CHAPTER

14

CHAPTER OUTLINE

- Rural Growth and Crisis
- Urban Revival
- Learning, Literature, and the Renaissance
- Political and Military Transformations
- Conclusion

DIVERSITY + DOMINANCE *Persecution and Protection of Jews, 1272–1349*

ENVIRONMENT + TECHNOLOGY *The Clock*

Burying Victims of the Black Death This scene from Tournai, Flanders, captures the magnitude of the plague.

Visit the website and ebook for additional study materials and interactive tools: www.cengage.com/history/bullietearthpeople5e

The Latin West, 1200–1500

- How well did inhabitants of the Latin West, rich and poor, urban and rural, deal with their natural environment?
- What social and economic factors led to the growth of cities in late medieval Europe?
- What factors were responsible for the promotion of learning and the arts in the Latin West?
- What social, political, and military developments contributed to the rise of European nations in this period?

In the summer of 1454, a year after the Ottoman Turks captured the Greek Christian city of Constantinople, Aeneas Sylvius Piccolomini (uh-NEE-uhs SIL-vee-uhs pee-kuh-lo-MEE-nee), destined in four years to become pope, expressed doubts as to whether anyone could persuade the rulers of Christian Europe to take up arms together against the Muslims: "Christendom has no head whom all will obey—neither the pope nor the emperor receives his due." The Christian states thought more of fighting each other. French and English armies had been battling for over a century. The German emperor presided over dozens of states but did not really control them. The numerous kingdoms and principalities of Spain and Italy could not unite. With only slight exaggeration, Aeneas Sylvius moaned, "Every city has its own king, and there are as many princes as there are households." He attributed this lack of unity to European preoccupation with personal welfare and material gain. Both pessimism about human nature and materialism had increased during the previous century, after a devastating plague had carried off a third of western Europe's population.

Yet despite all these divisions, disasters, and wars, historians now see the period from 1200 to 1500 (Europe's Later Middle Ages) as a time of unusual progress. Prosperous cities adorned with splendid architecture, institutions of higher learning, and cultural achievements counterbalanced the avarice and greed that Aeneas Sylvius lamented. Frequent wars caused havoc and destruction, but they also promoted the development of military technology and more unified monarchies.

Although their Muslim and Byzantine neighbors commonly called western Europeans "Franks," they ordinarily referred to themselves as "Latins," underscoring their allegiance to Roman Catholicism and the Latin language used in its rituals. Some common elements promoted the **Latin West**'s vigorous revival: competition, the pursuit of success, and the effective use of borrowed technology and learning.

Latin West Historians' name for the territories of Europe that adhered to the Latin rite of Christianity and used the Latin language for intellectual exchange in the period ca. 500–1500.

RURAL GROWTH AND CRISIS

Between 1200 and 1500, the Latin West brought more land under cultivation using new farming techniques and made greater use of machinery and mechanical forms of energy. Yet for the nine out of ten people who lived in the countryside, hard labor brought meager returns, and famine, epidemics, and war struck often. After the devastation of the Black Death between 1347 and 1351, social changes speeded up by peasant revolts released many persons from serfdom and brought some improvements to rural life.

Peasants, Population, and Plague

Rural Life

In 1200, most western Europeans lived as serfs tilling the soil on large estates owned by the nobility and the church (see Chapter 9). They owed their lord both a share of their harvests and numerous labor services. As a consequence of the inefficiency of farming practices and their obligations to landowners, peasants received meager returns for their hard work. Even with numerous religious holidays, peasants labored some fifty-four hours a week in their fields, more than half the time in support of the local nobility. Each noble household typically lived from the labor of fifteen to thirty peasant families. The standard of life in the lord's stone castle or manor house contrasted sharply with the peasant's one-room thatched cottage containing little furniture and no luxuries.

Scenes of rural life show both men and women at work in the fields, but equality of labor did not mean equality in decision making at home. In the peasant's hut as elsewhere in medieval Europe, women were subordinate to men. The influential theologian Thomas Aquinas **(uh-KWY-nuhs)** (1225–1274) spoke for his age when he argued that although both men and women were created in God's image, there was a sense in which "the image of God is found in man, and not in woman: for man is the beginning and end of woman; as God is the beginning and end of every creature."[1]

Rural poverty resulted from rapid population growth as well as inefficient farming methods and social inequality. In 1200, China's population may have exceeded Europe's by two to one; by 1300, the population of each was about 80 million. China's population fell because of the Mongol conquest (see Chapter 12), while Europe's more than doubled between 1100 and 1445. Some historians believe the reviving economy stimulated the increase. Others argue that severe epidemics were few, and warmer-than-usual temperatures reduced mortality from starvation and exposure.

Musée Conde, Chantilly, France/Bridgeman-Giraudon/ Art Resource, NY

Rural French Peasants Many scenes of peasant life in winter are visible in this small painting by the Flemish Limbourg brothers from the 1410s. Above the snow-covered beehives one man chops firewood, while another drives a donkey loaded with firewood to a little village. At the lower right a woman, blowing on her frozen fingers, heads past the huddled sheep and hungry birds to join other women warming themselves in the cottage (whose outer wall the artists have cut away).

CHRONOLOGY

	Technology and Environment	Culture	Politics and Society
1200	1200s Widespread use of crossbows and windmills		1200s Champagne fairs flourish
			1204 Fourth Crusade
		1210s Teutonic Knights, Franciscans, Dominicans	
			1215 Magna Carta issued
		1225–1274 Philosopher-monk Thomas Aquinas	
1300		1300–1500 Rise of universities	
	1315–1317 Great Famine	1313–1375 Giovanni Boccaccio, humanist writer	1337 Start of Hundred Years War
	1347–1351 Black Death ca.		
	1350 Growing deforestation		
			1381 Wat Tyler's Rebellion
		ca. 1390–1441 Jan van Eyck, painter	
1400	1400s Cannon and hand-held firearms in use		1415 Portuguese take Ceuta
			1431 Joan of Arc burned
		1452–1519 Leonardo da Vinci, artist	
	1454 Gutenberg Bible		1453 End of Hundred Years War; Ottomans take Constantinople
		1492 Expulsion of Jews from Spain	1492 Fall of Muslim state of Granada

New Farming Technology

three-field system A rotational system for agriculture in which two fields grow food crops and one lies fallow. It gradually replaced the two-field system in medieval Europe.

More people required more productive farming and new agricultural settlements. One widespread new technique, the **three-field system**, replaced the custom of leaving half the land fallow (uncultivated) every year to regain its fertility. Farmers grew crops on two-thirds of their land each year, alternating wheat and rye with oats, barley, or legumes. The third field was left fallow. The oats restored nitrogen to the depleted soil and produced feed for plow horses. In much of Europe, however, farmers continued to let half of their land lie fallow and use oxen (less efficient but cheaper than horses) to pull their plows.

New Settlements

Population growth also encouraged new agricultural settlements. In the twelfth and thirteenth centuries, large numbers of Germans migrated into the fertile lands east of the Elbe River and into the eastern Baltic states. Knights belonging to Latin Christian religious orders slaughtered or drove away native inhabitants who had not yet adopted Christianity. During the thirteenth century, the Order of Teutonic Knights conquered, resettled, and administered a vast area along the Baltic that later became Prussia (see Map 14.3 on page 418). Other Latin Christians founded new settlements on lands conquered from the Muslims and Byzantines in southern Europe and on Celtic lands in the British Isles.

AP* Exam Tip General knowledge of land management systems, but not specific details of the three-field system, is required for the multiple choice portion of the exam.

Draining swamps and clearing forests also brought new land under cultivation. But as population continued to rise, some people had to farm lands that had poor soils or were vulnerable to flooding, frost, or drought. Average crop yields fell accordingly after 1250, and more people lived at the edge of starvation. According to one historian, "By 1300, almost every child born in western Europe faced the probability of extreme hunger at least once or twice during his expected 30 to 35 years of life."[2] One unusually cold spell produced the Great Famine of 1315–1317, which affected much of Europe.

Famines

Black Death An outbreak of bubonic plague that spread across Asia, North Africa, and Europe in the mid-fourteenth century, carrying off vast numbers of persons.

The **Black Death** reversed the population growth. This terrible plague originated in China and spread across Central Asia with the Mongol armies (see Chapter 12). In 1346, the Mongols attacked the city of Kaffa (KAH-fah) on the Black Sea; a year later, Genoese (JEN-oh-eez) traders in Kaffa carried the disease to Italy and southern France. For two years, the Black Death spread across Europe, in some places carrying off two-thirds of the population. Average losses in western Europe amounted to one in three.

AP* Exam Tip The impact of the plague pandemics on the world is specifically highlighted in the course outline.

Victims developed boils the size of eggs in their groins and armpits, black blotches on their skin, foul body odors, and severe pain. In most cases, death came within a few days. Town officials closed their gates to people from infected areas and burned the victims' possessions. Such measures helped to spare some communities but could not halt the advance of the disease (see Map 14.1). Bubonic plague, the primary form of the Black Death, spreads from person to person and through the bites of fleas infesting the fur of certain rats. Although medieval doctors did not associate the disease with rats, eliminating the rats that thrived on urban refuse would have been difficult.

The plague left a psychological mark, bringing home to people how sudden and unexpected death could be. Some people became more religious, giving money to the church or hitting themselves with iron-tipped whips to atone for their sins. Others chose reckless enjoyment, spending their money on fancy clothes, feasts, and drinking. Whatever their mood, most survivors soon resumed their daily routines.

Periodic returns of plague made recovery from population losses slow and uneven. Europe's population in 1400 equaled that in 1200. Not until after 1500 did it rise above its preplague level.

Social Rebellion

Wat Tyler

In addition to its demographic and psychological effects, the Black Death triggered social changes in western Europe. Skilled and manual laborers who survived demanded higher pay for their services. At first, authorities tried to freeze wages at the old levels. Seeing this as a plot by the rich, peasants rose up against wealthy nobles and churchmen. During a widespread revolt in France in 1358, known as the Jacquerie, peasants looted castles and killed dozens of persons. In a large revolt led by Wat Tyler in 1381, English peasants invaded London, calling for an end to serfdom and obligations to landowners. Demonstrators murdered the archbishop of Canterbury and many royal officials. Authorities put down these rebellions with even greater bloodshed and cruelty, but they could not stave off the higher wages and other social changes the rebels demanded.

