



PEDRO BERRUGUETE, FEDERICO DA MONTEFELTRO AND HIS SON GUIDOBALDO, ca. 1476

This portrait shows the founder of the dynasty of Urbino—a soldier of fortune who was made duke by the pope in 1474. The artist used oil paint and a new sense of realism to depict the duke with everything that mattered to him: the armor of a soldier, the book of a scholar, the support of the papacy, shown by the tiara in the upper-left corner, and the presence of his son, an heir to perpetuate his dynasty. Strong, well-rounded individuals such as this brought a dramatic new spirit to the West.

A New Spirit in the West

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The Renaissance, ca. 1300–1640

“**T**his age is dominated by great men [who] labored much to aggrandize themselves and to acquire glory. And yet, would it not have been better if they had undertaken fewer enterprises and been more afraid of offending God and of persecuting their subjects and neighbors?” With these words, a contemporary biographer of Louis the Spider, king of France during the Renaissance, pinpointed both the strengths and weaknesses of this new age: Talented individuals accomplished much, yet often to the neglect of those in their care.

This rise of new talent first became evident in Italy during the disastrous fourteenth century, when some individuals responded to the troubled times with a clear-eyed realism that let them see opportunity amid the chaos. The transforming ideas of the era have been dubbed the Renaissance (meaning “rebirth”), and they promised a return to the spirit of ancient Greece and Rome that might restore the glory of the Roman Empire.

Political turbulence in the Italian city-states led visionary rulers to govern in new ways, developing innovative military strategies and novel diplomacy. This individual achievement in politics generated similar accomplishments in literature, architecture, and the visual arts as rulers became patrons supporting artists who mirrored their values. Just as these patrons stimulated artistic expression, intellectuals created a cultural movement that emphasized the study of Greek and Roman classics and praised realism and individual accomplishments. Perhaps the true greatness of the Renaissance lay in the application of these abstract ideas to real life. The innovative ideas that emerged in Italy subsequently spread throughout Europe as the ravages of the fourteenth century broke down old medieval structures and institutions.

Although these new ideas brought wealth and power to some, everyone did not benefit equally. Indeed, public policies in these centuries often worsened the lot of the poor and the powerless. Nevertheless, the Renaissance was an exciting, vibrant time that ushered Europe from the medieval world toward modern life.

TIMELINE

Capetian Dynasty
in France 987–1328

Valois Dynasty in France 1328–1589

Bourbon Dynasty
in France
1589–1650

Visconti Dynasty in Milan 1278–1447

Sforza Dynasty in Milan 1450–1535

Angevin Dynasty in Naples 1285–1435

Aragon Dynasty in Naples 1435–1494

Tudor Dynasty in England 1485–1603

1300 1330 1360 1390 1420 1450 1480 1510 1540 1570 1600

PREVIEW

A NEW SPIRIT EMERGES: INDIVIDUALISM, REALISM, AND ACTIVISM

Examine the characteristics of the Renaissance and humanism.

THE POLITICS OF INDIVIDUAL EFFORT

Trace the political fortunes of the Italian city-states.

INDIVIDUALISM AS SELF-INTEREST: LIFE DURING THE RENAISSANCE

Learn about families, slaves, economics, and intolerance.

AN AGE OF TALENT AND BEAUTY: RENAISSANCE CULTURE AND SCIENCE

Survey the arts of the Renaissance.

RENAISSANCE OF THE "NEW MONARCHIES" OF THE NORTH:

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A NEW SPIRIT EMERGES: INDIVIDUALISM, REALISM, AND ACTIVISM

In the late thirteenth century, Cimabue, an important painter from the Italian city-state of Florence, was walking in the countryside and saw a young shepherd boy drawing sheep on a rock. The painter recognized the boy's talent and took him on as an apprentice. The young shepherd, Giotto (ca. 1267–1337), flourished under his master's tutelage, and stories arose about the youth's talent for realistic painting—and his independent spirit. He was said to have once painted a fly on the nose of a face that Cimabue was painting, and the fly was so lifelike that the master tried to brush it off several times before he grasped his student's joke. Giotto grew up to vastly surpass his master and create paintings of such realism and emotional honesty that they helped change the direction of painting. As the new century dawned, there would be others like Giotto who creatively broke new ground.

The Renaissance: A Controversial Idea

For centuries historians have struggled with the very idea of whether this age beginning in the fourteenth century in Italy constituted a turning point—the Renaissance. People living in fourteenth-century Italy themselves identified this era as characterized by a return to the sources of knowledge and standards of beauty that had created the great civilizations of classical Greece and Rome. (Classical literature, as they defined it, covered a period from about 800 B.C.E. to about 400 C.E.) Francesco Petrarch (1304–1374),

an Italian writer who studied the classics and wrote poetry, was an early proponent of Renaissance ideas. Petrarch lamented that he could find no one in his own time who could serve as a model of virtuous behavior—he mirrored the example of many in the fourteenth century who despaired of their time (see Chapter 9). However, through his studies, he came to revere figures from antiquity who seemed to understand proper values and follow them regardless of worldly distractions. Petrarch even wrote letters to ancient figures, and in one such letter to the Roman historian Livy, he wrote: "I only wish, that I had been born in your time or you in ours. . . . I have to thank you . . . because you have so often helped me forget the evils of today." Later Renaissance thinkers would follow Petrarch's example and see in ancient Greece and Rome the models to shape a new world.

Yet, they overstated their case—medieval scholars had never lost touch with the Latin texts, and no one gazing at the Gothic cathedrals and the magnificent illuminated manuscripts of the Middle Ages can doubt that medieval people had an exquisite sense of beauty. Indeed, most of the qualities that we identify with the Renaissance had existed in some form throughout the Middle Ages. For this reason, some modern scholars have suggested that the Renaissance should not be considered a separate historical era. Some see this era as part of a succession of "renaissances" that spurred the intellectual history of the West. Others argue that a different spirit clearly emerged during the period that we have come to call the Renaissance.

In its simplest sense, the Renaissance was an age of accelerated change that began in Italy and that spread new ideas more rapidly than ever before. Many people, especially urban dwellers, questioned medieval values of hierarchy, community, and reliance on authority and replaced them with a focus on ambitious individualism and realism (both of which had to some extent existed in the Middle Ages but received new emphasis). Some no longer used the classic texts to reinforce the status quo, as had become common in the medieval universities; instead, they studied to transform themselves. Petrarch eagerly noted that the texts "sow into our hearts love of the best and eager desire for it." As they strove for excellence, the men and women of the Renaissance ushered in a new age.

Thus, many historians identify the Renaissance as a unique state of mind or set of ideas about everything from art to politics. Having first sprouted in Italy in the fourteenth century, these ideas slowly spread north as the prevailing medieval culture was rocked by the disasters of the fourteenth century. Just as historians disagree about the nature of the Renaissance, they also differ on exactly why these new ideas took root in Italy. What was it about the Italian situation in the

Medieval antecedents

early fourteenth century that made that land ripe for fresh ideas about individualism and realism and that fostered the rise of enterprising people?

Why Italy?

Because the people of the Renaissance themselves believed the heart of their rebirth was a recovery of the spirit of classical Greece and Rome, the ancient ruins provided a continuing stimulus for such reflections. As Petrarch mapped the ruins, he said the pastime was wonderfully pleasant "not so much because of what I actually saw, as from the recollection of our ancestors, who left such illustrious memorials of Roman virtue. . . ." For Petrarch and others, these ruins were an ever-present reminder of an age that they believed was dramatically different from their own—an age they sought to recapture.

The new appreciation of classical authors caused a resurgence of interest in the Greek classics that had been neglected in the West for so long. In 1396, the Florentines invited a Greek scholar from Byzantium to lecture at the University of Florence, but this first step received a huge impetus in the mid-fifteenth century when Constantinople fell to the Turks (see Chapter 9).

Classics

Many eastern scholars fled to Italy, bringing their language skills and Greek manuscripts with them. Over the next decades, new translations of some of the greatest Greek works became fully integrated into Western culture. The study of Greek texts would make a dramatic impact on religious studies, as we will see in Chapter 11.

A fresh reading of the classics certainly stimulated in some literate Italians a desire to recover a spirit of classical greatness, but were readings alone enough to change a culture's sensibilities so dramatically? Some historians argue instead that the tumultuous politics of the Italian city-states particularly favored the growth of new ideas. Incessant warfare among the states opened the door for skilled, innovative leaders to come forward. These leaders in turn surrounded themselves with talented courtiers who willingly broke from tradition to forward their own careers as they pleased their princes. A new spirit found fertile ground in these ambitious, upwardly mobile men.

Others point to the Black Death, which entered Italy in 1348, as the catalyst that transformed the old order (see Chapter 9). The plague's drastic reduction of the population engendered huge economic changes. Prices plummeted and wages rose, so those who had survived the plague were well placed to prosper, and many grew wealthy, indeed.

Italy was ideally placed to profit from new demands for trade goods—particularly trade in luxuries such as silk, jewelry, glass, and of course spices from the east. Italian ships brought goods into the peninsula, and Italian merchants built wealth in unprecedented amounts. During

the fourteenth century, individuals, families, and institutions accumulated a good deal of capital, and men and women used some of this money to support the arts. Some have vividly suggested that the Renaissance became one long shopping spree that supported the talented artists whose vision helped define this controversial era—the bridge that began to move Western history from the Middle Ages to modernity.

A Multifaceted Movement

At its core, the Renaissance emphasized and celebrated humans and their achievements. It thus revived an advocacy of individualism that the West had not seen since the time of the ancients. As the Italian writer Giovanni Pico della Mirandola (1463–1494) optimistically wrote in his *Oration on the Dignity of Man*, "Man is rightly . . . considered a great miracle and a truly marvelous creature," and in addition to this, Pico said that people could determine their own destiny. This optimistic faith in the human potential was an exciting new idea. Renaissance thinkers asserted a powerful belief in the human ability to choose right and wrong and to act on these choices.

Individualism

During the Renaissance, Europeans favored a biblical verse from Genesis that described humans as being created in God's "image and likeness." Figure 10.1 shows one portion of the Italian artist Michelangelo's (1475–1564) revered painting on the ceiling of the Sistine Chapel. In this image, the realistic and beautifully proportioned figure of Adam mirrors the physical beauty of the Creator. Michelangelo also portrayed Adam as more than a piece of inert clay waiting for the divine spark to bring him life. Instead, Adam reaches up to God, meeting him halfway in the act of Creation. For Michelangelo and many other artists of the time, man was indeed created in God's image—not merely spiritually and morally, but also as a creator himself, shaping his own destiny. Here Michelangelo echoes Pico in expressing this idea that was the essence of Renaissance thought.

Renaissance men and women also prided themselves on their accurate view of the world. This form of realism appears vividly in the art of the period. Throughout the rest of this chapter, the various examples of artwork from these centuries show a realistic portrayal of the world.

