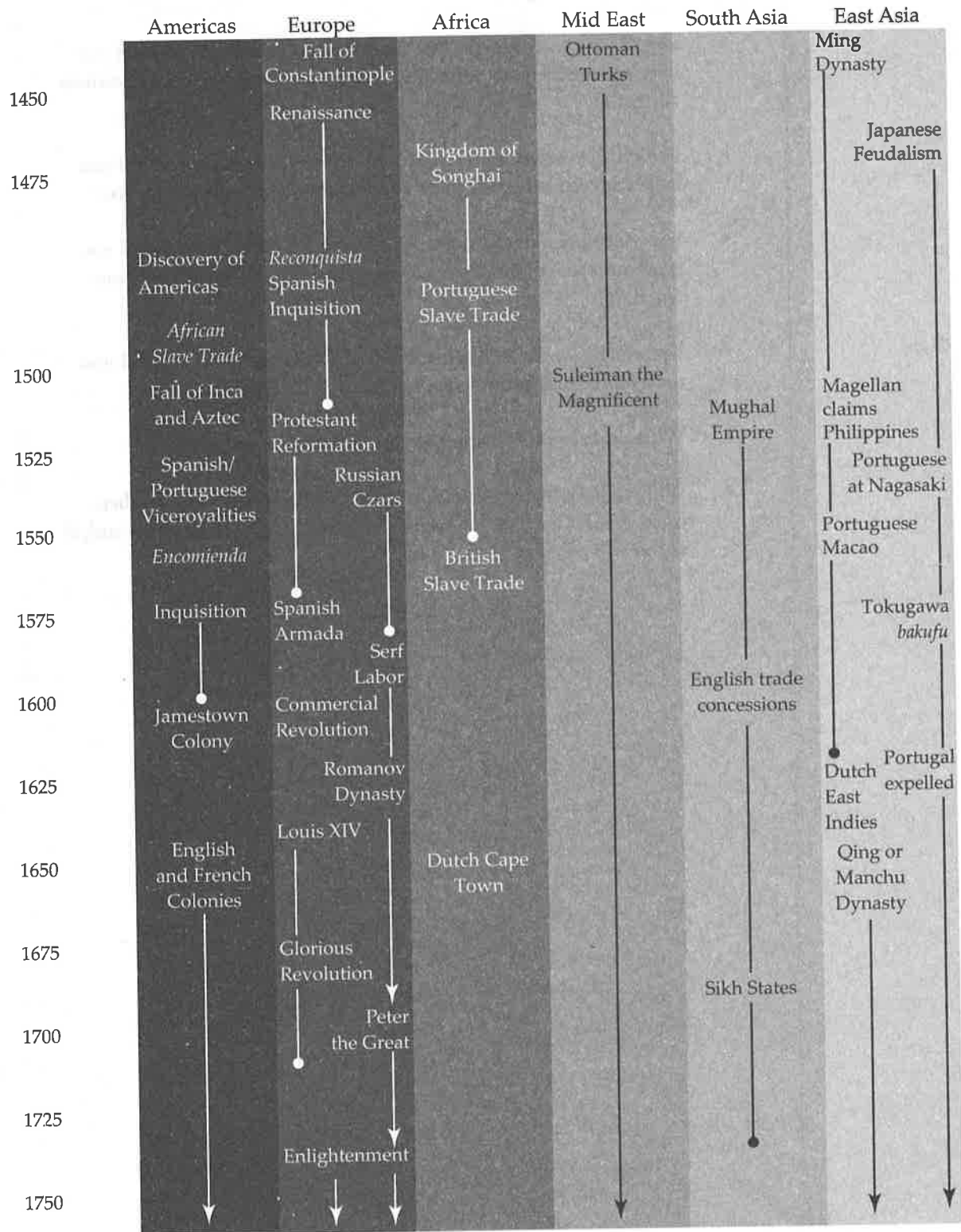
Important Terms

Absolute Monarch
Agrarian
Atheists
Capitalism
Cash Crop
Circumnavigate
Colonization
Commerce
Commercial
Commonwealth
Consequences
Continuity
Convent
Currency
Deists
Demography
Divine
Divine Right
Dominant
Economy
Hedonism
Hinder
Humanism
Institution
Jurisdiction
Left-Wing
Mercantilism
Monarchy
Monastic
Monk
Monopoly
Monotheism
Morality
Nun
Papacy/Papal
Parliament
Patriarch
Pope
Revolution
Right-Wing
Salvation
Sanctioned
Satire
Subsistence
Urbanization
Utopia/Utopian
Vassals
Venerate
Vernacular

People, Places, and Events

Age of Reason
Akbar the Great (Mughal India)
Batavia, Indonesia
Calvin, John
Columbian Exchange
Counter-Reformation
Dutch East India Company
Eastern Orthodox
Edict of Nantes
Edict of Fountainbleu
Elizabeth I of England
Encomienda System
English Bill of Rights
English Commonwealth
European Exploration
Floating Empires
Goa, India
Gutenberg's Printing Press
Hacienda System
Hapsburg Spain
Henry Tudor (Henry VIII)
Heliocentric Theory
Holy Roman Empire
Huguenots
Indulgences
Inquisition
Jannissary Corps
Jesuit Order
Law of Heavenly Bodies
Luther, Martin
Louis XIV (France)
Manchu (Qing Dynasty) China
Peter the Great (Russia)
Philip II of Spain
Potosi Silver Mine
Protestant Reformation
Renaissance
Roman Catholic Church
Scientific Methods
Scientific Revolution
Shogun
Silver or Single Whip System
Straits of Malacca, Indonesia
Suleiman the Magnificent (Ottoman)
Thirty Years War (1618–1648)
Tokugawa Bakufu System
Treaty of Westphalia (1648)
The Vatican
Zheng He (Ming, China)

VIII. TIMELINE OF MAJOR DEVELOPMENTS 1450–1750



REFLECT

Respond to the following questions:

- For which content topics discussed in this Chapter do you feel you have achieved sufficient mastery to answer multiple-choice questions correctly?
- For which content topics discussed in this Chapter do you feel you have achieved sufficient mastery to discuss effectively in an essay?
- For which content topics discussed in this Chapter do you feel you need more work before you can answer multiple-choice questions correctly?
- For which content topics discussed in this Chapter do you feel you need more work before you can discuss effectively in an essay?
- What parts of this Chapter are you going to re-review?
- Will you seek further help outside of this book (such as a teacher, tutor, or AP Central), on any of the content in this Chapter—and, if so, on what content?