Better Rural Conditions

Serfdom practically disappeared in western Europe as peasants bought their freedom or ran away. Many free persons earning higher wages saved their money and bought land. Some English landowners who could no longer afford to hire enough fieldworkers began pasturing sheep for their wool. Others grew crops that required less care or made greater use of draft animals and laborsaving tools. Because the plague had not killed wild and domesticated animals, survivors had abundant meat and leather for shoes. Thus, the welfare of the rural masses generally improved after the Black Death, though the gap between rich and poor remained wide.

In urban areas, employers raised wages to attract workers. Guilds (discussed later in this chapter) shortened the period of apprenticeship. Competition within crafts also became more common. Although the overall economy shrank with the decline in population, per capita production actually rose.

Mills and Mines

Mining, metalworking, and the use of mechanical energy expanded so greatly in the centuries before 1500 that some historians speak of an "industrial revolution" in medieval Europe. That may be too strong a term, but the landscape fairly bristled with mechanical devices. Mills powered by water or wind ground grain, sawed logs, crushed olives, tanned leather, and made paper.

Watermills

In 1086, 5,600 watermills flanked England's many rivers. After 1200, mills spread rapidly across the western European mainland. By the early fourteenth century, entrepreneurs had crammed 68 watermills into a 1-mile section of the Seine (sen) River in Paris. Less efficient **water wheels** depended on the flow of a river passing beneath them. Greater efficiency came from channeling water to fall over the top of the wheel so that gravity added force to the water's flow. Dams ensured a steady flow of water throughout the year. Some watermills in France and England even harnessed the power of ocean tides.

water wheel A mechanism that harnesses the energy in flowing water to grind grain or to power machinery. It was used in many parts of the world but was especially common in Europe from 1200 to 1900.

Windmills multiplied in comparatively dry lands like Spain and in northern Europe, where ice made water wheels useless in winter. Designs for watermills dated back to Roman times, and the Islamic world, which inherited Hellenistic technologies, knew both water wheels and windmills. But people in the medieval Latin West used these devices on a much larger scale than did people elsewhere.

Milling and Iron Making

Owners invested heavily in building mills, but since nature furnished the energy to run them for free, they returned great profits. While individuals or monasteries constructed some mills, most were built by groups of investors. Rich millers often aroused the jealousy of their neighbors. In his *Canterbury Tales*, the English poet Geoffrey Chaucer (ca. 1340–1400) captured their unsavory reputation by portraying a miller as "a master-hand at stealing grain" by pushing down on the balance scale with his thumb.[3]

Waterpower aided the great expansion of iron making. Water powered the stamping mills that broke up the iron, the trip hammers that pounded it, and the bellows (first documented in the West in 1323) that raised temperatures to the point where the iron was liquid enough to be poured into molds. Blast furnaces producing high-quality iron are documented from 1380. Finished products ranged from armor to nails, from horseshoes to hoes.

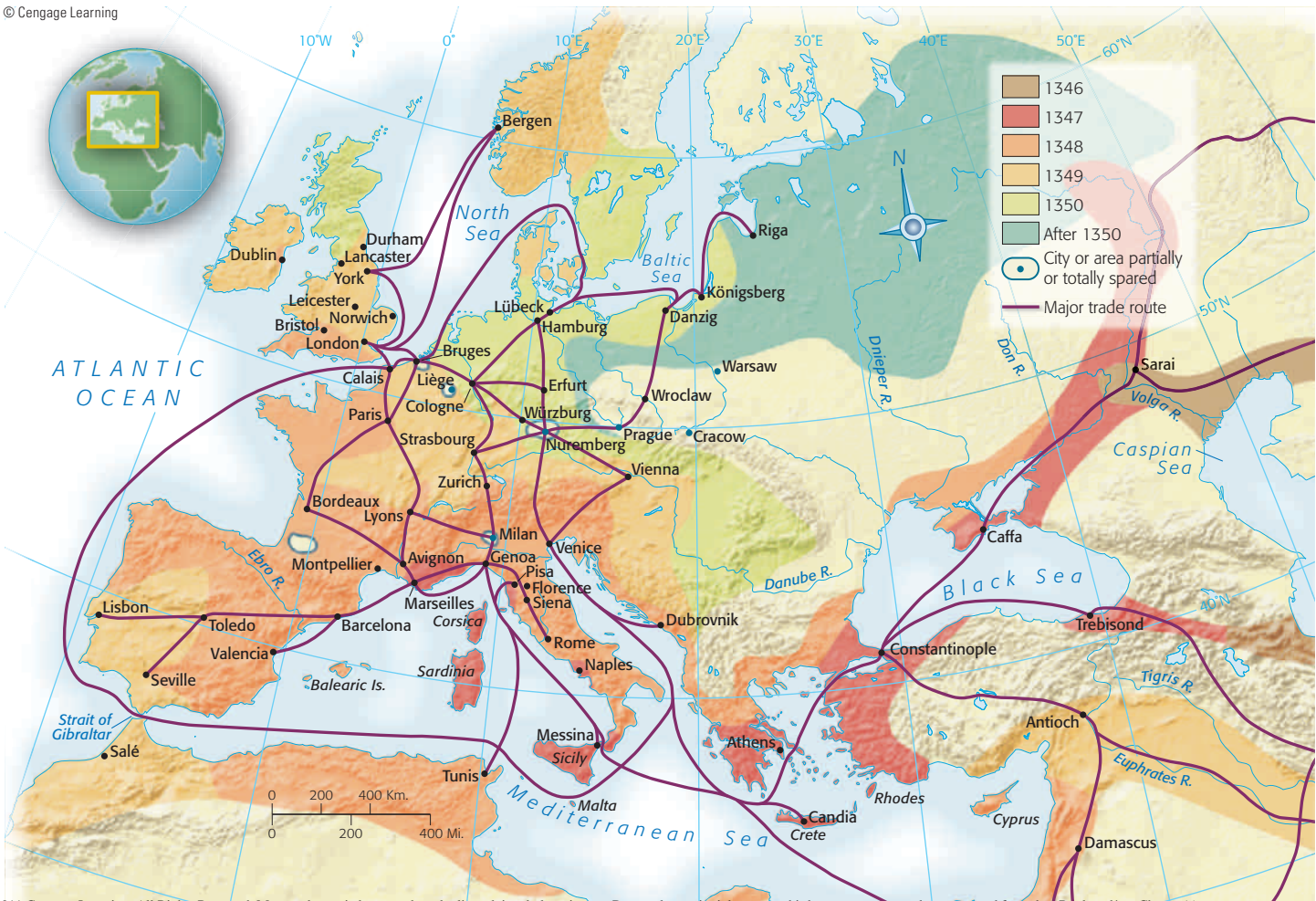
Growth of Industry

Demand stimulated iron mining in many parts of Europe. In addition, new silver, lead, and copper mines in Austria and Hungary supplied metal for coins, church bells, cannon, and statues. Techniques of deep mining developed in central Europe spread west in the latter part of the fifteenth century. A building boom stimulated stone quarrying in France during the eleventh, twelfth, and thirteenth centuries.

Industrial growth changed the landscape. Towns grew outward and new ones were founded, dams and canals changed the flow of rivers, and quarries and mines scarred the hillsides. Urban tanneries (factories that cured and processed leather), the runoff from slaughterhouses, and human waste polluted streams. England's Parliament enacted the first recorded antipollution law in 1388, but enforcement proved difficult.

Interactive Map

MAP 14.1 The Black Death in Fourteenth-Century Europe Spreading out of southwestern China along the routes opened by Mongol expansion, the plague reached the Black Sea port of Kaffa in 1346. This map documents its deadly progress year by year from there into the Mediterranean and north and east across the face of Europe.



SECTION REVIEW

- Population growth stimulated improved farming methods and agricultural expansion, but peasant life did not significantly improve.
- Famine and the Black Death reversed the population growth and resulted in social change throughout western Europe.
- Improved mill designs and other technology stimulated further industrial growth, which, in turn, changed the landscape.

Deforestation accelerated. Trees provided timber for buildings and ships. Tanneries stripped bark to make acid for tanning leather. Many forests gave way to farmland. The glass and iron industries used great quantities of charcoal, made by controlled burning of oak or other hardwood, to produce the high temperatures required. A single iron furnace could consume all the trees within five-eighths of a mile (1 kilometer) in just forty days. Consequently, the later Middle Ages saw the end of many of western Europe's once-dense forests, except in places where powerful landowners established hunting preserves.

URBAN REVIVAL

AP* Exam Tip It is important to be able to compare the role of cities in various regions.

In the tenth century, no town in the Latin West could compete in size, wealth, or comfort with the cities of Byzantium and Islam. Yet by the later Middle Ages, the Mediterranean, Baltic, and Atlantic coasts boasted wealthy port cities, as did some major rivers draining into these seas (see Map 14.2). Some Byzantine and Muslim cities still exceeded those of the West in size, but not in commercial, cultural, and administrative dynamism, as marked by impressive new churches, guild halls, and residences.

PRIMARY SOURCE: Description of the World Follow Marco Polo, and hear him relate the natural, and sometimes supernatural, wonders he encountered on his journey to Khubilai Khan.

Trading Cities

Most urban growth after 1200 resulted from manufacturing and trade, both between cities and their hinterlands and over long distances. Northern Italy particularly benefited from maritime trade with the port cities of the eastern Mediterranean and, through them, the markets of the Indian Ocean and East Asia. In northern Europe, commercial cities in the county of Flanders (roughly today's Belgium) and around the Baltic Sea profited from regional networks and from overland and sea routes to the Mediterranean.

The Fourth Crusade

A Venetian-inspired assault in 1204 against the city of Constantinople, misleadingly named the "Fourth Crusade," temporarily eliminated Byzantine control of the passage between the Mediterranean and the Black Sea and thereby allowed Venice to seize Crete and expand its trading colonies around the Black Sea. Another boon to Italian trade came from the westward expansion of the Mongol Empire, which opened trade routes from the Mediterranean to China (see Chapter 12).