Realism

Another prevailing theme in the Renaissance came with the emergence of activism. Petrarch himself succinctly expressed the energetic spirit of the age, writing, "It is better to will the good than to know the truth." In other words, being wise was not enough; one had to exert one's will actively in the world to make a difference. Leon Battista Alberti (1404–1472) expressed the

Activism



FIGURE 10.1 Michelangelo, *Creation of Adam*, 1508–1512

Michelangelo was commissioned to paint frescoes on the ceiling of the Sistine Chapel, the pope's personal chapel in the Vatican, Rome. This famous scene depicts God's work, with the shaping of Adam in His image.

same sentiment: "Men can do all things if they will." As we see, Michelangelo's Adam in Figure 10.1 participates in his own creation by reaching up to receive the spark of life, and people were encouraged to imitate this active involvement.

A final characteristic of this new spirit was that it was secular—that is, it did not take place in the churches, monasteries, or universities that were dominated by religious thought. That is not to say Renaissance thinkers were antireligious, for

A secular spirit

they were not—Petrarch explained quite clearly: "Christ is my God; Cicero is the prince of the language I use." While most believed deeply in God and many worked in the church, their vocation was to apply the new spirit to this world, not the next.

Renaissance thinkers felt that the spirit of the classical worlds of Greece and Rome had been reborn before their very eyes. In part, they were right. This vital new age witnessed a renewed belief in human beings' capacity to perfect themselves, to assess the world realistically, and to act vigorously to make an impact on their society. The key to this transformation was education.

Humanism: The Path to Self-Improvement

The urban dwellers of the Italian cities knew that education was the key to success. Men entering business had to be trained at least in reading, writing, and mathematics. In Florence at the beginning of the fourteenth century, the number of students enrolled in private schools testifies to the value practical Florentines placed on education: Out of a total population of

about 100,000, some 10,000 youths attended private schools to obtain a basic education. Of those, about 1,000 went to special schools to learn advanced business mathematics. However, another 500 pursued a more general liberal education. From these latter emerged an educational movement that defined and perpetuated the Renaissance spirit and changed the course of Western thought.

Petrarch departed from the traditional medieval course of study and from his father's desire that he prepare for a career in law. Instead, he pursued a general study of classical literature. The cities of Italy spawned many young men like Petrarch, who

Humanist curriculum

wanted an education separated from the church-dominated universities that had monopolized learning for centuries. Such students sought to understand the causes of human actions through the writings of the ancients, and in turn improve themselves. After all, if they believed they were created in God's image, they had a responsibility to cultivate their capabilities. The humanities—literature, history, and philosophy—thus formed the core of the ideal Renaissance education, which aimed to shape students so that they could excel in anything. Proponents of this teaching method were called **humanists**.

Humanists stressed grammar (particularly Latin and Greek so that students could read the classics), poetry, history, and ethics. Following the ancient Roman model, humanists capped off their education with rhetoric, the art of persuasive speaking, which prepared men to serve in a public capacity. Although this course of study may not appear revolutionary, it proved to be.

The early humanists' passion for classical texts led them to search out manuscripts that might yield even greater wisdom from the ancients. As they read and compared manuscripts, they discovered that mistakes had crept into texts that had been painstakingly copied over and over in the medieval monasteries. So the early humanists carefully pored over the many copies of texts to compile accurate versions. These techniques established standards for historical and literary criticism that continue today. Our debt to these literary scholars is incalculable as we enjoy accurate editions of works written thousands of years ago.

The Renaissance emphasis on study inspired some writers to comment on educational theory. Christine of Pizan (1365–ca. 1430) was a professional writer who worked in the French court. She supported herself and her children through her works

Educational theory of poetry and prose. Reflecting the interests of the times, she also wrote several pedagogical treatises: one instructing women on their roles in society (*The Book of Three Virtues*), a manual of good government for the French Dauphin (*The Book of Deeds of King Charles V*), and even a military handbook (*The Book of Feats of Arms and of Chivalry*).

In the same vein, many others authored books to help people learn to cultivate their talents. The best known of these is *The Book of the Courtier*, by the Italian author Baldassare Castiglione (1478–1529). In this popular work, the author summarizes the expected behavior of men of the court. For Castiglione, native endowments were only the beginning—a courtier had to cultivate military skills, a classical education, and an appreciation of art through music, drawing, and painting. Castiglione turned the Renaissance ideal of an active, well-developed individual into a social ideal of the aristocracy.

Other humanists proposed more formal educational settings. One educator (Guarino da Verona) established a model secondary school at Mantua, in Italy, called the Happy House, which taught humanities, religion, mathematics, and physical education. The school even included lessons on diet and dress; no facet of the whole human was neglected in the effort at improvement.

Urban families who prized education for their sons also expected their daughters to be educated, but not to the same degree. The eminent Italian humanist Leonardo Bruni (1374–1444) wrote an oft-quoted letter praising a humanist—but not a full—

Women humanists education for women. For example, he argued that rhetoric in particular was inappropriate for women: "For why exhaust a woman with the concerns of . . . [rhetoric] when she will never be seen in the forum?" His comments reveal the crux of the matter: Women could be educated, but they were not to use their education in a public way, and since rhetoric was central to the humanists, educated Renaissance women were caught in a paradox.

As one example, Isotta Nogarola (1418–1466) earned much recognition from her family and some family friends for her learning. However, as soon as she tried to engage in a public dialogue (through letters), male humanists reprimanded her and deemed her immoral for her public display. She retired into the seclusion of her study, just as other women took refuge in convents to pursue their research.

Rulers, of course, were exempt from such prohibitions of public use of education, and royal women made good use of the latest Renaissance notions of study. Queens such as Elizabeth I of England (r. 1558–1603) and Isabella of Castile (r. 1474–1504) employed their education to rule effectively, support the arts, and encourage the new educational methods. The Biography of Isabella d'Este (on page 296) describes the life of one Italian woman who possessed so much political authority that she became a renowned patron of the arts and of education.

Humanists applied their skills in many areas of life. Some—called **civic humanists**—involved themselves in politics, treating the public arena as their artistic canvas. Others applied their skills at literary criticism to the Bible and other Christian texts. The most influential of these **Christian humanists** came from outside Italy. As we will see in Chapter 11, men such as the Spanish cardinal Ximénez de Cisneros (1436–1517) and the Dutchman Desiderius Erasmus (ca. 1466–1536) transformed the study of the Bible and paved the way for dramatic changes in religious sensibilities.

Humanist scholarship was crucial in shaping the new spirit of the Renaissance, but it was not sufficient in itself. Scholars and artists and talented young men would have made little impact without the generosity of patrons such as Isabella, who supported the new talent and assiduously purchased their productions. The spirit of the Renaissance thrived on the money that flowed abundantly (albeit unevenly, as we will see) in the Italian cities.

The Generosity of Patrons: Supporting New Ideas

The talented writers and artists of the Renaissance depended on generous patrons to support them. During the early Renaissance, cities themselves served as artistic patrons, stimulating the creation of art by offering prizes and subsidies for their talented citizens. Guilds, too, served as artistic patrons, commissioning great public monuments to enhance the spaces of their cities. The public art that graced the streets and squares enhanced the reputation of the city itself and in turn forwarded the new ideas of the gifted artists.

In time, warfare and internal strife caused cities to have less money to use in support of art, and patronage was taken over by wealthy individuals. In addition to

BIOGRAPHY

Isabella d'Este

(1474–1539)

Isabella d'Este was born the daughter of a duke in 1474 in the small Duchy of Ferrara, just south of Venice. She grew up in a court that appreciated Renaissance education and art.

The young girl was educated in the best humanist tradition. Her tutors taught her to read the great classics of the Roman world in the original Latin. She spoke Latin fluently at an early age.

She also was an accomplished musician and excelled at singing and playing the lute.

*Duchess of
Mantua,
Diplomat,
and Patron
of the Arts*

When she was 6 years old, Isabella's parents began searching for a suitable future husband for her. They approached the family of the nearby Duke of Mantua to discuss a betrothal between Isabella and their eldest son, Francesco. They sent Francesco's parents a portrait of the lovely black-eyed, blond child but assured them that "her marvelous knowledge and intelligence are far more worthy of admiration [than her beauty]." A betrothal was arranged that would unite the two houses trying to maintain independence from their powerful neighbors, Milan and Venice.

Isabella and Francesco were married in 1490, when she was 15. An elaborate ceremony joined the two families, and in her old age, Isabella proudly wrote of her

memories of the gifts, decorations, and lavish banquet that marked this turning point of her life.

Under the skillful rule of Francesco and Isabella, Mantua rose to the foremost rank of the smaller Italian city-states. Isabella involved herself in the art of diplomacy throughout the couple's reign. She wrote more than two thousand letters—many of them to popes, kings, and other Italian rulers. In one letter to her husband, Isabella assured him that he could concentrate completely on military matters, for "I intend to govern the State . . . in such a manner that you will suffer no wrong, and all that is possible will be done for the good of your subjects."

Like other Italians influenced by Renaissance pseudoscience, Isabella avidly believed in astrology. She embarked on no important venture without consulting her astrologers. But she also took an interest in the real-world findings of the time. She received correspondence about Columbus's discovery of America and the "intelligent and gentle" natives he found there.

Yet the educated duchess is most remembered as a patron of the arts. Recognizing excellence, she wanted to commission a work from Leonardo da Vinci, but the artist never found the time to oblige her. (See Document 10.1.)



FIGURE 10.2 Isabella d'Este

With a love of literature nurtured since her youth, Isabella accumulated a library that became one of the best in Italy. She took advantage of the new printing industry to acquire the first editions of the great classics as well as the contemporary works of Petrarch and Dante.

Isabella died in 1539, a year after losing her husband. In the last months of her life, a great scholar of the age called her "the wisest and most fortunate of women"—an apt epitaph for someone who so personified the Renaissance spirit.

Connecting People & Society

1. What opportunities did a wealthy woman have to participate in the intellectual life of the Renaissance?

Isabella d'Este, many other rulers, such as the Medici in Florence and the Sforza in Milan, used their wealth to stimulate the creation of spectacular works of art. In return, patrons gained social and political status by surrounding themselves with objects of beauty or intellect.

Cosimo de Medici (1389–1464) offers a perfect model for the impact of patrons in the Renaissance. Cosimo supported intellectuals and artists and personally financed the acquisition of manuscripts. His fascination with the Greek philosopher Plato led him to make perhaps his greatest contribution to the

intellectual life of the West: He founded the Platonic Academy, hiring the famous Neoplatonic scholar Marsilio Ficino (1433–1499) to guide the studies. Ficino translated the works of Plato and wrote works that demonstrated that Platonism and Christianity shared a belief that humans were permeated with divine love and that the goal of humanity was to rise upward toward the Divinity. These studies shaped the glorification of human accomplishments that were to be the hallmark of the Renaissance, and they were made possible by the powerful patronage of Cosimo and other leaders.

DOCUMENT 10.1

Isabella d'Este Implores Leonardo da Vinci to Paint for Her

In 1504, Isabella d'Este of Mantua (see Biography in this chapter) wrote letters to Leonardo da Vinci soliciting a painting. She never received her painting. This letter shows the tensions that often arose between purchasers' desires and artists' aesthetic inclinations, and it sheds light on the all-important process of patronage.

Letter 1. "To Master Leonardo Vinci, the painter. M. Leonardo,—Hearing that you are settled at Florence, we have begun to hope that our cherished desire to obtain a work by your hand may be at length realised. When you were in this city, and

drew our portrait in carbon, you promised us that you would some day paint it in colours. But because this would be almost impossible, since you are unable to come here, we beg you to keep your promise by converting our portrait into another figure, which would be still more acceptable to us; that is to say, a youthful Christ of about twelve years, which would be the age He had attained when He disputed with the doctors in the temple, executed with all that sweetness and charm of atmosphere which is the peculiar excellence of your art. If you will consent to gratify this our great desire, remember that apart from the payment, which you shall fix yourself,

we shall remain so deeply obliged to you that our sole desire will be to do what you wish, and from this time forth we are ready to do your service and pleasure, hoping to receive an answer in the affirmative." Mantua, May 14, 1504.

FROM: Julia Cartwright, *Isabella d'Este: Marchioness of Mantua, 1474–1539*, vol. 1 (New York: E. P. Dutton, 1903), p. 324.

Analyze the Source

1. What painting does Isabella want? How do you think modern artists would react to getting such specific instructions? Why?

Not only rulers, but rising bourgeoisie as well, could enhance their social status by owning works of art, and this activity served to spur the production of art. Document 10.1 describes Isabella d'Este trying to contract a painting.

The church also supported the arts. Religious fraternities commissioned many paintings, and popes financially backed numerous artists. Like cities and individuals, churches gained status through their patronage, but churches also recognized a religious purpose of art. Many people attributed miraculous power to visual portrayals of religious themes, and churchmen supported this belief. For example, the Florentines customarily brought an image of the Virgin Mary (called the *Madonna of Impruneta*) down from the hills to Florence in times of crisis, and in 1483, a procession of the Madonna was credited with stopping a destructive, monthlong rainfall.

Religious patronage

Thus, dynamic city life and a new emphasis on education stimulated new ideas, and generous patronage helped them grow. However, the new spirit spread rapidly by the late Renaissance owing to a revolutionary advance in technology.

The Invention of the Printing Press: Spreading New Ideas

Throughout the Middle Ages, precious texts had to be laboriously copied by hand, making books relatively scarce and expensive. As we saw in Chapter 1, one of

the significant advantages to the growth of civilization is the ability for more people to read and have access to the written word. As Thinking about Science and Technology on page 298 describes, Johannes Gutenberg (ca. 1400–1470) is credited with producing the first printed Bible in 1455. The increased availability of printed text would ultimately affect all of Western civilization.

Printing presses spread rapidly through Europe. By the 1480s many Italian cities had established their own presses, and by 1500 there were about a thousand presses all over the continent. Previously, valuable books, painstakingly copied by hand, belonged to the patron who paid for the copy. Now the literary world looked to a broader reading public for support, consequently igniting a rapid spread of ideas that carried the new spirit throughout Europe. Subsequent notions—from the excitement of international discoveries to intellectual challenges to religious ideology—also spread rapidly. The pace of change in Western civilization quickened as the European presses circulated ideas with unprecedented speed.

All the elements were in place for the transformation of thought that we have come to know as the Renaissance. The study of classical texts had helped change people's views of themselves and their approach to the world. Money flowed in support of talented and enterprising individuals, and technology helped spread the ideas rapidly. Finally, men actively implemented these ideas in many fields, from art to business to politics.



FIGURE 10.3 A Printing Shop

An Information Revolution: The Printing Press

As is often the case, the intellectual revolution of the Renaissance came on the heels of a new technology: the printing press, which made it possible to reproduce books and pamphlets more quickly and cheaply than ever before. Like so many technological innovations, this one had a long, global history.

One of the prerequisites for mass-produced books is a cheap medium to print on. As early as the first century B.C.E., Chinese craftsmen were producing cheap paper from rags and plant matter. This

paper spread from China into Spain by the eleventh century, but was not immediately popular because it was not as durable as the vellum (leather) then used in the West.

To print books, people also need to be able to press ink onto a page (instead of drawing it on with a quill.) Again, people in Asia were in the forefront of this technology. By the eighth century, bookmakers in Asia were dipping carved wooden blocks in ink and using them to print pictures on paper. By the fourteenth century,

bookmakers in the West had begun to use this block-printing technology and soon improved upon it by crafting the letters on metal blocks, rather than on the wood used in the East, which deteriorated quickly.

By firing their ovens to 600 degrees Fahrenheit, Western metallurgists smelted an alloy of lead, tin, and antimony to create a rapid-hardening, durable metal that could be poured into small molds in the shape of letters. Printers arranged these metal letters into a frame, and using an old technology—the presses used in crushing grapes and olives—stamped these frames onto vellum at first, and eventually paper, to produce pages of print.

The most famous early surviving book is the Gutenberg Bible, which was printed in 1455 by a German silversmith named Johannes Gutenberg. The compositors spent two years setting the type for the full Bible. Gutenberg used 5,000 calfskins and 50,000 sheets of paper to print 40 vellum and 140 paper copies of the book. This massive and expensive undertaking signaled a new information revolution: Books and the ideas they contained were becoming widely accessible for the first time in human history.

Connecting Science & Society

1. What technologies and scientific innovations were required before the publication of cheap books was possible? How do you think the printing revolution compares with the modern information revolution based on computers and the Internet? Do you think that printed books will become obsolete? Why or why not?

THE POLITICS OF INDIVIDUAL EFFORT

The medieval power struggle between emperors and popes left an enormous power vacuum in northern Italy. This vacuum allowed small city-states, or cities that controlled the surrounding countryside, to become used to independence. As the fourteenth century opened, most of the northern cities were free

communes (see Chapter 8) with republican forms of government, but as the fourteenth century progressed, changes occurred.

The Italian City-States

These city-states engaged in almost constant warfare over their borders and commercial interests, and within the cities, classes and political factions fought

MAP 10.1

Italy in 1454

This map shows the political divisions of Italy in the fifteenth century. It also includes the locations of the major city-states of the north.

Explore the Map

1. Which of the city-states was most likely to be threatened by the expansion of the Papal States? Why?
2. What contributed to Naples's relative isolation from the politics of the northern states?



for control of the government. In such unstable times, most of the republican governments were under pressure, and strong men with dictatorial power took over. As we saw in Chapter 9, mercenary armies had become a significant feature of warfare, and they also became a force in Italian politics as city-states hired army captains (called *condottieri*) with their armies to come fight their wars. These mercenaries frequently ravaged the countryside, bringing more misery than protection to the population. Through the fourteenth and fifteenth centuries, city-states would see repeated internal and external strife as they wrestled with their neighbors and with internal governing. These turbulent times brought misery to many but opportunity to others. Sometimes strong, talented individuals rose to positions of authority without constitutional or hereditary legitimacy. The Duke of Urbino, portrayed in the chapter-opening illustration, was one such successful mercenary captain. These rulers introduced a new kind of politics and perhaps inadvertently stimulated the new spirit of the Renaissance.

Map 10.1 shows Italy in 1454. Notice that the northern areas consisted of a patchwork quilt of city-states. Among these, Venice, Milan, and Florence were the largest and most powerful. Popes controlled the large, central strip of the peninsula, and the Kingdom of Naples dominated the south. It was the competition

among the northern states that fueled the politics of individual effort that so influenced Renaissance ideas such as individualism and activism.

The Italian city-states fell into two general categories: republics and principalities. Republics featured the institutions of the medieval city communes, in which an urban elite governed. For the most part, Venice and Florence preserved the republican form of government during most of the Renaissance. Principalities, on the other hand, were ruled by one dynasty. Milan and Naples were the most notable examples of this form of government.

Florence: Birthplace of the Renaissance

Florence at the beginning of the fourteenth century was a vibrant republic where Renaissance ideas seem to have been first fostered. Florence prided itself on its republican form of government, in which eligible men held office by random selection. But the city was an uneasy republic indeed, fragmented by local rivalries that always threatened to break out into violence

within the urban spaces themselves. Only guild members could participate in the government, and an oligarchy of the leading families was frequently able to control it. Florence was badly hit by the plague—in 1348 alone, almost 40 percent of its population was killed, and its economy, too, was badly damaged as cloth production declined. Warfare with Milan in the early fifteenth century bankrupted many of the city's leading commercial families and created a massive public debt. In their troubles, the Florentines turned to the wealthiest banking family in Europe—the Medici. The republic got more than it bargained for.

In 1434, Cosimo de' Medici took control of the Florentine oligarchy and exiled his rivals. In the tradition of Caesar Augustus, whom he admired, Cosimo concentrated power in his household while ostensibly keeping a republican form of government. Under this shrewd family, Florence and the arts flourished. Cosimo's grandson, Lorenzo the Magnificent (r. 1469–1492), epitomized the ideal Renaissance ruler. A great statesman, he was also a patron of the arts, a poet, and an athlete.

Yet even Lorenzo could not bring peace to the contentious Florentine people. During his life he faced intrigue and assassination attempts and had to use all his diplomatic skills to preserve Florence from foreign foes. Late in his tenure, voices began to be raised against the Renaissance ideals that he so actively supported. Shortly after Lorenzo's death, the rule of the Medici could not withstand the growing pressures from outside and within the city.

In 1494, French armies invaded the countryside around Florence, and the city-state was again buffeted with financial and material woes. The French armies found an ally within the city in the person of a fiery preacher who had objected to the rule of the Medici and to the passionate acquisition of money and art that had dominated the early Renaissance.

Girolamo Savonarola (1452–1498) was a courageous, yet uncompromising, man who had resented the rule of the Medici and accused the clergy of corruption from the papacy on down. He argued vigorously against the lust for money that motivated citizens in the high-tempo Florentine economy. Perhaps most of all, he despised humanism, which he believed poisoned everything from art to religion by placing humans in the spotlight. The passionate preacher clearly recognized the changing times, but he advocated a different response to these changes.

Helped by the disruptions caused by the French invasions, Savonarola was able to arrange for the Medici to be expelled from the city and for a republic to be reintroduced. But Savonarola also wanted to return people's sensibilities to those of what he perceived to be a more pious age. He preached against

nude paintings and sculptures and in 1497 presided over a public "burning of the vanities"—a huge bonfire into which people tossed ornaments, pictures, cards, and other "frivolous" items. This event is described by an eyewitness in Document 10.2.

Eventually, the monk's zeal sparked opposition. The pope chafed at Savonarola's attacks and finally excommunicated him and forbade him to preach. Savonarola himself came to an ironic, fiery end: He was condemned and hung, and his body was burned in the public square of Florence—exactly where the "vanities" had been burned.