Marco Polo

A young merchant named Marco Polo set out from Venice in 1271 and reached the Mongol court in China after a long trek across Central Asia. He served the emperor Khubilai Khan for many years as an ambassador and governor of a Chinese province. Some scholars question Marco's later account of these adventures and a treacherous return voyage through the Indian Ocean that returned him to Venice in 1295, after an absence of twenty-four years. Similar reports of the riches of the East came from other European travelers.

When Mongol decline interrupted the caravan trade in the fourteenth century, Venetian merchants purchased eastern silks and spices brought by other middlemen to Constantinople, Damascus, and Cairo. Three times a year, Venice dispatched convoys of two or three galleys, with sixty oarsmen each, capable of bringing back 2,000 tons of goods. Other merchants explored new overland or sea routes.

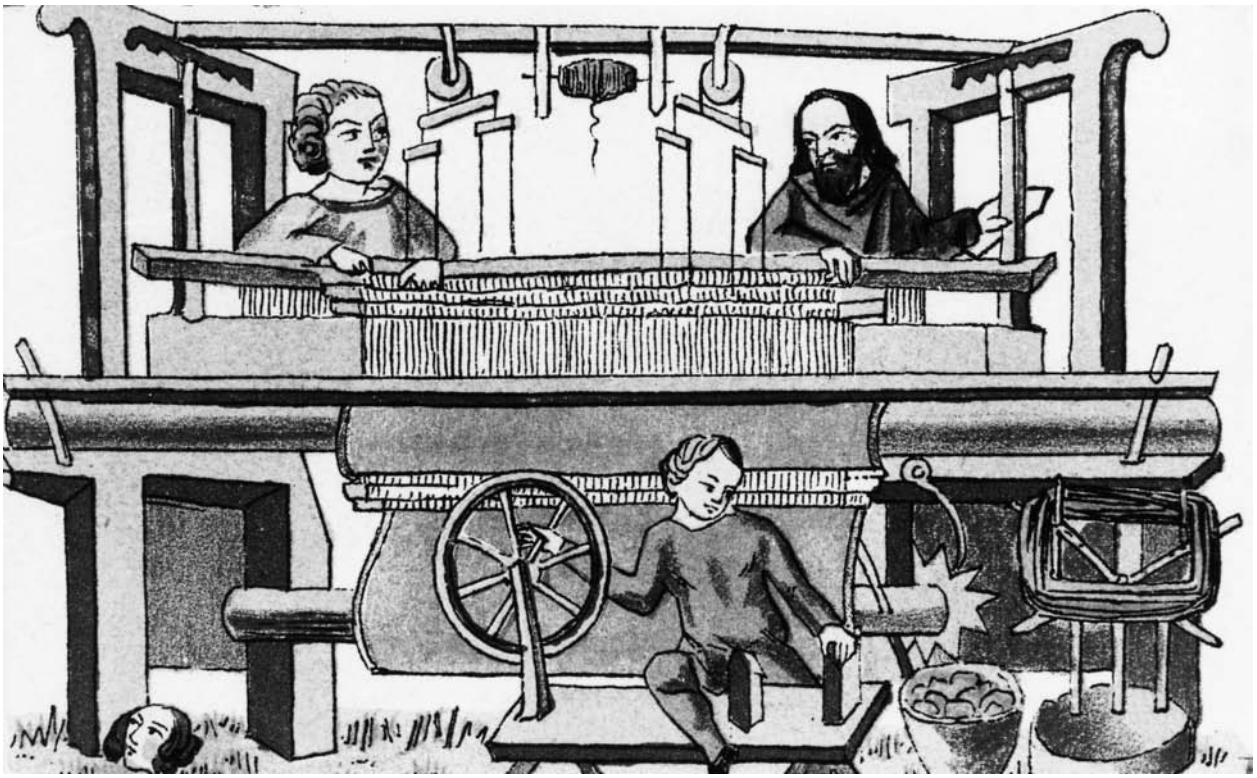
Hanseatic League An economic and defensive alliance of the free towns in northern Germany, founded about 1241 and most powerful in the fourteenth century.

Genoa and Hanseatic League

The sea trade of Genoa on northern Italy's west coast probably equaled that of Venice. Genoese merchants established colonies in the western and eastern Mediterranean and around the Black Sea. In northern Europe, an association of trading cities known as the **Hanseatic** (han-see-AT-ik) **League** traded extensively in the Baltic, including the coasts of Prussia, newly conquered by German knights. Their merchants ranged eastward to Novgorod in Russia and westward across the North Sea to London.

Flemish Cities and Textiles

In the late thirteenth century, Genoese galleys from the Mediterranean and Hanseatic ships from the Baltic were converging on the trading and manufacturing cities in Flanders. Arti-



Stedelijke Openbare Bibliotheek, Ypres

Flemish Weavers, Ypres The spread of textile weaving gave employment to many people in the Netherlands. The city of Ypres in Flanders (now northern Belgium) was an important textile center in the thirteenth century. This drawing from a fourteenth-century manuscript shows a man and a woman weaving cloth on a horizontal loom, while a child makes thread on a spinning wheel.

sans in the Flemish towns of Bruges (broozh), Ghent (gent [hard *g* as in *get*]), and Ypres (EE-pruh) transformed raw wool from England into a fine cloth that was softer and smoother than the coarse "homespuns" from simple village looms. Dyed in vivid hues, these Flemish textiles appealed to wealthy Europeans, who also appreciated fine textiles from Asia.

Trade Fairs

Along the overland route connecting Flanders and northern Italy, important trading fairs developed in the Champagne (sham-PAIN) region of Burgundy. The Champagne fairs began as regional markets, exchanging manufactured goods, livestock, and farm produce once or twice a year. When the king of France gained control of Champagne at the end of the twelfth century, royal guarantees of safe conduct to merchants turned these markets into international fairs that were important for currency exchange and other financial transactions as well. A century later, fifteen Italian cities had permanent consulates in Champagne to represent the interests of their citizens. During the fourteenth century, the large volume of trade made it cheaper to ship Flemish woolens to Italy by sea than to pack them overland on animal backs. Champagne's fairs consequently lost some international trade, but they remained important as regional markets.

The Wool Trade

In the late thirteenth century, the English monarchy raised taxes on exports of raw wool, making cloth manufacture in England more profitable than in Flanders. Flemish specialists crossed the English Channel and introduced the spinning wheel and other devices to England. Annual raw wool exports fell from 35,000 sacks of wool at the beginning of the fourteenth century to 8,000 in the mid-fifteenth century, while English wool cloth production rose from 4,000 pieces just before 1350 to 54,000 a century later.

Florence also replaced Flemish imports with its own woolens industry financed by local banking families. In 1338, Florence manufactured 80,000 pieces of cloth, while importing only 10,000. These changes in the textile industry show how competition promoted the spread of manufacturing and encouraged new specialties.

The growing textile industries used the power of wind and water channeled through gears, pulleys, and belts to drive all sorts of machinery. Flemish mills cleaned and thickened woven

MAP 14.2 **Trade and Manufacturing in Later Medieval Europe** The economic revival of European cities was associated with great expansion of commerce. Notice the concentration of wool and linen textile manufacturing in northern Italy, the Netherlands, and England; the importance of trade in various kinds of foodstuffs; and the slave-exporting markets in Cairo, Kiev, and Rostov.

Interactive Map

cloth by beating it in water, a process known as fulling. Other mills produced paper, starting in southern Europe in the thirteenth century. Unlike the Chinese and Muslim papermakers, who had pursued the craft for centuries, the Europeans introduced machines to do the heavy work.

Venice

In the fifteenth century, Venice surpassed its European rivals in the volume of its trade in the Mediterranean as well as across the Alps into central Europe. Its craftspeople manufactured luxury goods once obtainable only from eastern sources, notably silk and cotton textiles, glassware and mirrors, jewelry, and paper. Exports of Italian and northern European woolens to the eastern Mediterranean also rose. In the space of a few centuries, western European cities had used the eastern trade to increase their prosperity and then reduce their dependence on eastern goods.

Civic Life

Most northern Italian and German cities were independent states, much like the port cities of the Indian Ocean Basin (see Chapter 13). Other European cities held royal charters exempting them from the authority of local nobles. Their autonomy enabled them to adapt to changing market conditions more quickly than cities controlled by imperial authorities, as in China and the Islamic world. Since anyone who lived in a chartered city for over a year could claim freedom, urban life promoted social mobility.

Jews in Europe

Europe's Jews mostly lived in cities. Spain had the largest communities because of the tolerance of earlier Muslim rulers. Commercial cities elsewhere welcomed Jews with manufacturing and business skills. Despite official protection by certain Christian princes and kings, Jews endured violent religious persecutions or expulsions in times of crisis, such as during the Black Death (see Diversity and Dominance: Persecution and Protection of Jews, 1272–1349). In 1492, the Spanish monarchs expelled all Jews in the name of religious and ethnic purity. Only the papal city of Rome left its Jews undisturbed throughout the centuries before 1500.

Artisan Guilds

guild In medieval Europe, an association of men (rarely women), such as merchants, artisans, or professors, who worked in a particular trade and banded together to promote their economic and political interests. Guilds were also important in other societies, such as the Ottoman and Safavid Empires.

Within most towns and cities, powerful associations known as guilds dominated civic life. **Guilds** brought together craft specialists, such as silversmiths, or merchants working in a particular trade, to regulate business practices and set prices. Guilds also trained apprentices and promoted members' interests with the city government. By denying membership to outsiders and Jews, guilds protected the interests of families that already belonged to them. Guilds also perpetuated male dominance of most skilled jobs.

Women

Nevertheless, in a few places, women could join guilds either on their own or as the wives, widows, or daughters of male guild members. Large numbers of poor women also toiled in nonguild jobs in urban textile industries and in the food and beverage trades, generally receiving lower wages than men.

Some women advanced socially through marriage to wealthy men. One of Chaucer's *Canterbury Tales* concerns a woman from Bath, a city in southern England, who became wealthy by marrying a succession of old men for their money (and then two other husbands for love), "aside from other company in youth." She was also a skilled weaver, Chaucer says: "In making cloth she showed so great a bent, / She bettered those of Ypres and of Ghent."