Like the other great figures of the age, Savonarola was a product of the Renaissance—he felt the same civic pride and shared the same love of education. But, instead of responding to these forces with a sense of humanism and realism, he looked for a spiritual reaction, a religious renewal that he believed should shape the future. In time, northern Europeans picked up Savonarola's call for religious renewal, but not yet. In Florence the Medici were restored in the sixteenth century, and the republic was formally dissolved in 1530.

At first glance, it may seem incongruous that the stormy political history of Florence spawned the creative ideas that we have come to identify with the Renaissance. However, the very environment that made people feel they had to be actively involved in their city and fight for their own interests stimulated the driving individualism that characterized this age. Politicians vied to prove themselves superior to their rivals, often by supporting artists whose products contributed to their own status. In the republican turmoil, the Renaissance was born.

Venice: The Serene Republic?

Venice preserved its republic with much less turmoil than Florence, although there, too, an oligarchy ruled. Venice's constitution called for only its aristocratic merchant families—numbering about 2,000—to serve in its Great Council. From among this number, they chose one man to serve as the council leader, or *doge*, for life, but most men were in their 70s before being elected to this office. This rule by the elders made political life in Venice remarkably stable—indeed, the city called itself the "Most Serene Republic." This title underplayed the ever-present factional strife that plagued the Italian cities, but Venetians were able to suppress the strife, and many believed their self-proclaimed myth of serenity.

This peace also stemmed from the prosperity generated by overseas trade, which Venice dominated owing to its advantageous location on the Adriatic Sea. Map 10.2 shows how Venice's location perfectly situated it to take advantage of the lucrative trade in the eastern

The Medici

Savonarola

Overseas trade

DOCUMENT 10.2

Friar Savonarola Ignites a “Bonfire of the Vanities”

Luca Landucci ran a small apothecary shop in Florence and kept a diary for most of his life. This excerpt from 1497 describes the notorious incident in which the reforming friar Savonarola (whom Landucci calls *Fra Girolamo*) ordered his followers—young boys—to collect Florentine artworks and burn them in the square.

27th February (the Carnival). There was made on the *Piazza de' Signori* a pile of vain things, nude statues and playing-boards, heretic books, Morganti [poems], mirrors, and many other vain things, of great value, estimated at thousands of florins. Although some lukewarm people gave trouble, throwing dead cats and other dirt upon it, the boys nevertheless set it on fire and burnt everything, for there was plenty of small brushwood. And it is

to be observed that the pile was not made by children; there was a rectangular woodwork measuring more than 12 *braccia* [about 23 feet] each way, which had taken the carpenters several days to make, with many workmen, so that it was necessary for many armed men to keep guard the night before, as certain lukewarm persons, specially certain young men called *Compagnacci* wanted to destroy it. The *Frate* was held in such veneration by those who had faith in him, that this morning, although it was Carnival, *Fra Girolamo* said mass in *San Marco*, and gave the Sacrament with his hands to all his friars, and afterwards to several thousand men and women; and then he came on to a pulpit outside the door of the church with the Host, and showing it to the people, blessed them, with many prayers: *Fac salvum*

populum tuum Domine, etc. There was a great crowd, who had come in the expectation of seeing signs; the lukewarm laughed and mocked, saying: “He is excommunicated, and he gives the Communion to others.” And certainly it seemed a mistake to me, although I had faith in him; but I never wished to endanger myself by going to hear him, since he was excommunicated.

FROM: Luca Landucci, *A Florentine Diary from 1450 to 1516*, trans. Alice de Rosen Jervice (London: Dent, 1927), pp. 130–131.

Analyze the Source

1. What kinds of objects did the friar’s followers collect?
2. What did Landucci think of Savonarola? Why did he take this position?

Mediterranean. From Venice’s earliest history, it enjoyed a privileged position in the trade with Byzantium, and as we saw in Chapter 8, during the Fourth Crusade in 1204, the Venetians led in the conquest of Constantinople itself. The end of the crusader kingdoms did not end the Venetian dominance of trade, and at the beginning of the Renaissance, wealth continued to pour into the Serene Republic. To consolidate its hold on the eastern Mediterranean, Venice built an empire of coastal cities and islands—as shown on Map 10.2.

Venice was built on a collection of islands in a lagoon, and the Grand Canal that continues to mark its main thoroughfare is a perfect representation of the city’s maritime orientation. Of the city-state’s total population of about 150,000 people, more than 30,000 were sailors. Venice’s navy boasted forty-five galleys—large warships with sails and oars—and three hundred hefty sailing ships.

In the beginning of the fifteenth century, Venice began to engage in a policy of expanding into the Italian mainland—the city-state wanted to secure its food supply as well as its overland trade routes. Map 10.2 shows the cities that became Venetian dependencies. Although this expansionist policy made sense to the Venetians, it understandably upset the neighboring states of Milan and Florence.

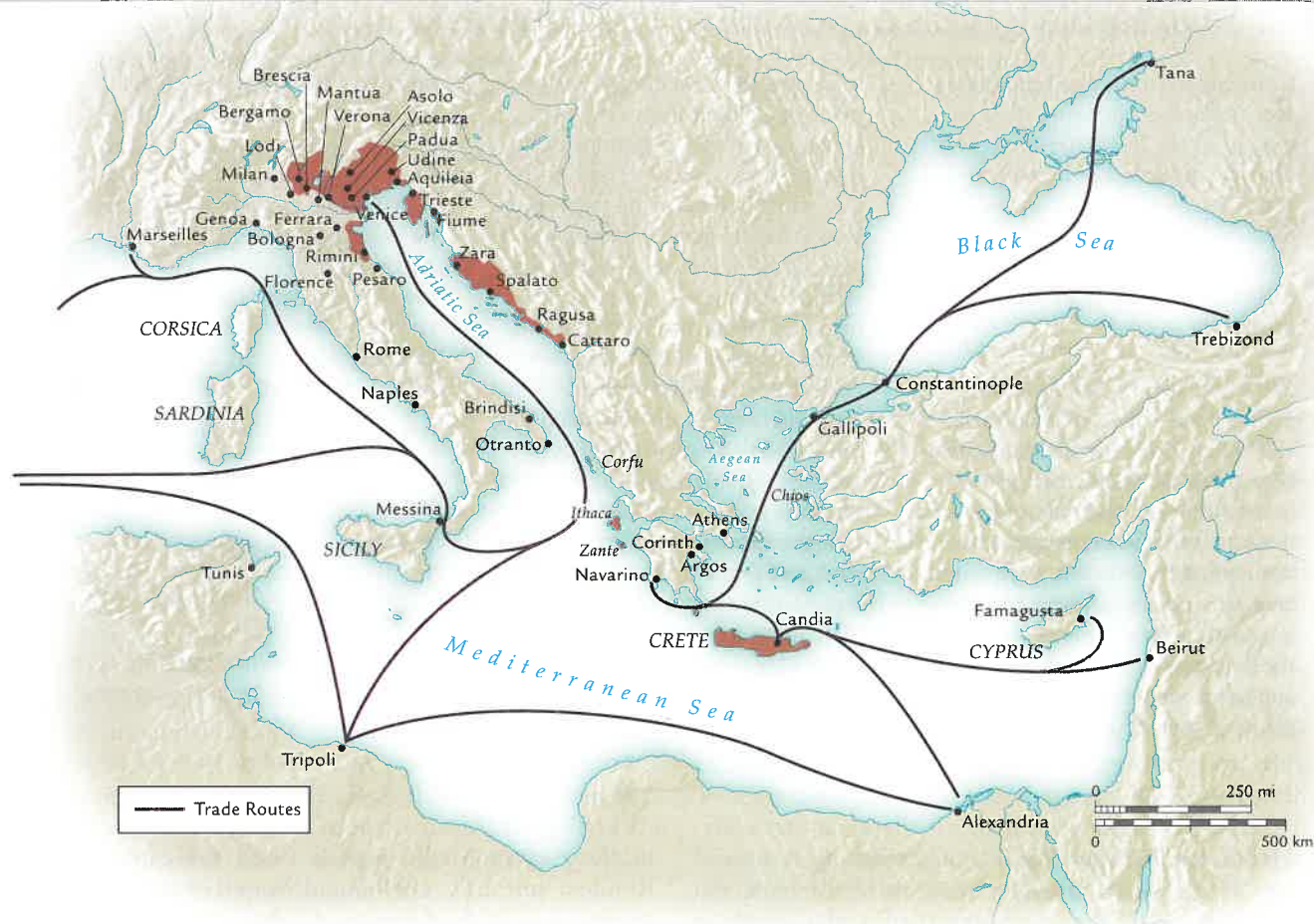
The Venetians perhaps should have looked more carefully at their maritime holdings, for Turkish expansion

in the eastern Mediterranean (with the capture of Rhodes) seriously challenged Venetian supremacy in the seas. (See Chapter 11 for the subsequent confrontation.)

Through the Renaissance, however, this calm republic helped forward the progress of the new spirit. Its leaders wanted to grace their city with the magnificent new art, so their patronage brought talent to the fore, and their ships helped disseminate the new ideas along with the Italian trade goods.

Milan and Naples: Two Principalities

Milan’s violent history mirrored that of Florence, but this city-state more quickly moved from a republican form of government to a hereditary principality. During the thirteenth century, rival political factions in the city had constantly vied for power. In desperation, the commune invited a soldier from a family named Visconti to come in and keep the peace; he stayed on to rule as prince and established a dynasty that reigned in Milan from 1278 to 1447. The Visconti family recognized the volatility of Italian politics and focused on the military strength that had brought them to power in the first place. After fending off attempts to establish a republic, the Visconti established a principality that coveted the lands of the rest of northern Italy. Only the diplomatic and military talents of



MAP 10.2

The Venetian Empire in the Fifteenth Century

This map shows the Venetian Empire, with the red lines indicating the main trade routes of Venice's prosperous commercial ventures.

Explore the Map

1. How would Venice's dominance of the Adriatic Sea and its control of Crete facilitate its ascendancy over the trade in the eastern Mediterranean?
2. Locate the Muslim cities of Tripoli, Tunis, Alexandria, and Beirut. How might Venetian trade with these centers have facilitated cross-cultural interactions?

Florence, Venice, and its other neighbors kept this aggressive principality in check. Finally, in 1447, the Visconti dynasty ended when the prince died without an heir—the door was open for a new power struggle in Milan.

In 1450, another strong dynasty took power. The Sforza family kept the city-state's proud military tradition, yet also served as patrons of the arts to enhance their own political reputations. The Sforza continued to rule until the early sixteenth century, though always under the pressure of growing republican aspirations.

The Kingdom of Naples in the south was the only region of Italy that preserved a feudal form of government ruled by a hereditary monarchy. In the early fourteenth century, Naples was ruled by Angevin kings who were descendants of the king of France. Under these kings, the ideas of the Renaissance came to the feudal and rural south. Giotto (the shepherd-painter whose story opened this chapter) and Boccaccio (see Chapter 9) spent time in Naples under the patronage of King Robert (r. 1309–1343), and even

Naples

Petrarch called Robert “the only king of our times who has been a friend of learning and of virtue.” However, after Robert’s rule, Naples became a battleground with claimants from the Angevins and the Spanish Aragonese competing for the throne.

In 1435, the king of Aragon, Alfonso the Magnanimous (r. 1435–1458), was able to reunite the crowns of Naples and Sicily. He worked to centralize his administration but was unable fully to subdue his barons, and Naples remained a feudal kingdom. Alfonso was a passionate devotee of Italian culture and served as a patron of the Renaissance. However, the dynastic claims on this throne by other kings in Europe would disrupt Italian politics in years to come.

The Papal States

The Great Schism ended in 1417, when some 400 churchmen gathered at the Council of Constance and elected a Roman cardinal to be Pope Martin V. When he returned to Rome after the papal sojourn in Avignon (see Chapter 9), Martin found traditional papal lands under the control of neighboring states, and the city in sad disrepair. How was he to restore papal prestige? Should he focus on spiritual or secular leadership? These were the weighty questions that confronted the new pope, and his responses would shape the history of the church.

Martin’s first decision was to take political control over central Italy. As one supporter of papal rule said, “Virtue without power would be ridiculous.” Map 10.1 shows the extensive Papal States, which spanned the peninsula. As rulers of central Italy, the popes had a particular advantage in that their rule was a **theocracy** that derived its legitimacy from God (and election by the college of cardinals), so issues of republicanism and tyranny did not apply. However, their religious role also brought complications. For example, as worldly rulers in the Italian tradition, they were expected to improve the fortunes of their families, so they frequently (and accurately) fell prey to the charge of nepotism as they created positions for their relatives. The popes also looked backward to their medieval struggles with the Holy Roman Emperors to control Italy (see Chapter 8), so many felt they had a right—indeed, an obligation—to expand papal lands on the peninsula. All these factors helped propel the popes into the frequently violent sphere of Italian politics. But they also leaped into the exciting, brilliant world of Renaissance creativity.

Martin V determined that the city of Rome itself should be a place of beauty and a beacon of papal power. Just as the Italian princes used art to enhance their prestige, popes began an ambitious—and expensive—building program that would underscore their authority. The culmination of this effort was the construction of the new St. Peter’s Church in the later

1400s. The new St. Peter’s, shown in Figure 10.4 replaced the old shrine (shown in Figure 5.14) that had stood outside the walls of Rome. From this time on, St. Peter’s Basilica became the main church of Rome and a center of **Papal patronage** Catholic worship. Money flowed from all over Europe to build the new Rome, a development that angered many northern Christians. With these contributions, the popes transformed Rome into one of Europe’s major cultural centers. Another pope, Sixtus IV (r. 1471–1484), revealed his love of humanist scholarship by building a new library at the Vatican to house the papal collection and hiring a humanist, Platina, to run it and increase its holdings. Even today, the library remains a major learning center.

To increase (or even maintain) their secular power, the popes waded into the quagmire of Italian politics, and at the end of the Renaissance, a pope was elected from an influential family—the Borgia. Like many other Renaissance princes, the Borgia pope Alexander VI (r. 1492–1503) tried to reclaim his lands from his acquisitive neighbors. Alexander also proved worldly in his personal life; gossips gleefully **The Borgia family** circulated accounts of his sexual escapades. He still upheld the tradition of Renaissance family life, however, favoring his illegitimate children by placing them in advantageous positions. The pope’s warrior son, Cesare Borgia (ca. 1475–1507), seemed a candidate for uniting Italy under Alexander’s authority. For his daughter Lucrezia, Alexander arranged three marriages designed to advance the family’s dynastic aims. Isabella d’Este (featured in the Biography on page 296) arranged one of these marriages to protect the Este family’s interests. All these manipulations came to nothing, however: Alexander died suddenly, and the family’s ambitions

*Dates are for period of rule

RENAISSANCE RULERS

1364–1380	Charles V the Wise, France
1434–1464	Cosimo de’ Medici, Florence
1461–1483	Louis XI the Spider, France
1469–1492	Lorenzo the Magnificent de’ Medici, Florence
1490–1539	Isabella d’Este, Mantua
1492–1503	Pope Alexander VI
1503–1513	Pope Julius II
1509–1547	Henry VIII of England
1515–1547	Francis I of France
1558–1603	Elizabeth I of England



FIGURE 10.4 St. Peter's Basilica, Vatican City, Italy

This is the modern St. Peter's Basilica that was completed during the late Renaissance. The great dome towers over the city, and the huge colonnaded piazza creates a gathering space for the faithful. This church displays the artistic magnificence of the Renaissance.

failed. The reputation of the papacy as a spiritual authority also declined.

One of the most memorable of the Renaissance popes, Julius II (r. 1503–1513) embodied the ambitious values of the times, but without the scandals that had plagued Alexander. Julius was as perfect a Renaissance ruler as Florence's Lorenzo de' Medici. A patron of the arts, he made Rome a cultural hub on a par with the greatness of Florence. He was also an experienced warrior, personally leading his armies into battle as he carried on Alexander's expansionist policies. Julius II summoned Michelangelo to Rome and commissioned him to decorate the ceiling of the Sistine Chapel (see Figure 10.1). Michelangelo also worked on the new St. Peter's Church in Rome that was being built at the time. Although Julius and Michelangelo had a stormy relationship, the patron helped his artist produce some of the most beautiful work of the Renaissance.

Julius II

The Renaissance popes achieved their ambitious agenda: They were powerful earthly rulers living in a magnificent city. As the papacy proved to be a stronger institution than the church councils, efforts were ended to give supreme authority to bishops meeting in councils. However, over time, the popes' territorial power would undermine papal claims of universality, as many

people began to question why Italian princes should have authority over lands outside Italy. As we will see in Chapter 11, these same people would begin to criticize the popes for what some called worldly extravagance.

The Art of Diplomacy

The wars, shifting alliances, and the courtly intrigue of Italian politics sparked a new interest (and expertise) in the art of diplomacy. Not since the early Byzantine state had courtiers devoted such attention to the details of successful diplomacy. States exchanged ambassadors to facilitate official communication and sent spies to maintain advantages.

The most noted writer on political skill and diplomacy was Niccolò Machiavelli (1469–1527), whose book *The Prince* still influences many modern-day political thinkers. Machiavelli recognized the danger confronting Florence in the fifteenth century as French armies threatened the independence of the city-states, and he wrote to offer advice about how to survive—

indeed prevail—in these turbulent times. His was an eminently practical guide that looked at politics with a cold-blooded realism that had not been seen before. For Machiavelli, the most important element for a successful ruler (the prince) was his strength of will. He insisted that *Machiavelli* although princes might appear to have such traditional virtues as charity and generosity, they could not rely on these traits to hold power. They must actually be ruthless, expedient, strong, and clever if they were to maintain their rule. As he said, "It is better for a ruler to be feared than loved."

Machiavelli's blunt description of political power articulated a striking departure from medieval political ideals. During the Middle Ages, the perfect ruler was Louis IX of France (r. 1226–1270) (described in Chapter 8), who proved so virtuous that he was made a saint. With the Renaissance, men like Cosimo de' Medici and Cesare Borgia—self-made rulers who methodically cultivated their talents and grasped power boldly—took power. Machiavelli's book captured the new statecraft and showed that realistic politics often meant a brutal disregard for ethics. Indeed, many Europeans living during the Renaissance showed a social indifference and personal immorality that we might find dismaying today.

INDIVIDUALISM AS SELF-INTEREST: LIFE DURING THE RENAISSANCE

In spite of efforts to hone their diplomatic skills to a fine art, many Italians still resorted to brute force to get what they wanted. In all the city-states, some individuals came to power by stimulating social strife among competing factions or even using violence to vanquish their rivals. Taking part in politics could also get one in deep trouble. Petrarch's father, for example, like many other men of his time, made the mistake of supporting a losing political struggle in Florence, and the victors punished him by amputating his hand. Individuals struggling to better themselves politically and economically often did so at the expense of their neighbors.

Aside from offering the occasional opportunity to improve one's social position, Renaissance cities still had a clearly defined social hierarchy. The Florentines referred to these divisions as the "little people" and the "fat people." The "little people" consisted of merchants, artisans, and workers and made up about 60 percent of the population. Slaves and servants assumed even lower status, beneath the "little people." The "fat people" included well-to-do merchants and professionals and made up about 30 percent of the population. The wealthiest elite—bankers and merchants owning more than one-quarter of the city's wealth—made up only 1 percent of the population.

Whenever there is a great disparity between rich and poor in a situation of some social mobility, crime tends to run high. This was true throughout Renaissance Europe. One Florentine merchant, Luca Landucci, who kept a detailed diary of the events of his age, regularly wrote of crime and punishment as he heard his neighbors gossip about the shocking misdeeds of the day. In one diary entry, he repeats news of a young woman who killed a child for the pearl necklace the girl was wearing. In another, he tells of the townspeople watching as a man was beheaded for "coining false money." Luca's dreary lists of crimes seem endless.

Many people blamed wanderers for the alarming rise in crime. According to such observers, soldiers discharged from mercenary armies, the poor fleeing poverty in cities and countryside, and other displaced persons made the highways more dangerous than ever. Italy and other states tried to control crime, but their methods were usually ineffective as well as misplaced. As in other times of rapid social change, rulers increased the regulation of social behavior. For example, in England in 1547 a new law stipulated that vagabonds be branded and enslaved for two years. The law tells us a great deal about Renaissance society's intense fear of crime and strangers.

Growing Intolerance

Renaissance governments enacted harsh legislation on people they found threatening, from prostitutes to paupers. This same impulse contributed to an increasing intolerance of other religions and cultures, as evidenced by an intensifying prejudice against Jews. In Italy, Christians passed laws against sexual relations between Christians and Jews, and authorities in Rome reputedly burned 50 Jewish prostitutes to death for having intercourse with Christian men. Laws also restricted Jews to certain parts of cities and required them to wear identifiable clothing. In some instances the clothing included colors that had been set aside for prostitutes. This cruel association left Jewish women open to ridicule, criticism, and sometimes abuse from non-Jewish neighbors.

Persecution of Jews existed during the Middle Ages—thirteenth-century kings of England and France had expelled Jews from their lands, and communities of Jews had experienced periodic violence. (As we saw in Chapter 9, Jews were subjected to particular violence in the wake of the bubonic plague.) However, increasing prejudice in the fifteenth century led to large-scale expulsions of Jewish communities from many cities and countries. Vienna began expelling Jews in 1421, and many other German cities followed. **Figure 10.5** is taken from a fourteenth-century Hebrew manuscript, and it shows Jews driven from their homes. The group was allowed to take their animals and a wagon for the women, children, and elderly as they headed down the hills seeking a new home. Most European Jews moved eastward into Poland and Russia, and the center of Judaism shifted from western Europe to the East.