Banking

By the fifteenth century, a new class of wealthy merchant-bankers was operating on a vast scale and specializing in money changing and loans and making investments on behalf of other parties. Merchants great and small used their services. They also handled the financial transactions of ecclesiastical and secular officials and arranged for the transmission to the pope of funds known as Peter's pence, a collection taken up annually in every church in the Latin West. Princes and kings supported their wars and lavish courts with credit. Some merchant-bankers even developed their own news services, gathering information on any topic that could affect business.

The Fugger Bank

Florentine financiers invented checking accounts, organized private shareholding companies (the forerunners of modern corporations), and improved bookkeeping techniques. In the fifteenth century, the Medici (MED-ih-chee) family of Florence operated banks in Italy, Flanders, and London. Medicis also controlled the government of Florence and commissioned art works. The Fuggers (FOOG-uhrz) of Augsburg, who had ten times the Medici bank's lending capital, topped Europe's banking fraternity by 1500. Beginning as cloth merchants under Jacob "the Rich" (1459–1525), the family's many activities included the trade in Hungarian copper, essential for casting cannon.

Persecution and Protection of Jews, 1272–1349

Because they did not belong to the dominant Latin Christian faith, Jews suffered from periodic discrimination and persecution. For the most part, religious and secular authorities tried to curb such anti-Semitism. Jews, after all, were useful citizens who worshiped the same God as their Christian neighbors. Still, it was hard to know where to draw the line between justifiable and unjustifiable discrimination. The famous reviser of Catholic theology, St. Thomas Aquinas, made one such distinction in his Summa Theologica *with regard to attempts at forced conversion.*

Now, the practice of the Church never held that the children of Jews should be baptized against the will of their parents. . . . Therefore, it seems dangerous to bring forward this new view, that contrary to the previously established custom of the Church, the children of Jews should be baptized against the will of their parents.

There are two reasons for this position. One stems from danger to faith. For, if children without the use of reason were to receive baptism, then after reaching maturity they could easily be persuaded by their parents to relinquish what they had received in ignorance. This would tend to do harm to the faith.

The second reason is that it is opposed to natural justice . . . it [is] a matter of natural right that a son, before he has the use of reason, is under the care of his father. Hence, it would be against natural justice for the boy, before he has the use of reason, to be removed from the care of his parents, or for anything to be arranged for him against the will of his parents.

The "new view" Aquinas opposed was much in the air, for in 1272 Pope Gregory X issued a decree condemning forced baptism. The pope's decree reviews the history of papal protection given to the Jews, starting with a quotation from Pope Gregory I dating from 598, and decrees two new protections of Jews' legal rights.

Even as it is not allowed to the Jews in their assemblies presumptuously to undertake for themselves more than that which is permitted them by law, even so they ought not to suffer any disadvantage in those [privileges] which have been granted them.

Although they prefer to persist in their stubbornness rather than to recognize the words of their prophets and the mysteries of the Scriptures, and thus to arrive at a knowledge of Christian faith and salvation; nevertheless, inasmuch as they have made an appeal for our protection and help, we therefore admit their petition and offer them the shield of our protection through the clemency of Christian piety. In so doing we follow in the footsteps of our predecessors of happy memory, the popes of Rome—Calixtus, Eugene, Alexander, Clement, Celestine, Innocent, and Honorius.

We decree moreover that no Christian shall compel them or any one of their group to come to baptism unwillingly. But if any one of them shall take refuge of his own accord with Christians, because of conviction, then, after his intention will have been made manifest, he shall be made a Christian without any intrigue. For indeed that person who is known to come to Christian baptism not freely, but unwillingly, is not believed to possess the Christian faith.

Moreover, no Christian shall presume to seize, imprison, wound, torture, mutilate, kill, or inflict violence on them; furthermore no one shall presume, except by judicial action of the authorities of the country, to change the good customs in the land where they live for the purpose of taking their money or goods from them or from others.

In addition, no one shall disturb them in any way during the celebration of their festivals, whether by day or by night, with clubs or stones or anything else. Also no one shall exact any compulsory service of them unless it be that which they have been accustomed to render in previous times.

Inasmuch as the Jews are not able to bear witness against the Christians, we decree furthermore that the testimony of Christians against Jews shall not be valid unless there is among these Christians some Jew who is there for the purpose of offering testimony.

Since it occasionally happens that some Christians lose their Christian children, the Jews are accused by their enemies of secretly carrying off and killing these same Christian children, and of making sacrifices of the heart and blood of these very children. It happens, too, that the parents of these children, or some other Christian enemies of these Jews, secretly hide these very children in order that they may be able to injure these Jews, and in order that they may be able to extort from them a certain amount of money by redeeming them from their straits.

And most falsely do these Christians claim that the Jews have secretly and furtively carried away these children and killed them, and that the Jews offer sacrifice from the heart and the blood of these children, since their law in this matter precisely and expressly forbids Jews to sacrifice, eat, or drink the blood, or eat the flesh of animals having claws. This has been demonstrated many times at our court by Jews converted to the Christian faith: nevertheless very many Jews are often seized and detained unjustly because of this.

We decree, therefore, that Christians need not be obeyed against Jews in such a case or situation of this type, and we order that Jews seized under such a silly pretext be freed from imprisonment, and that they shall not be arrested henceforth on such a miserable pretext, unless—which we do not believe—they be caught in the commission of the crime. We decree that no Christian shall stir up anything against them, but that they should be maintained in that status and position in which they were from the time of our predecessors, from antiquity till now.

We decree, in order to stop the wickedness and avarice of bad men, that no one shall dare to devastate or to destroy a

cemetery of the Jews or to dig up human bodies for the sake of getting money [by holding them for ransom]. Moreover, if anyone, after having known the content of this decree, should—which we hope will not happen—attempt audaciously to act contrary to it, then let him suffer punishment in his rank and position, or let him be punished by the penalty of excommunication, unless he makes amends for his boldness by proper recompense. Moreover, we wish that only those Jews who have not attempted to contrive anything toward the destruction of the Christian faith be fortified by the support of such protection. . . .

Despite such decrees, violence against Jews might burst out when fears and emotions were running high. This selection is from the official chronicles of the upper-Rhineland towns.

In the year 1349 there occurred the greatest epidemic that ever happened. Death went from one end of the earth to the other, on that side and this side of the [Mediterranean] sea, and it was greater among the Saracens [Muslims] than among the Christians. In some lands everyone died so that no one was left. Ships were also found on the sea laden with wares; the crew had all died and no one guided the ship. The Bishop of Marseilles and priests and monks and more than half of all the people there died with them. In other kingdoms and cities so many people perished that it would be horrible to describe. The pope at Avignon stopped all sessions of court, locked himself in a room, allowed no one to approach him and had a fire burning before him all the time. And from what this epidemic came, all wise teachers and physicians could only say that it was God's will. And the plague was now here, so it was in other places, and lasted more than a whole year. This epidemic also came to Strasbourg in the summer of the above mentioned year, and it is estimated about sixteen thousand people died.

In the matter of this plague the Jews throughout the world were reviled and accused in all lands of having caused it through the poison which they are said to have put into the water and the wells—that is what they were accused of—and for this reason the Jews were burnt all the way from the Mediterranean into Germany, but not in Avignon, for the pope protected them there.

Nevertheless they tortured a number of Jews in Berne and Zofingen who admitted they had put poison into many wells, and they found the poison in the wells. Thereupon they burnt the Jews in many towns and wrote of this affair to Strasbourg, Freibourg, and Basel in order that they too should burn their Jews. . . . The deputies of the city of Strasbourg were asked what they were going to do with their Jews. They answered and said that they knew no evil of them. Then . . . there was a great indignation and clamor against the deputies from Strasbourg. So finally the Bishop and the lords and the Imperial Cities agreed to do away with the Jews. The result was that they were burnt in many cities, and wherever they were expelled they were caught by the peasants and stabbed to death or drowned. . . .

On Saturday—that was St. Valentine's Day—they burnt the Jews on a wooden platform in their cemetery. There were about two thousand people of them. Those who wanted to baptize themselves were spared. Many small children were taken out of the fire and baptized against the will of their fathers and mothers. And everything that was owed to the Jews was cancelled, and the Jews had to surrender all pledges and notes that they had taken for debts. The council, however, took the cash that the Jews possessed and divided it among the working-men proportionately. The money was indeed the thing that killed the Jews. If they had been poor and if the feudal lords had not been in debt to them, they would not have been burnt.

QUESTIONS FOR ANALYSIS

1. **Why do Aquinas and Pope Gregory oppose prejudicial actions against Jews?**
2. **Why did prejudice increase at the time of the Black Death?**
3. **What factors account for the differences between the views of Christian leaders and the Christian masses?**

Source: First selection reprinted with the permission of Pocket Books, a division of Simon & Schuster, Inc., and the Vernon & Janet Bourke Living Trust from *The Pocket Aquinas*, edited with translations by Vernon G. Bourke. Copyright © 1960 by Washington Square Press. Copyright renewed © 1988 by Simon & Schuster, Inc. Second and third selections from Jacob R. Marcus, ed., *The Jew in the Medieval World: A Source Book, 315–1791* (Cincinnati: Union of American Hebrew Congregations, 1938), 152–154, 45–47. Reprinted with permission of the Hebrew Union College Press, Cincinnati.

PRIMARY SOURCE: The Practice of Commerce Get advice from an experienced Florentine merchant before planning your next overland business trip to Cathay!

Since Latin Christians generally considered charging interest (usury) sinful, Jews predominated in money lending. Christian bankers devised ways to profit from loans indirectly in order to get around the condemnation of usury. Some borrowers repaid loans in a different currency at a rate of exchange favorable to the lender. Others added to their repayment a "gift" in thanks to the lender. For example, in 1501, church officials agreed to repay a Fugger loan of 6,000 gold ducats in five months along with a "gift" of 400 ducats, amounting to an effective interest rate of 16 percent a year. In fact, the return was less since the church failed to repay the loan on time.

Yet most residents of western European cities lived in poverty and squalor rather than wealth. European cities generally lacked civic amenities, such as public baths and water supply systems, that had existed in the cities of Western antiquity and still survived in cities of the Islamic Middle East.