Ferdinand and Isabella forced all of Spain's Jews to leave in 1492, causing one of the largest movements of peoples in the era. Portugal did the same in 1497. Many Iberian Jews fled to the Muslim lands in North Africa, and some people today still trace their ancestry back to this exodus. As a result of this intolerance, western Europe lost the talents of the many Jews who had inhabited these lands for centuries.

Economic Boom Times

The new ideas of the Renaissance (both good and bad) developed against the backdrop of the fourteenth century crises but were fostered in the fifteenth century by a vigorous economic life. Individualism was stimulated by the economic potential, and excess money made the all-important patronage possible. Growing commerce and industries brought money into Italy, stimulating the local economy and allowing wealthy people to indulge their desire for beauty and comfort.

Venice shone as the greatest merchant city in the world, importing tons of cotton, silk, and spices every

Rising crime



FIGURE 10.5 Expulsion of Jews, ca. 1350.

During the Renaissance, Jews were increasingly driven out of their hometowns and even their home nations. This image, from an early Hebrew manuscript used at a seder celebration, depicts their expulsion from a walled city.

year and exporting woolen cloth and mounds of silver coins to pay for their imports. As the sixteenth century opened, 1.5 million pounds of spices came through Venice alone every year. Venetians did not simply rest on their commercial wealth, some enterprising citizens developed and manufactured new products—most prominently, forks and windowpane glass—that would in time sweep through the world.

By contrast, Milan and Florence were craft-industrial cities. Florence, with its 270 workshops, led the way in wool cloth making. Renaissance Italy also profited from another new industry: silk. As early as the twelfth century, travelers had smuggled silkworms into Italy from China so that Italians could begin to produce the precious fabric locally. But the industry really blossomed after the thirteenth century, when the Chinese silk

Wool and silk

loom appeared in Italy. Italians powered the looms with waterwheels and produced large amounts of silk cloth. In the fourteenth century, one city had a silk mill employing 480 spindles rapidly spinning the precious silk. By the fifteenth century, Florence boasted eighty-three workshops devoted to silk production. The wealth let Florence take part in the thriving economy generated by the cloth trade network that connected countries like Italy and the Netherlands all the way to the New World. In the wake of this prosperous trade, even a shopkeeper in Florence wrote excitedly about his first taste of sugar brought in from overseas.

But the most profitable industry was banking. Throughout the Middle Ages, the development of banking and commerce had been impeded by the Christian belief in the immorality of usury, or charging interest, but enterprising merchants found ways around the prohibition. Some people offered gifts in gratitude for a loan of money, thus effectively paying back **Banking** more than they borrowed.

However, the easiest way to collect interest was by changing money and making a profit on the exchange rate. By the thirteenth century, Christians all over Europe began to engage in the lucrative trade of moneylending, but it was the Italian bankers of the Renaissance who really first perfected the art of using money to make money. In the process, many raked in fortunes—for example, the rich families in Florence purchased state-guaranteed government bonds that paid over 15 percent interest. It is not surprising that the “fat people” got even “fatter” as the Renaissance rolled on.

Slavery Revived

The booming economy of the Renaissance led to new institutional oppression—the revival of slavery in Europe. Why was slavery reintroduced precisely when even serfs were being freed from their bondage? Some historians suggest that the labor shortage of the late fourteenth century caused by the bubonic plague drove people to look for fresh hands. However, this explanation is not satisfactory, because the new slaves were by and large not used in agriculture or industry. Instead, it seems that newly wealthy people trying to make their lives more comfortable looked to new sources for scarce domestic help.

Slavery had some complex facets. Renaissance families, for example, often considered slaves part of the household. One Florentine woman in 1469 wrote a letter to her husband asking him to acquire a slave girl to care for their young child or a “black boy” to become the child’s playmate. Occasionally slaves bore children fathered by their owners, who sometimes raised them as legitimate heirs. **Figure 10.6** is a portrait of a slave named Katharina drawn by Albrecht Dürer (1471–1528), a popular engraver commissioned to render portraits of many famous people. Katharina was a slave of a Portuguese commercial agent living in Antwerp who became friends with Dürer in 1520. This portrait shows the high regard in which this owner held Katharina. She is well dressed, and the fact that she sat for a portrait shows that she was a valued member of the household.

The Venetians, positioned near the eastern Mediterranean, capitalized on this trade first, dealing mostly

Finding Comfort in Family

In the rugged world that emphasized individual achievement, the family assumed central importance as the one constant, dependable structure in Renaissance society. Men and women believed they could count on their kin when all else failed and highlighted these connections in art, literature, and the decisions they made in their daily lives. The emphasis on family loyalty was not limited to the upper classes. Artisan workshops, for example, were family affairs in which fathers trained sons and sons-in-law to carry on the family business.

Family ties also defined ethics in a world in which morality seemed relative. In a book about family written by Leon Battista Alberti (1404–1472), a Florentine architect, the author argued that whatever increased a man's power to help his family was good. Riches, however gained, fell into this category. Still, as Isabella d'Este proved, nothing beat a good marriage alliance for improving a family's standing.

Marriage alliances

Plans for such beneficial alliances began as early as the birth of a girl, when wealthy Florentine fathers would open an account with the public dowry fund, which paid as much as 21 percent interest. Family alliances depended on both parties bringing resources to the match. Wealthy families with sons wanted to be certain that their resources would not be diminished by marriage. Thus, parents of girls had to ensure that their daughters could bring enough money to an alliance to ensure a match with well-placed families. The dowry fund was implemented to guarantee that a girl had a sizable dowry when she reached marriageable age. Some Renaissance families could not afford dowries for all their daughters and encouraged some to enter convents (which required smaller dowries). Indeed, the number of convents in Florence increased from only five in 1350 to forty-seven in 1550.

Of course, all these efforts to secure important family alliances had an equal impact on men and women. In the literature and art of the period, too, both men and women appear, but here women play a strikingly different role than they did in real life. Frequently, following the medieval traditions of courtly love, women were given a prominent place as idealized beings who inspired men. Dante Alighieri (1265–1321) (discussed in Chapter 9), whose *Divine Comedy* stands at the cusp between the Middle Ages and the Renaissance, featured a young woman, Beatrice, as his guide into heaven. Petrarch devoted many sonnets to Laura, a young woman who served as his inspiration. Painters, too, portrayed numerous women, many of them nudes who represented idealized beauty and longing for perfection. Artists may have played with the notion of idealized women, but Renaissance men depended on real



FIGURE 10.6 Albrecht Dürer, *Portrait of Katharina*, 1520
This etching was commissioned by a Portuguese commercial agent living in Antwerp and is silent testimony to the enslavement of peoples in the early modern period.

in Muslim and Greek Orthodox slaves obtained through warfare or simply taken captive. Between 1414 and 1423, Venetian traders sold about 10,000 slaves in their markets. Most of these slaves were young girls sold into service as domestic servants. The fall of Constantinople to the Turks in 1453 (see Chapter 9) led to a decline in slaves from Eastern lands, and Europeans began to look for new sources of captives. In the early fifteenth century, the Portuguese conquered the

Sources of slaves

Canary Islands off the western coast of Africa, and what had been a trickle of African slaves into Europe swelled. In the following decades, Portuguese traders eager to compete with the wealthy Venetians brought some 140,000 sub-Saharan African slaves into Europe.

Many people questioned the reestablishment of slavery in Europe. The church disapproved of it, and numerous slaveowners considered it too expensive in the long run. Slavery gradually disappeared in Europe by the end of the Renaissance. However, the precedent had been reestablished, and traders would later find a flourishing slave market in the New World (see Chapters 12 and 15).

women to preside over the haven that was their family and their security for the future.

Children's Lives

Though idealized visions of women signaled the importance of the continuity that families provided, and Renaissance families wanted and loved their children, child-rearing practices undermined the hopes of many a proud parent. Privileged families of the Renaissance believed that it was unhealthy (and perhaps even unsavory) for women to breast-feed their infants. Therefore, they customarily sent their newborns to live with peasant women, who were paid to serve as wet nurses until the children were weaned. Some nurses took meticulous care of these infants; others were less attentive. Peasant mothers suffered from poor diets themselves and often had insufficient milk to nurse a fosterling along with her own infants. Foster babies faced other dangers in the villages as well: Criminal records tell horrifying stories of death in the countryside, such as that of a peasant man who murdered four children under the age of 8. Florentine city-dwellers hearing such tales sometimes worried about their children's safety in the countryside, but the force of custom sent infants away to depend on the kindness of strangers.

Wealthy urban parents reclaimed their children when they were weaned, at about 2 years old. These young strangers then had to fit into large households teeming with older children, stepchildren, and a host of other relatives. With busy parents and step-parents, children often formed their principal attachment with an older sibling or aunt or uncle. The artist Andrea Mantegna was commissioned to paint a cycle of frescoes for the Gonzaga family, who ruled the Duchy of Mantua, and Figure 10.7 shows one portion of this magnificent work. Against the stunning background of the city, the painter shows a man with presumably three of his sons. The youngest, in the foreground, holds tightly to the eldest's hand, perhaps reflecting the situation in many crowded settings as older children cared for younger.

Child-rearing experts warned parents against pampering their offspring, and in general the parents obeyed. Ironically, in this culture of wealth and luxury, people raised their children with a degree of strictness that may seem extreme to us today. One writer (the Dominican Giovanni Dominici), for example, urged mothers to prepare children for hardship by making them sleep in the cold on a hard chest instead of a bed. To toughen them, parents fed children bitter-tasting objects such as peachstones and sometimes gave them "harmless" nausea-inducing herbs so as to accustom them to illness. A humanist (Filarete) writing about an ideal school recommended that children be fed only tough meat so they would learn to eat slowly. This same



FIGURE 10.7 Andrea Mantegna, *The Cardinal Francesco Gonzaga Returning from Rome*, 1474

The painter was commissioned by the Marquis of Mantua to decorate a room with frescoes. The scenes show the marquis' family and are done with techniques of perspective that make the walls seem like windows on the world.

writer recommended that children eat standing up until they were 20 years old. Many parents let their children sleep only six to eight hours a night to keep them from getting lazy.

Within these strict guidelines, boys and girls were treated quite differently. One humanist (Paola da Certaldo) advised feeding and clothing boys well. For girls, he recommended: "Dress the girl well but as for eating, it doesn't matter as long as it keeps her alive; don't let her get fat."

At about 7 years old, middle-class boys were sent to school to learn reading and mathematics and to ready themselves for the complex world of Renaissance economics. As the boys prepared for careers, fathers arranged marriages for their young daughters. Girls were married relatively young—between 17 and 20 years old (although sometimes younger)—to bridegrooms in their 30s who had established their careers. (See Isabella d'Este's biography.) Many brides, still children themselves when they began having babies, did not survive

Childhood hardships

the experience of giving birth. One Florentine man recorded in his memoirs that, between 1390 and 1431, he had four wives who gave him a total of 24 children. The first three wives died in childbirth.

The harshness of childhood took its toll on many boys and girls; mortality among children reached astonishing rates. In fifteenth-century Florence, 45 percent of children died before the age of 20, most of them girls. The 1427 census in Florence showed a surprising gender ratio: 100 women to every 110 men. This statistic reversed the situation that had prevailed through the High Middle Ages, when women outnumbered men.

AN AGE OF TALENT AND BEAUTY: RENAISSANCE CULTURE AND SCIENCE

Renaissance life had its unsavory side—as rich men struggled to get richer, powerful men worked for more power, and small children sometimes suffered. But at the same time, Renaissance society produced some astonishingly talented people whose works have transformed not only our ideas about beauty but also the very appearance of the world we live in today. During the Renaissance—as in classical Athens—people expected art to be a public thing, to be available to and appreciated by people as they strolled through the cities. Public art nurtured civic pride.

Artists and Artisans

During the Renaissance, many upper-class boys pursued humanistic literary studies to prepare for the day they would play a public role in city life, but their families generally discouraged them from following careers in the visual arts. Filippo Brunelleschi (1377–1446), for example, greatly displeased his father when he declared his interest in sculpting and architecture; his family had fully expected Filippo to become a physician or a notary. Michelangelo's father dismissed his son's interest in art as "shameful." Peasant boys, too, had little chance at a career in the arts, for without family connections, there was little chance of entry into the art world. If a country boy was a talented artist, he would probably not have the good fortune to be discovered like the shepherd Giotto whose story opened this chapter.

The majority of Renaissance artists came from artisan families. As boys worked as apprentices in artisan workshops, masters recognized and supported genius. Botticelli, the great Florentine painter, was apprenticed at age 13, as was Michelangelo. These examples were typical—a boy entering adulthood had to learn to take his place in the world, and that place often began in the artisan workshops. As a young man developed his skill, people began to recognize that he was no longer a

simple craftsman, an artisan, making goods, but instead an artist, a creator of beauty.

Women ordinarily were excluded from taking this path. Yet, in spite of this lack of official acceptance, a number of female artists won renown during the Renaissance. Two, in particular, were highly respected by their contemporaries. Sofonisba Anguissola (ca. 1532–1625) achieved fame as an artist through her skill and the support of her wealthy, aristocratic father. More typical was the case of Lavinia Fontana (1552–1614), the daughter of an artist who trained in her father's workshop. Despite these successes, the public role of artists precluded many women from active careers in art. For example, Anguissola delayed marriage until she was in her late 40s so she could paint—a privilege that most Renaissance fathers did not grant.

Late in the Renaissance, artists overall gained new respect—wealthy patrons stopped viewing them as simply manual laborers and began to recognize them as artists. Michelangelo even earned the title *Il Divino*, the Divine One. Europeans during the Renaissance valued genius, and these artistic geniuses obliged by creating magnificent works.

Architecture: Echoing the Human Form

The most expensive investment a patron of the arts could make was in architecture, and artists competed for these lucrative contracts. In the process, they designed innovative churches and other buildings that contributed to the prestige of their cities. Where did architects learn these new ideas? Part of the answer comes from the training of architects. Artisans did not consider architecture a separate craft, so there was no direct apprenticeship for this profession that rigidly inculcated old design ideas. Indeed, the greatest architects had all trained for other fields: Brunelleschi, for example, was a goldsmith, and Alberti a university-trained humanist. The Renaissance passion for the glory of classical Greece and Rome led would-be architects to look carefully at the old ruins that had stood for so long; their love of the individual caused them to put humans at the center of their enterprise. The resulting architecture, while looking back to classical models, was strikingly and beautifully new.

Instead of creating soaring Gothic cathedrals dominated by vertical heights, architects followed classical models of balance and simplicity and combined circular forms with linear supports to break up the monotony of vertical lines. Instead of creating structures that made humans seem small and insignificant before God, they built to glorify the human form and proportions. The fifteenth-century architectural drawings pictured in **Figure 10.8** show the ideal of buildings designed along human proportions. The drawing on the left shows a front view of a building with a man standing to indicate the proper proportions, while the one on

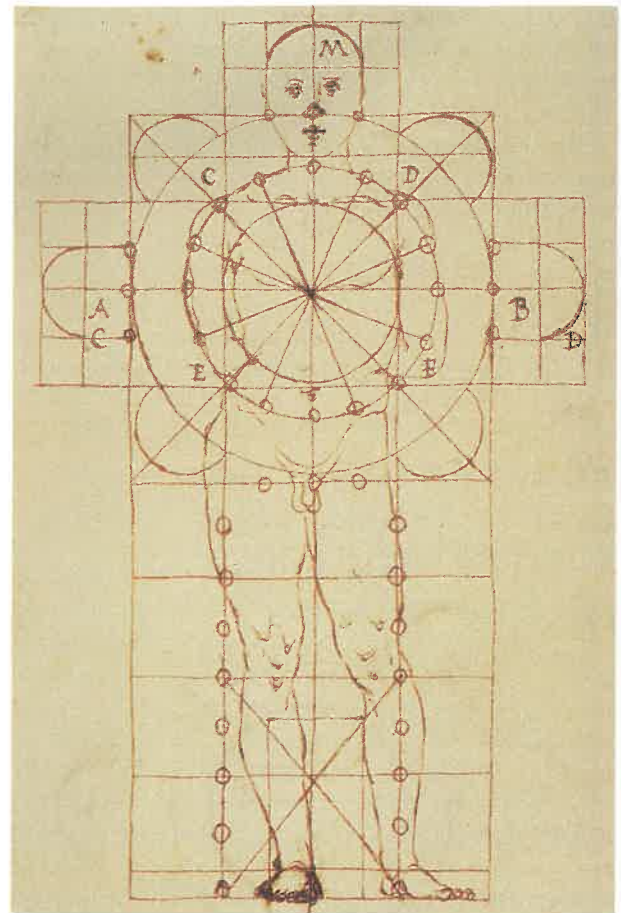
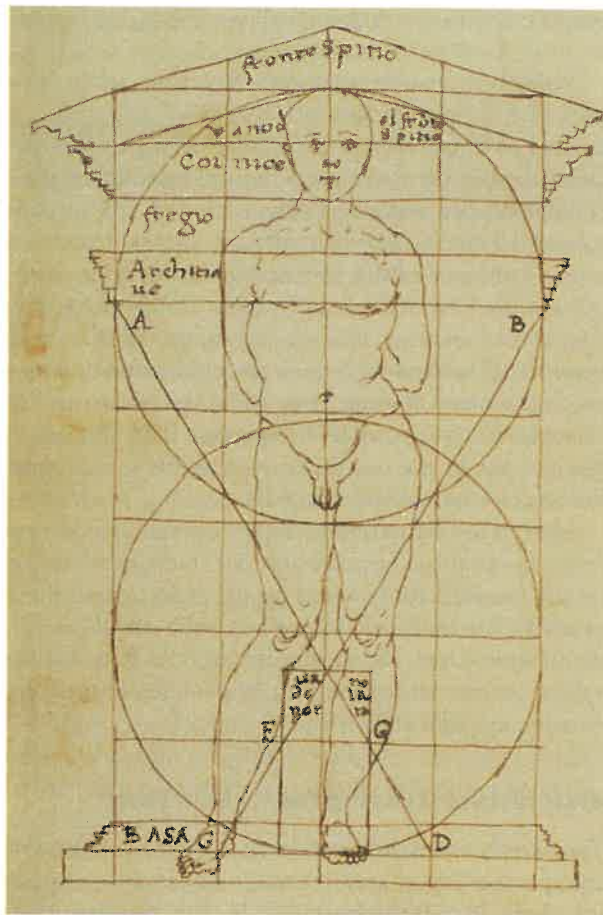


FIGURE 10.8 Francesco di Giorgio Martini, *Trattato di Architettura*, 1480

As theoreticians of architecture considered the best proportions for designing pleasing buildings, they looked to the human form to determine the proper ratios. These drawings show these ratios superimposed on the front and floor plan of buildings.

the right shows a floor plan with the man lying down in the building.

The most influential architectural treatise, *On Building* by Alberti, dominated the field for centuries and expressed an architectural aesthetic that echoed that of the ancient Greeks. Alberti argued that buildings

Human architecture

should mirror the human body in their supports and openings, and this sentiment is shown in Figure 10.8. Repeating the same principle, Michelangelo claimed that anyone who had not mastered anatomy and painting of the human form could not understand architecture. "The different parts of a building," he explained, "derive from human members." Thus, much of the architecture of the Renaissance was created in the image and likeness of the human form.

It is easy to miss the subtleties of human proportion within architecture as we look at the graceful buildings, but there is no overlooking one of the architects' debts to Rome—domes instead of Gothic spires now began to rise with more frequency over the skylines of Renaissance cities.

Domes

Figure 10.9 shows the cathedral of Florence, with its dome designed by

Brunelleschi. The architect had admired the Pantheon dome in Rome (see Chapter 4), and he wanted to erect a massive dome to span the huge base of the new cathedral in Florence. However, Brunelleschi realized that the Roman dome was not suitable to the large space, so the architect creatively took the Gothic technique of using architectural ribs to create a magnificent new structure for the city. Brunelleschi designed the dome of the Florence cathedral with an inner and outer shell, both attached to the eight ribs of the octagonal structure. Many Florentines predicted that the dome would collapse, yet Brunelleschi's handiwork continues to dominate the skyline of Florence.

The Renaissance study of architecture also extended beyond individual buildings to town planning in general. In the fifteenth century, planners began to dream of laying out towns in the simple and logical grid pattern that characterizes our modern cities. Indeed, older European cities still feature a medieval center with curved and random streets surrounded by tidy, post-Renaissance grids. In Latin America, by contrast, towns founded by fifteenth-century Europeans were created

Town planning



FIGURE 10.9 Florence Cathedral, 1420–1436
Brunelleschi's dome for the Cathedral of Florence was an architectural wonder. The architect creatively used ribs to support the dome's weight.

in a grid pattern centered on the town square. On the peripheries of such towns, however, streets wove randomly in the tradition of the villages that predated the Renaissance town centers. All these new ideas about buildings and street planning reshaped the cities of the West.

Sculpture Comes into Its Own

Just as Brunelleschi's admiration of the ancients led him to re-create domed architecture, sculptors also drew from classical models. Italians, who had admired freestanding images from the ancient world, began to demand similar beauty for their cities. City communes and individuals commissioned life-size figures to stand free in the public spaces of cities.

Figure 10.10 shows Michelangelo's widely admired statue of David, the biblical figure who killed the giant Goliath. The statue took the master three years to carve from a block of supposedly flawed marble. The work exhibits all the innovations of Renaissance sculpture: It is a huge, freestanding nude

Michelangelo's David

that depicts the classical ideal of repose, in which the subject rests his weight on one leg in a pose called *contra posto*. The figure exemplifies the confidence and the glorification of the human body that marked Renaissance pride.



FIGURE 10.10 Michelangelo, *David*, 1504
This spectacular sculpture, more than 14 feet high, was in its day the largest marble nude created since antiquity. It was commissioned by Florence to symbolize how the Florentine republic would stand—like David the “giant killer”—against neighboring political giants.