Gothic cathedrals Large churches originating in twelfth-century France; built in an architectural style featuring pointed arches, tall vaults and spires, flying buttresses, and large stained-glass windows.

Gothic Cathedrals

Master builders and associated craftsmen counted among the skilled people in greatest demand. Though cities competed with one another in the magnificence of their guild halls, town halls, and other structures (see Environment and Technology: The Clock), **Gothic cathedrals**, first

Cathedral at Autun in Eastern France Begun around 1120 and sufficiently completed to receive the relics of St. Lazaire in 1146, this cathedral reflected Romanesque architectural design and artistic taste. In the fifteenth century a rebuilding program changed the cathedral's external appearance from Romanesque to Gothic, but the images above the west portal survive in their original form. Carved by a sculptor named Gislebertus between 1130 and 1135, they depict the Last Judgment, with Christ enthroned between the saved souls on his right and those condemned to Hell on his left. The sharply angular figures are typical of Romanesque style. Scenes like these taught important religious messages to illiterate worshipers.

Scala/Art Resource, NY

The Clock

Clocks were a prominent feature of the Latin West in the late medieval period. The Song-era Chinese had built elaborate mechanical clocks centuries earlier (see Chapter 10), but the West was the first part of the world where clocks became a regular part of urban life. Whether mounted in a church steeple or placed on a bridge or tower, mechanical clocks proclaimed Western people's delight with mechanical objects, concern with precision, and display of civic wealth.

The word *clock* comes from a word for bell. The first mechanical clocks that appeared around 1300 in western Europe were simply bells with an automatic mechanical device to strike the correct number of hours. The most elaborate Chinese clock had been powered by falling water, but this was impractical in cold weather. The levers, pulleys, and gears of European clocks were powered by a weight hanging from a rope wound around a cylinder. An "escapement" lever regulated the slow, steady unwinding.

Bodleian Library, University of Oxford, Ms. Laud Misc. 570, 25v.

Early Clock This weight-driven clock dates from 1454.

Enthusiasm for building expensive clocks came from various parts of the community. For some time, monks had been using devices to mark the times for prayer. Employers welcomed chiming clocks to regulate the hours of their employees. Universities used them to mark the beginning and end of classes. Prosperous merchants readily donated money to build a splendid clock that would display their city's wealth. The city of Strasbourg, for example, built a clock in the 1350s that included statues of the Virgin, the Christ Child, and the three Magi; a mechanical rooster; the signs of the zodiac; a perpetual calendar; and an astrolabe—and it could play hymns, too!

By the 1370s and 1380s clocks were common enough for their measured hours to displace the older system that varied the length of the hour in proportion to the length of the day. Previously, for example, the London hour had varied from thirty-eight minutes in winter to eighty-two minutes in summer. By 1500 clocks had numbered faces with hour and minute hands. Small clocks for indoor use were also in vogue. Though not very accurate by today's standards, these clocks were still a great step forward. Some historians consider the clock the most important of the many technological advances of the later Middle Ages because it fostered so many changes during the following centuries.

appearing about 1140 in France, cost the most and brought the greatest prestige. The pointed, or Gothic, arch, replacing the older round, or Roman, arch, proved a hallmark of the new design. External (flying) buttresses stabilizing the high, thin, stone columns below the arches constituted another distinctive feature. This method of construction enabled master builders to push the Gothic cathedrals to great heights and fill the outside walls with giant windows depicting religious scenes in brilliantly colored stained glass. During the next four centuries, interior heights soared ever higher, towers and spires pierced the heavens, and walls became dazzling curtains of stained glass.

SECTION REVIEW

- After 1200, most cities grew through manufacture and trade, particularly those of northern Italy, Flanders, and the Baltic coast.
- Expanding trade and technological innovation ultimately reduced Europe's dependence on eastern goods.
- Cities fostered social mobility, but civic life was dominated by guilds, wealthy merchants, and bankers.
- Most urban residents lived in squalor without the amenities of Islamic Middle Eastern cities.
- Gothic cathedrals became signs of special civic pride and prestige in European cities.

The men who designed and built the cathedrals had little or no formal education and limited understanding of the mathematical principles of modern civil engineering. Master masons sometimes miscalculated, causing parts of some overly ambitious cathedrals to collapse. The record-high choir vault of Beauvais Cathedral, for instance—154 feet (47 meters) in height—came tumbling down in 1284. But as builders gained experience and invented novel solutions to their problems, success rose from the rubble of their mistakes. The cathedral spire in Strasbourg reached 466 feet (142 meters) into the air—as high as a forty-story building. Such heights were unsurpassed until the twentieth century.

LEARNING, LITERATURE, AND THE RENAISSANCE

The Roman Heritage

Throughout the Middle Ages, people in the Latin West lived amid reminders of the achievements of the Romans. They wrote and worshiped in a version of their language, traveled their roads, and obeyed some of their laws. The vestments and robes of popes, kings, and emperors followed the designs of Roman officials. Yet the learning of Greco-Roman antiquity virtually disappeared with the rise of the biblical world described in the Hebrew and Christian scriptures.

The Renaissance

A small revival of learning associated with the court of Charlemagne in the ninth century was followed by a larger renaissance (rebirth) in the twelfth century. Cities became centers of intellectual and artistic life. The universities established across the Latin West after 1200 contributed to this cultural revival. In the mid-fourteenth century, the pace of intellectual and artistic life quickened in what is often called the **Renaissance**, which began in northern Italy and later spread to northern Europe. Some Italian authors saw the Italian Renaissance as a sharp break with an age of darkness. Others see this era as the high noon of a day that had been dawning for several centuries.

Renaissance (European) A period of intense artistic and intellectual activity, said to be a "rebirth" of Greco-Roman culture. Usually divided into an Italian Renaissance, from roughly the mid-fourteenth to mid-fifteenth century, and a Northern (trans-Alpine) Renaissance, from roughly the early fifteenth to early seventeenth century.

Translations from Arabic

Before 1100, Byzantine and Islamic scholarship generally surpassed scholarship in Latin Europe. When Latin Christians wrested southern Italy from the Byzantines and Sicily and Toledo from the Muslims in the eleventh century, they acquired many manuscripts of Greek and Arabic works. These included works by Plato and Aristotle (AR-ih-stah-tahl) and Greek treatises on medicine, mathematics, and geography, as well as scientific and philosophical writings by Muslim writers. Latin translations of the Iranian philosopher Ibn Sina (IB-uhn SEE-nah) (980–1037), known in the West as Avicenna (av-uh-SEN-uh), had great influence because of their sophisticated blend of Aristotelian and Islamic philosophy. Jewish scholars contributed significantly to the translation and explication of Arabic and other manuscripts.

Universities

The thirteenth century saw the foundation of two new religious orders, the Dominicans and the Franciscans, some of whose most talented members taught in the independent colleges that arose after 1200. Some scholars believe that the colleges established in Paris and Oxford patterned themselves on similarly endowed places of study then spreading in the Islamic world—*madrasas*, which provided subsidized housing for poor students and paid the salaries of their teachers. The Latin West, however, innovated the idea of **universities**, degree-granting corporations specializing in multidisciplinary research and advanced teaching.

universities Degree-granting institutions of higher learning. Those that appeared in the Latin West from about 1200 onward became the model of all modern universities.

Between 1300 and 1500, sixty universities joined the twenty established before that time. Students banded together to start some of them; guilds of professors founded others. Teaching guilds, like the guilds overseeing manufacturing and commerce, set standards for the profession, trained apprentices and masters, and defended their professional interests.

Universities set the curriculum for each discipline and instituted final examinations for degrees. Students who passed the exams that ended their apprenticeship received a "license" to teach. Students who completed longer training and defended a masterwork of scholarship became "masters" and "doctors." The University of Paris gradually absorbed the city's various colleges, but the colleges of Oxford and Cambridge remained independent, self-governing organizations.

Specialized Training

Since all universities used Latin, students and masters could move freely across political and linguistic lines, seeking the courses they wanted and the most interesting professors. Some universities offered specialized training. Legal training centered on Bologna (buh-LOHN-yuh); Montpellier and Salerno focused on medicine; Paris and Oxford excelled in theology.

scholasticism A philosophical and theological system, associated with Thomas Aquinas, devised to reconcile Aristotelian philosophy and Roman Catholic theology in the thirteenth century.

The prominence of theology stemmed from many students aspiring to ecclesiastical careers, but scholars also saw theology as "queen of the sciences"—the central discipline encompassing all knowledge. Hence, thirteenth-century theologians sought to synthesize the rediscovered philosophical works of Aristotle and the commentaries of Avicenna with the Bible's revealed truth. These efforts to synthesize reason and faith were known as **scholasticism** (skoh-LAS-tih-sizm).

Thomas Aquinas

Thomas Aquinas, a brilliant Dominican priest who taught theology at the University of Paris, wrote the most notable scholastic work, the *Summa Theologica* (SOOM-uh thee-uh-LOH-jih-kuh), between 1267 and 1273. Although his exposition of Christian belief organized on Aristotelian principles came to be accepted as a masterly demonstration of the reasonableness of Christianity, scholasticism upset many traditional thinkers. Some church authorities tried to ban Aristotle from the curriculum. In addition, rivalry between the leading Dominican and Franciscan theological scholars continued over the next two centuries. However, the considerable freedom of medieval universities from both secular and religious authorities enabled the new ideas to prevail over the fears of church administrators.

PRIMARY SOURCE: *Summa Theologica*: On Free Will This selection from Thomas Aquinas, on the question of free will, shows a synthesis of Aristotelian logic and Christian theology.

Humanists and Printers

Dante's *Divine Comedy*

This period also saw important literary contributions. The Italian Dante Alighieri (DAHN-tay ah-lee-GYEH-ree) (1265–1321) completed a long, elegant poem, the *Divine Comedy*, shortly before his death. This supreme expression of medieval preoccupations tells the allegorical story of Dante's journey through the nine circles of Hell and the seven terraces of Purgatory, followed by his entry into Paradise. The Roman poet Virgil guides him through Hell and Purgatory; Beatrice, a woman he had loved from afar since childhood and whose death inspired the poem, guides him to Paradise.

The *Divine Comedy* foreshadows the literary fashions of the later Italian Renaissance. Like Dante, later Italian writers made use of Greco-Roman classical themes and mythology and sometimes courted a broader audience by writing not in Latin but in their local language (Dante used the vernacular spoken in Tuscany [TUS-kuh-nee]).

Chaucer's *Canterbury Tales*

The poet Geoffrey Chaucer (c. 1343–1400), many of whose works show the influence of Dante, wrote in vernacular English. The *Canterbury Tales*, a lengthy poem written in the last dozen years of his life, contains often humorous and earthy tales told by fictional pilgrims on their way to the shrine of Thomas à Becket in Canterbury (see Chapter 9). They present a vivid cross-section of medieval people and attitudes.

Humanities

Dante influenced a literary movement of the **humanists** that began in his native Florence in the mid-fourteenth century. The term refers to their interest in grammar, rhetoric, poetry, history, and moral philosophy (ethics)—subjects known collectively as the humanities, an ancient discipline. With the brash exaggeration characteristic of new intellectual fashions, humanist writers like the poet Francesco Petrarch (fran-CHES-koh PAY-trahrk) (1304–1374) and the poet and storyteller Giovanni Boccaccio (jo-VAH-nee boh-KAH-chee-oh) (1313–1375) proclaimed a revival of the classical Greco-Roman tradition they felt had for centuries lain buried under the rubble of the Middle Ages.

humanists (Renaissance) European scholars, writers, and teachers associated with the study of the humanities (grammar, rhetoric, poetry, history, languages, and moral philosophy), influential in the fifteenth century and later.

This idea of a rebirth of learning dismisses too readily the monastic and university scholars who for centuries had been recovering all sorts of Greco-Roman learning, as well as writers like Dante (whom the humanists revered), who anticipated humanist interests by a generation. Yet the humanists had a great impact as educators, advisers, and reformers. Their greatest influence came in reforming secondary education. They introduced a curriculum centered on the languages and

akg-images

Dante's Divine Comedy This fifteenth-century painting by Domenico di Michelino shows Dante holding a copy of the *Divine Comedy*. Hell is depicted to the poet's right and the terraces of Purgatory behind him, surmounted by the earthly and heavenly Paradise. The city of Florence, with its recently completed cathedral, appears to Dante's left.

literature of Greco-Roman antiquity, which they felt provided intellectual discipline, moral lessons, and refined tastes. This curriculum dominated European secondary schools well into the twentieth century. The universities felt the humanist influence less, mostly after 1500. Theology, law, medicine, and branches of philosophy other than ethics remained prominent in university education during this period.

Boccaccio's *Decameron*

Many humanists tried to duplicate the elegance of classical Latin and (to a lesser extent) Greek, which they revered as the pinnacle of learning, beauty, and wisdom. Boccaccio gained fame with his vernacular writings, which resemble Dante's, and especially for the *Decameron*, an earthy work that has much in common with Chaucer's boisterous tales. Under Petrarch's influence, however, Boccaccio turned to writing in classical Latin.

Erasmus of Rotterdam

As humanist scholars mastered Latin and Greek, they turned their language skills to restoring the original texts of Greco-Roman writers and of the Bible. By comparing different manuscripts, they eliminated errors introduced by generations of copyists. To aid in this task, Pope Nicholas V (r. 1447–1455) created the Vatican Library, buying scrolls of Greco-Roman writings and paying to have accurate copies and translations made. Working independently, the Dutch scholar Erasmus (uh-RAZ-muhs) of Rotterdam (ca. 1466–1536) produced a critical edition of the New Testament in Greek. Erasmus corrected many errors and mistranslations in the Latin text that had been in general use throughout the Middle Ages. Later, this humanist priest and theologian wrote—in classical Latin—influential moral guides, including the *Enchiridion militis christiani* (*The Manual of the Christian Knight,* 1503) and *The Education of a Christian Prince* (1515).

printing press A mechanical device for transferring text or graphics from a woodblock or type to paper using ink. Presses using movable type first appeared in Europe in about 1450.

The influence of the humanists grew as the new technology of printing made their critical editions of ancient texts, literary works, and moral guides more available. The Chinese and the Arabs used carved woodblocks for printing, and block-printed playing cards circulated in Europe before 1450, but after that date three European improvements revolutionized printing: (1) movable pieces of type consisting of individual letters, (2) new ink suitable for printing on paper, and (3) the **printing press**, a mechanical device that pressed inked type onto sheets of paper.

Gutenberg's Printing Press

Johann Gutenberg (yoh-HAHN GOO-ten-burg) (ca. 1394–1468) of Mainz led the way. The Gutenberg Bible of 1454, the first book in the West printed from movable type, exhibited a

The Art Archive

A French Printshop, 1537 A workman operates the "press," quite literally a screw device that presses the paper to the inked type. Other employees examine the printed sheets, each of which holds four pages. When folded, the sheets make a book. The man on the right is selecting pieces of type from a compartmented box and placing them in a frame for printing.

beauty and craftsmanship that bore witness to the printer's years of experimentation. Humanists worked closely with the printers, who spread the new techniques to Italy and France. Erasmus did editing and proofreading for the Italian scholar-printer Aldo Manuzio (1449–1515) in Venice. Manuzio's press published many critical editions of classical Latin and Greek texts.

By 1500, at least 10 million printed volumes flowed from presses in 238 European towns, launching a revolution that affected students, scholars, and a growing literate population. These readers consumed unorthodox political and religious tracts along with ancient texts.

Renaissance Artists

Although the artists of the fourteenth and fifteenth centuries continued to depict biblical subjects, the Greco-Roman revival led some, especially in Italy, to portray ancient deities and myths. Another popular trend involved scenes of daily life.

Neither theme was entirely new, however. Renaissance art, like Renaissance scholarship, owed a debt to earlier generations. Italian painters of the fifteenth century credited the Florentine painter Giotto (JAW-toh) (ca. 1267–1337) with single-handedly reviving the "lost art of painting." In religious scenes, Giotto replaced the stiff, staring figures of the Byzantine style, which were intended to overawe viewers, with more natural and human portraits with whose

Michelangelo's Tomb Statue of Lorenzo de Medici The greatest of the Medici bankers, Lorenzo governed Florence during the height of the Renaissance. At the time of his death in 1492 he had fallen under the influence of Girolamo Savonarola, a stern, moralistic priest who felt that art and morals had departed too far from proper Christianity. Nevertheless, the Roman armor and pensive expression of this statue epitomize the antique revival and dedication to thought associated with the term Renaissance.

Scala/Art Resource, NY

emotions of grief and love viewers could identify. Rather than floating on backgrounds of gold leaf, his saints inhabit earthly landscapes.

Flemish Art

North of the Alps, the Flemish painter Jan van Eyck (yahn vahn IKE) (ca. 1390–1441) mixed his pigments with linseed oil in place of the egg yolk of earlier centuries. Oil paints dried more slowly and gave pictures a superior luster. Italian painters quickly copied van Eyck's technique, though his own masterfully realistic paintings on religious and domestic themes remained distinctive.

Leonardo da Vinci (lay-own-AHR-doh dah-VIN-chee) (1452–1519) used oil paints for his *Mona Lisa*. Renaissance artists like Leonardo worked in many media, including bronze sculptures and frescos (painting on wet plaster) like *The Last Supper*. Leonardo's notebooks also contain imaginative designs for airplanes, submarines, and tanks. His younger contemporary Michelangelo (my-kuhl-AN-juh-low) (1472–1564) painted frescoes of biblical scenes on the ceiling of the Sistine Chapel in the Vatican, sculpted statues of David and Moses, and designed the dome for a new Saint Peter's Basilica in Rome.

Italian Art

The patronage of wealthy and educated merchants and prelates underlay the artistic blossoming in the cities of northern Italy and Flanders. The Florentine banker Cosimo de' Medici (1389–1464) and his grandson Lorenzo (1449–1492), known as "the Magnificent," spent immense

SECTION REVIEW

- Greco-Roman learning returned to the Latin West through a series of revivals that culminated with the Renaissance.
- An infusion of Greek and Islamic scholarship during the eleventh century helped to prompt the revival of the twelfth and thirteenth centuries.
- Colleges and universities grew, with theology as the preeminent discipline.
- Foreshadowed by Dante, humanism, with its focus on classical languages, literature, ethics, and education, emerged in Italy.
- The influence of the humanists spread through the new print technology.
- Renaissance artists enlarged the thematic and technical resources of painting, sculpture, and architecture.

sums on paintings, sculpture, and public buildings. In Rome, the papacy (PAY-puh-see) launched a building program that culminated in the construction of the new Saint Peter's Basilica and a residence for the pope.

These scholarly and artistic achievements exemplify the innovation and striving for excellence of the Late Middle Ages. The new literary themes and artistic styles of this period had lasting influence on Western culture. But the innovations in the organization of universities, in printing, and in oil painting had wider implications, for they were later adopted by cultures all over the world.

POLITICAL AND MILITARY TRANSFORMATIONS

AP* Exam Tip It is important to know the similarities and contrasts between feudalism in Europe and Japan.

Stronger and more unified states and armies developed in western Europe in parallel with the economic and cultural revivals (see Map 14.3). Through the prolonged struggle of the Hundred Years War, French and English monarchs forged closer ties with the nobility, the church, and the merchants. Crusades against Muslim states brought consolidation to Spain and Portugal. In Italy and Germany, however, political power remained in the hands of small states and loose alliances.

Monarchs, Nobles, and the Church

Thirteenth-century states continued early medieval state structures (see Chapter 9). Hereditary monarchs topped the political pyramid, but modest treasuries and the rights of nobles and the church limited their powers. Powerful noblemen who controlled vast estates had an important voice in matters of state. The church guarded closely its traditional rights and independence. Towns, too, had acquired rights and privileges. Towns in Flanders, the Hanseatic League, and Italy approached independence from royal interference. In theory the ruler's noble vassals owed military service in time of war. In practice, vassals sought to limit the monarch's power.

Crossbows and Firearms

In the year 1200, knights still formed the backbone of western European armies, but changes in weaponry brought this into question. Improved crossbows could shoot metal-tipped arrows with enough force to pierce helmets and light body armor. Professional crossbowmen, hired for wages, became increasingly common and much feared. Indeed, a church council in 1139 outlawed the crossbow—ineffectively—as being too deadly for use against Christians. The arrival in Europe of firearms based on the Chinese invention of gunpowder (see Chapter 12) further transformed the medieval army.

Rome Versus Avignon

The church also resisted royal control. In 1302, the outraged Pope Boniface VIII (r. 1294–1303) asserted that divine law made the papacy superior to "every human creature," including monarchs. Issuing his own claim of superiority, King Philip "the Fair" of France (r. 1285–1314) sent an army to arrest the pope, a chastisement that hastened Pope Boniface's death. Philip then engineered the election of a French pope, who established a new papal residence at Avignon (ah-vee-NYON) in southern France in 1309.

Great Western Schism
A division in the Latin (Western) Christian Church between 1378 and 1415, when rival claimants to the papacy existed in Rome and Avignon.

A succession of French-dominated popes residing in Avignon improved church discipline but at the price of compromising their neutrality in the eyes of other rulers. The **Great Western Schism** between 1378 and 1415 saw rival papal claimants at Avignon and Rome vying for Christian loyalties. The papacy eventually regained its independence and returned to Rome, but the

Spread of Roman Christendom
- In 1000 C.E.
- Added 1000–1200
- Lost 1000–1200 (Regained 1200–1500)
- Added 1200–1500
- Lost 1200–1500
- English holdings, 1360
- Boundary of the Holy Roman Empire

N

NORWAY
Oslo
SWEDEN
Stockholm
SCOTLAND
IRELAND
Dublin
North Sea
DENMARK
Copenhagen
Baltic Sea
ESTONIA
NOVGOROD
GRAND PRINCIPALITY OF MOSCOW
KHANATE OF THE KAZAN
PRUSSIA
Riga
Moscow
KHANATE OF THE GOLDEN HORDE
Königsberg
Danzig
WALES
ENGLAND
London
Hamburg
Elbe R.
PRUSSIA
GRAND PRINCIPALITY OF LITHUANIA
Don R.
50°N
50°E
Warsaw
FLANDERS
Rhine R.
POLAND
Volga R.
Kiev
Frankfurt
BRITTANY
Paris
CHAMPAGNE
LUXEMBOURG
HOLY ROMAN EMPIRE
BOHEMIA
Dnieper R.
KHANATE OF THE CRIMEA
KHANATE OF THE ASTRAKHAN
Orléans
FRANCE
FRANCHE-COMTÉ
AUSTRIA
Vienna
ATLANTIC OCEAN
BURGUNDY
SWITZERLAND
TYROL
Budapest
HUNGARY
MOLDAVIA
Lyons
ALPS
MILAN
STYRIA
AQUITAINE
SAVOY
Venice
VENETIAN REPUBLIC
Po R.
Ebro R.
Rhône R.
Avignon
GENOA
WALLACHIA
BOSNIA
Black Sea
NAVARRE
PORTUGAL
KINGDOM OF CASTILE AND LEÓN
KINGDOM OF ARAGON
Marseilles
FLORENCE
PAPAL STATES
Adriatic Sea
SERBIA
Danube R.
Lisbon
Toledo
Barcelona
Corsica
MONTENEGRO
40°N
Rome
Constantinople
10°W
ALBANIA
Sardinia
Naples
OTTOMAN EMPIRE
Granada
GRANADA
KINGDOM OF NAPLES
Mediterranean Sea
Athens
Tigris R.
Euphrates R.
Sicily
MOROCCO
ALGIERS
TUNIS
Malta
Rhodes
Crete
Cyprus
0 150 300 Km.
0 150 300 Mi.
0°
10°E
20°E
30°E
40°E

MAP 14.3 **Europe in 1453** This year marked the end of the Hundred Years War between France and England and the fall of the Byzantine capital city of Constantinople to the Ottoman Turks. Muslim advances into southeastern Europe were offset by the Latin Christian reconquests of Islamic holdings in southern Italy and the Iberian Peninsula and by the conversion of Lithuania.

Interactive Map

The National Archives, Public Record Office and Historical Manuscripts Commission

The Magna Carta One of four extant copies, this document shows the ravages of time, but the symbolic importance of the charter King John of England signed under duress in 1215 for English constitutional history has not been diminished. Originally a guarantee of the barons' feudal rights, it came to be seen as a limit on the monarch's authority over all subjects.

PRIMARY SOURCE: Magna Carta: The Great Charter of Liberties Learn what rights and liberties the English nobility, on behalf of all free Englishmen, forced King John to grant them in 1215.

Magna Carta

long crisis broke the pope's ability to challenge the rising power of monarchs like Philip, who had used the dispute to persuade his nobles to grant him a new tax.

The English monarchy wielded more centralized power as a result of consolidation that took place after the Norman conquest of 1066. The Anglo-Norman kings also extended their realm by assaults on their Celtic neighbors. Between 1200 and 1400, they incorporated Wales and reasserted control over most of Ireland. Nevertheless, under King John (r. 1199–1216), royal power suffered a severe setback. Forced to acknowledge the pope as his overlord in 1213, he lost his bid to reassert claims to Aquitaine in southern France the following year and then yielded to his nobles by signing the Magna Carta in 1215. This "Great Charter" affirmed that monarchs were subject to established law, confirmed the independence of the church and the city of London, and guaranteed the nobles' hereditary rights.

The Hundred Years War

Hundred Years War (1337–1453) Series of campaigns over control of the throne of France, involving English and French royal families and French noble families.

The conflict between the king of France and his vassals known as the **Hundred Years War** (1337–1453) affords a key example of the transformation in politics and war. These vassals included the kings of England (for lands that belonged to their Norman ancestors), the counts of prosperous and independent-minded Flanders, and the dukes of Brittany and Burgundy. In typical fashion, the conflict grew out of a marriage alliance.

Marriage between Princess Isabella of France and King Edward II of England (r. 1307–1327) should have ensured the king's loyalty, as a vassal, to the French monarchy. However, when the next generation of the French ruling house produced no other sons, Isabella's son, King Edward III of England (r. 1327–1377), laid claim to the French throne in 1337. French courts instead awarded the throne to a more distant (and more French) cousin. Edward decided to fight for his rights.

Military Technology

The new military technology shaped the conflict. Early in the war, hired Italian crossbowmen reinforced the French cavalry, but the English longbow proved superior. Adopted from the Welsh, the 6-foot (1.8-meter) longbow could shoot farther and more rapidly than the crossbow. Its arrows could not pierce armor, but concentrated volleys found gaps in the knights' defenses or struck their less-protected horses. Heavier and more encompassing armor provided a defense but limited a knight's movements. Once pulled off his steed by a foot soldier armed with a pike (hooked pole), he could not get up.

Later in the Hundred Years War, firearms gained prominence. The first cannon scared the horses with smoke and noise but did little damage. As they grew larger, however, they proved effective in battering the walls of castles and towns. The first artillery use against the French, at the Battle of Agincourt (1415), gave the English an important victory.

Joan of Arc

Faced with a young French peasant woman called Joan of Arc, subsequent English gains stalled. Acting, she believed, on God's instructions, she put on armAor and rallied the French troops to defeat the English in 1429. Shortly afterward, she fell into English hands; she was tried by English churchmen and burned at the stake as a witch in 1431.

In the final battles, French cannon demolished the walls of once-secure castles held by the English and their allies. The truce that ended the struggle in 1453 left the French monarchy in firm control.

New Monarchies in France and England

new monarchies Historians' term for the monarchies in France, England, and Spain from 1450 to 1600. The centralization of royal power was increasing within more or less fixed territorial limits.

The war proved a watershed in the rise of **new monarchies** in France and England, centralized states with fixed "national" boundaries and stronger representative institutions. English monarchs after 1453 consolidated control over territory within the British Isles, though the Scots defended their independence. The French monarchs also turned to consolidating control over powerful noble families, especially those headed by women. Mary of Burgundy (1457–1482) was forced to surrender most of her family's vast holdings to the king. Then in 1491, Anne of Brittany's forced marriage to the king led to the eventual incorporation of her duchy (DUTCH-ee) into France.

Military technology undermined the nobility. Smaller, more mobile cannon developed in the late fifteenth century pounded castle walls. Improvements in hand-held firearms, able by the late fifteenth century to pierce the heaviest armor, ended the domination of the armored knight. Armies now depended less on knights and more on bowmen, pikemen, musketeers, and artillerymen.

The Cost of War

The new monarchies needed a way to finance their full-time armies. Some nobles agreed to money payments in place of military service and to additional taxes in time of war. For example, in 1439 and 1445, Charles VII of France (r. 1422–1461) successfully levied a new tax on his vassals' land. This not only paid the costs of the war with England but also provided the monarchy a financial base for the next 350 years.

Merchants' taxes also provided revenues. Taxes on the English wool trade, begun by King Edward III, paid most of the costs of the Hundred Years War. Some rulers taxed Jewish mer-

chants or extorted large contributions from wealthy towns. Individual merchants sometimes curried royal favor with loans. The fifteenth-century French merchant Jacques Coeur (cur) gained many social and financial benefits for himself and his family by lending money to French courtiers, but his debtors accused him of murder and had his fortune confiscated.

Church Versus State

The church provided a third source of revenue through voluntary contributions to support a war. English and French monarchs won the right to appoint important church officials in their realms in the fifteenth century. They subsequently used state power to enforce religious orthodoxy more vigorously than the popes had been able to do. But reformers complained that the church's spiritual mission became subordinate to political and economic concerns.

The shift in power to the monarchs and away from the nobility and the church did not deprive nobles of their social position and roles as government officials and military officers. Moreover, the kings of England and France in 1500 had to deal with representative institutions that had not existed in 1200. The English Parliament proved a permanent check on royal power: the House of Lords contained the great nobles and church officials; the House of Commons represented the towns and the leading citizens of the counties. In France, the Estates General, a similar but less effective representative body, represented the church, the nobles, and the towns.

reconquest of Iberia Beginning in the eleventh century, military campaigns by various Iberian Christian states to recapture territory taken by Muslims. In 1492 the last Muslim ruler was defeated, and Spain and Portugal emerged as united kingdoms.

Iberian Unification

Spain and Portugal's **reconquest of Iberia** from Muslim rule expanded the boundaries of Latin Christianity. The knights who pushed the borders of their kingdoms southward furthered both Christianity and their own interests. The spoils of victory included irrigated farmland, rich cities, and ports on the Mediterranean Sea and Atlantic Ocean. Serving God, growing rich, and living off the labor of others became a way of life for the Iberian nobility.

DeA Picture Library/Art Resource, NY

Conquest of Granada A Muslim state since 1238, Granada was conquered in 1492 by the armies of Ferdinand of Aragon and Isabella of Castile. This relief sculpture from the sixteenth century shows the sultan Mohammad XI surrendering the keys of the capital city.

Portugal and Africa

The reconquest proceeded over several centuries. Toledo fell and became a Christian outpost in 1085. English crusaders bound for the Holy Land helped take Lisbon in 1147. It displaced the older city of Oporto (meaning "the port"), from which Portugal took its name, as both capital and the kingdom's leading city. After a Christian victory in 1212 broke the back of Muslim power, the reconquest accelerated. Within decades, Portuguese and Castilian forces captured the prosperous cities of Cordova (1236) and Seville (1248) and drove the Muslims from the southwestern region known as Algarve (ahl-GAHRV) ("the west" in Arabic). Only the small kingdom of Granada hugging the Mediterranean coast remained in Muslim hands.

By incorporating Algarve in 1249, Portugal attained its modern territorial limits. After a pause to colonize, Christianize, and consolidate this land, Portugal took the crusade to North Africa. In 1415, Portuguese knights seized the port of Ceuta (say-OO-tuh) in Morocco, where they learned more about the Saharan caravan trade in gold and slaves. During the next few decades, Portuguese mariners sailed down the Atlantic coast of Africa seeking rumored African Christian allies and access to this trade (see Chapter 15).

Elsewhere in Iberia, the reconquest continued. Spain came into being when the marriage of Princess Isabella of Castile and Prince Ferdinand of Aragon in 1469 led to the union of their kingdoms when they inherited their respective thrones a decade later. Their conquest of Granada in 1492 secured the final piece of Muslim territory for the new kingdom.

King Ferdinand and Queen Isabella

Ferdinand and Isabella sponsored the first voyage of Christopher Columbus in 1492 (see Chapter 15). In a third momentous event of that year, the monarchs manifested their crusading mentality by ordering all Jews expelled from their kingdoms. Attempts to convert or expel the remaining Muslims led to a revolt at the end of 1499 that lasted until 1501. The Spanish rulers expelled the last Muslims in 1502. Portugal expelled the Jews in 1496, including 100,000 refugees from Spain.

SECTION REVIEW

- Between 1200 and 1500, monarchs, nobles, and the church struggled over political power.
- Tensions between the French monarchy and the papacy resulted in the Great Western Schism.
- In England, royal power was checked by the papacy and nobility, the latter imposing the Magna Carta on King John.
- The Hundred Years War between the French monarchy and its vassals introduced new military technologies.
- The war also stimulated the rise of the new centralized monarchies of England and France.
- Spain and Portugal continued the reconquest of Muslim Iberia, a process completed by Ferdinand and Isabella.

CONCLUSION

Ecologically, the peoples of Latin Europe harnessed the power of wind and water and mined and refined their mineral wealth at the cost of localized pollution and deforestation. However, inability to improve food production and distribution in response to population growth created a demographic crisis that climaxed with the Black Death that devastated Europe in the mid-fourteenth century.

Politically, basic features of the modern European state began to emerge. Frequent wars caused kingdoms of moderate size to develop exceptional military strength. The ruling class saw economic strength as the twin of political power and promoted the welfare of cities specializing in trade, manufacturing, and finance, the profits of which they taxed.

Culturally, autonomous universities and printing supported the advance of knowledge. Art and architecture reached unsurpassed peaks in the Renaissance. Late medieval society displayed a fundamental fascination with tools and techniques. New inventions and improved versions of old ones underlay the new dynamism in commerce, warfare, industry, and navigation.

Ironically, many of the tools that the Latin West would use to challenge Eastern supremacy—printing, firearms, and navigational devices—originally came from the East. However, western European success depended as much on strong motives for expansion. From the eleventh century onward, population pressure, religious zeal, economic enterprise, and intellectual curiosity drove an expansion of territory and resources that took the crusaders to the Holy Land, merchants to the eastern Mediterranean and Black Seas, the English into Wales and Ireland, German settlers across the Elbe River, and Iberian Christians into the Muslim south. The early voyages into the Atlantic, discussed in the next chapter, extended these activities.

KEY TERMS

Latin West p. 399
three-field system p. 401
Black Death p. 401
water wheel p. 402
Hanseatic League p. 404
guild p. 407
Gothic cathedrals p. 410
Renaissance (European) p. 412
universities p. 412
scholasticism p. 413
humanists (Renaissance) p. 413
printing press p. 414
Great Western Schism p. 417
Hundred Years War p. 420
new monarchies p. 420
reconquest of Iberia p. 421

EBOOK AND WEBSITE RESOURCES

Primary Sources

Description of the World

The Practice of Commerce

Summa Theologica: On Free Will

Magna Carta: The Great Charter of Liberties

Interactive Maps

Map 14.1 The Black Death in Fourteenth-Century Europe

Map 14.2 Trade and Manufacturing in Later Medieval Europe

Map 14.3 Europe in 1453

Plus flashcards, practice quizzes, and more. Go to: www.cengage.com/history/bullietearthpeople5e

SUGGESTED READING

Alland, Christopher. *The Hundred Years War: England and France at War, ca. 1300–ca. 1450*. 1988. Key events in the Anglo-French dynastic conflict.

Bartlett, Robert. *The Making of Europe: Conquest, Colonization, and Cultural Change*. 1993. Shows Europe as the product of conquest and colonization before it became a colonizer.

Bechmann, Roland. *Trees and Man: The Forest in the Middle Ages*. 1990. A pioneering work in environmental history.

Cantor, Norman F. *In the Wake of the Plague: The Black Death and the World It Made*. 2001. A thorough introduction.

Gies, Frances, and Joseph Gies. *Women in the Middle Ages*. 1978. A general introduction.

Gimpel, Jean. *The Medieval Machine: The Industrial Revolution of the Middle Ages*. 1977. A general introduction to the technological issues of the period.

Holmes, George. *Europe: Hierarchy and Revolt, 1320–1450*, 2nd ed. 2000. A comprehensive overview.

Huizinga, Johan. *The Waning of the Middle Ages*. 1924. A classic account of the "mind" of the fifteenth century.

Jardine, Lisa. *Worldly Goods: A New History of the Renaissance*. 1996. A well-illustrated and balanced survey.

Lopez, Robert S. *The Commercial Revolution of the Middle Ages, 950–1350*. 1976. Surveys the West's economic revival and growth.

McNeill, William H. *The Pursuit of Power: Technology, Armed Force, and Society Since A.D. 1000*. 1982. An influential interpretation by an eminent world historian.

O'Callaghan, Joseph F. *A History of Medieval Spain*. 1975. Provides the best one-volume coverage.

Oakley, Francis C. *The Western Church in the Later Middle Ages*. 1985. A reliable summary of modern scholarship.

Phillips, J. R. S. *The Medieval Expansion of Europe*, 2nd ed. 1998. European adventurism from Greenland to West Africa to China.

Stow, Kenneth R. *Alienated Minority: The Jews of Medieval Latin Europe*. 1992. A fine survey through the fourteenth century.

NOTES

1. Quoted in Marina Warner, *Alone of All Her Sex: The Myth and Cult of the Virgin Mary* (New York: Random House, 1983), 179.
2. Harry Miskimin, *The Economy of the Early Renaissance, 1300–1460* (Englewood Cliffs, NJ: Prentice Hall, 1969), 26–27.
3. Quotations here and later in the chapter are from Geoffrey Chaucer, *The Canterbury Tales*, trans. Nevill Coghill (New York: Penguin Books, 1952), 25, 29, 32.

AP* REVIEW QUESTIONS FOR CHAPTER 14

1. Western Europeans of the eleventh through the fourteenth centuries tended to refer to themselves as

   (A) Romans.
   (B) Latins.
   (C) Burgundians.
   (D) Germans.

2. Between 1100 and 1350, Europe's population more than doubled. Historians believe that this increase may have been due to

   (A) better hygiene practices.
   (B) cooler temperatures killing off germs.
   (C) a general decrease in warfare.
   (D) a revival in the economy of Europe.

3. In response to the increase in population, some farmers in Europe

   (A) tried new methods of increasing yields like the three-field system.
   (B) borrowed money from banks to rent land for planting crops.
   (C) gave up farming and began herding, which was more lucrative.
   (D) rented lands directly from the landowners.

4. The majority of the urban growth in Europe from 1200 to 1500 was due to

   (A) the growth in population.
   (B) land enclosures.
   (C) the growth in trade and manufacturing.
   (D) access to less expensive food.

5. The decline of the Mongol Empire disrupted the caravan trade into Europe. In response, European merchants

   (A) began to explore new overland routes and new sea routes.
   (B) became dependant on the Muslims for trade goods.
   (C) learned to become self-sufficient and do without goods from Asia.
   (D) launched Crusades to reestablish the trade routes to China.

6. In most towns and cities, merchants and skilled craftsmen regulated business practices, membership, and training and promoted the interests of their members in city government through

   (A) payment of feudal obligations.
   (B) guilds.
   (C) the church.
   (D) the encomienda.

7. The spread of the humanist movement benefited from

   (A) local kings who supported it.
   (B) support from the church.
   (C) common people wanting to learn more about their world.
   (D) the development of the printing press.

8. By the thirteenth century

   (A) wealthy nobles were seeking to limit the power of the king.
   (B) the church gave local control of parishes to local nobles.
   (C) overseas trade was supplanting overland trade.
   (D) England and France had established parliaments.

9. By the mid-thirteenth century, Portugal had

   (A) become one of the most advanced trading kingdoms in Europe.
   (B) merged with Spain to become a joint kingdom.
   (C) become warriors for the church.
   (D) challenged the Italian city-states on the Mediterranean Sea.