Michelangelo's statue shows another hallmark of Renaissance spirit—an exuberant praise of realism; the sculptor knew anatomy and realistically portrayed the human body. Renaissance sculptors had to look at life carefully in order to reproduce it with such accuracy, and the audience, too, was led to an appreciation of realism through admiring the great sculptures that graced the public areas.

The statue also carried a political message, a common characteristic of the civic humanism of the day. In 1494, when the French invasion of Florence caused a temporary fall of the Medici rule, the newly restored Republic of Florence commissioned Michelangelo to create a work with a patriotic theme—something that would celebrate the overthrow of the family that had dominated the city for so long. The sculptor chose David the “giant killer” to symbolize the republic's ousting of the goliath Medici. Michelangelo portrayed David before his fight with Goliath—the youth is confident

and defiant, just as Florence saw itself confronting the rest of the world. In this masterpiece, art joined with politics in the best Renaissance tradition.

Painting from a New Perspective

The shepherd Giotto di Bondone (ca. 1267–1337), whose artistic talents were recognized by a Florentine master, was to revolutionize painting for Florence and the West. The young apprentice who fooled his master with a painting of a fly turned his talents to magnificent religious paintings, and he created realistic figures that showed a full range of human expression. For example, his images of the Virgin Mary were not done as remote queens of heaven, but instead painted as realistic young girls struggling to be caring mothers.

Like architects and sculptors, Renaissance painters developed striking new techniques, including oil painting on canvas and the perfection of portraiture. However, perhaps their best-known innovation was

linear perspective, which allowed painters to enhance the realism of paintings by creating the illusion of three-dimensional space on a two-dimensional surface. The Florentines—and Brunelleschi in particular—proudly claimed to have invented this technique of painting. Whether they did or not is probably irrelevant; regardless of who invented linear perspective, the Florentines perfected it.

Before beginning to paint, Brunelleschi organized the painting around a central point and then drew a grid to place objects precisely in relation to each other. His real innovation, however, came when he calculated the mathematical ratios by which objects seem to get smaller as they recede from view. In this way, he knew exactly how big to paint each object in his grid to achieve a realistic illusion of receding space. In commenting on Brunelleschi's creations, Alberti asserted that a painting should be pleasing to the eye but also should appeal to the mind with optical and mathematical accuracy. And here is the essence of these complex works: They used all the intellectual skill of the artists to create images profoundly appealing to the senses.

Perspective also grew from and appealed to the Renaissance emphasis on the individual, for it assumed that a painting would be viewed from one single spot in front of the work. Thus, the painter designed the painting with the eye of the beholder in mind. For the next four hundred years, Renaissance ideas of perspective and space set the standard for Western painting. The painting shown in **Figure 10.11** offers a fine example of linear perspective, in which a flat plane looks like a three-dimensional space.

The painter Raphael (1483–1520) was widely regarded as one of Italy's best painters of the High Renaissance (the late fifteenth and early sixteenth centuries).

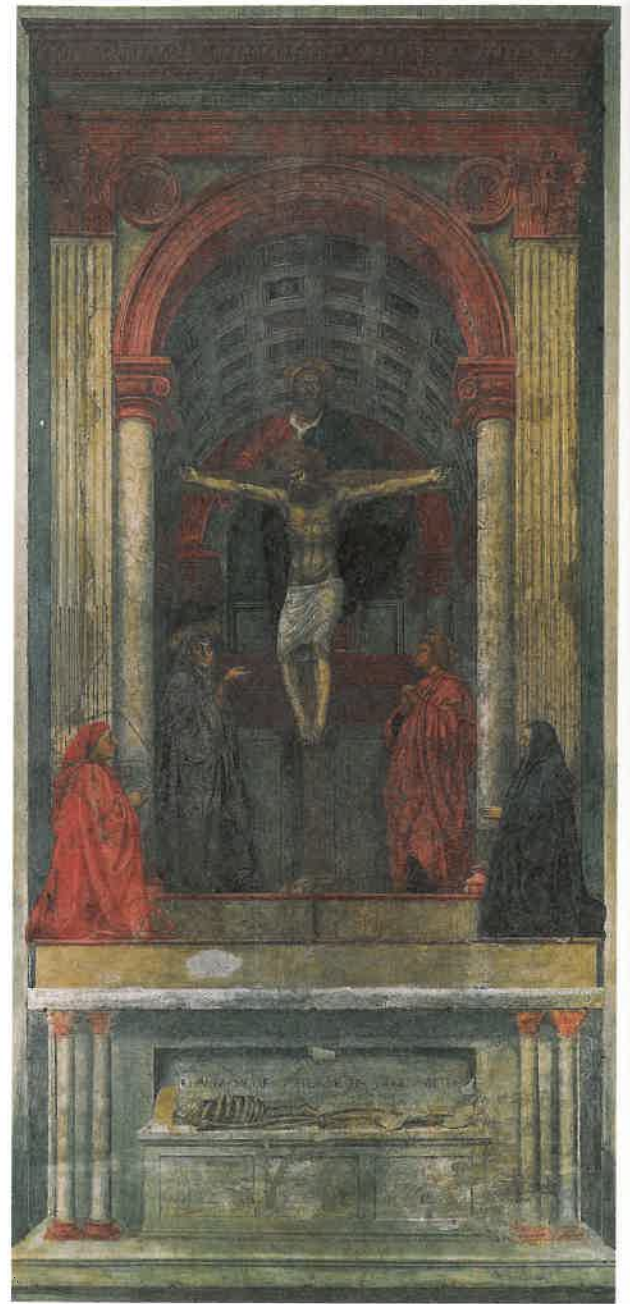


FIGURE 10.11 Masaccio, *Trinity with the Virgin, St. John the Evangelist, and Donors*, 1425

Masaccio's painting skillfully uses linear perspective to create a convincing illusion of three-dimensional space. The donors kneeling in the forefront are one more reminder of the importance of patrons.

During his lifetime, he was much acclaimed as an artist who could portray transcendent themes with all the realism of fifteenth-century Italian life, and modern critics agree. His reputation gained him the coveted commission to paint a fresco for Pope Julius II's library, and **Figure 10.12** shows that fresco—*School of Athens*. Raphael created this fresco just as Michelangelo was painting the Sistine Chapel ceiling (see **Figure 10.1**).



FIGURE 10.12
Raphael, *School of Athens*, 1510–1511

Pope Julius II commissioned the painter Raphael to create a fresco for his library. The artist portrayed famous ancient philosophers, such as Euclid, Pythagoras, and Socrates, along with Plato and Aristotle in the center. Plato (looking remarkably like Leonardo da Vinci) is on the left, with his hand pointing in the air to remind viewers of the realm of

ideas. He is speaking to Aristotle, whose hand presses downward, reminding viewers of his more earthly approach to knowledge. Raphael also included a self-portrait on the right (in the black hat) and a depiction of a brooding Michelangelo sitting in the center foreground, leaning his head on his hand.

Analyze the Source

1. Identify the following characteristics of the Renaissance in this image: individualism, appreciation of the classics, and perspective.

Celestial Music of Human Emotions

Renaissance thinkers turned their attention to music in a quest to carry that art into the new age. Early humanists at first thought that music should imitate classical forms, but no one really knew what ancient Greek music sounded like. However, people did look to ancient mathematics to inform musical composition, for Pythagoras (ca. 569–475 B.C.E.) had postulated harmonious relationships among planets, and

music intervals were supposed to echo the ratios of those relationships, creating what the ancients called a “music of the spheres.” This search for heavenly music helped to standardize musical notation during the Renaissance and would continue into the seventeenth century.

On a practical level, composers drew from humanistic studies and put human feelings at the center of a piece so that the music itself would reflect the

emotions of the lyrics. For example, if the lyric was sad, the pitch should descend and the tempo should slow down. Music also moved from the church to the courts in these centuries, and perhaps the best-known secular, emotional music was the **madrigals**, poetic songs usually about love. The attempt to link music, narrative, and emotion led to the invention of opera at the end of the sixteenth century.

Music became part of a well-rounded education. Castiglione, in his *Book of the Courtier*, wrote, "I am not pleased with the courtier if he be not also a musician." Music came into the households as well as the courts, and new instruments were developed to serve the home market. Noble households resonated with the sounds of instruments such as the viola da gamba (a bowed, stringed instrument), the whistle-like recorder, and the harpsichord (an instrument, like the piano, with strings that are plucked). The printing press helped to advance this popularization of music, as it allowed for the wide distribution of sheet music after the 1470s. Despite all the new instruments and the new technology of printing, however, the human voice, so expressive of human emotion, remained the central instrument of Renaissance music.

Science or Pseudoscience?

The Renaissance passion for direct observation and realistic assessment that led to such magnificent achievements in the visual, musical, and literary arts catalyzed a process that ultimately led to the scientific accomplishments of the seventeenth century. During the fourteenth and fifteenth centuries, however, much scientific inquiry was shaped by a desire to control as well as understand the world. This combination led to the pursuit of what we consider pseudoscientific studies.

As the *Biography of Isabella d'Este* indicated, astrology was extremely popular during these centuries. Even some popes hired their own astrologers. The bright appearance of Halley's comet in 1456 provoked a flurry of both dire and inspiring prophecies. For example, one humanist physician explained the outbreak of syphilis in Europe in terms of a conjunction of the planets Saturn, Jupiter, and Mars in the sign of Cancer.

Astrology and alchemy

Alchemy was the early practice of chemistry, but the alchemists' interests were dramatically different from those of modern scientists. Their main goal was to find a "philosopher stone" that would turn base metals into gold. This science was perhaps even more popular than astrology.

Such pseudoscience aside, the Renaissance did succeed in combining visual arts with scientific observation. The study of linear perspective, for example, depended on an understanding of mathematics, and scholars spread the use of Arabic numerals to replace the Roman numerals that had previously dominated

the West. The use of these numbers facilitated higher orders of calculations, like algebra, which was also learned from the Muslims. Musicians explored ratios and fractions to try to re-create celestial proportions. Realistic sculpture and painting required a study of anatomy, and this science also progressed. Amid these advancements, the Renaissance saw the birth of a man who came to represent the entire range and combination of talents that so defined this age.

Mathematics and anatomy

Leonardo da Vinci: The "Renaissance Man"

Leonardo da Vinci (1452–1519) personifies the idea of the "Renaissance man"—the person who can supposedly do anything well. As a young man, he contributed to the architecture of Florence by helping to make the golden ball that topped Brunelleschi's dome (see **Figure 10.9**), but he excelled in much more than architecture and sculpture.

This multit talented Italian served in the courts of a number of patrons, from the Medici to the Sforza of Milan—even Isabella d'Este tried to woo him. At these courts, Leonardo painted magnificent portraits and beautiful religious works. **Figure 10.13** shows Leonardo's celebrated *Mona Lisa*, probably the most famous portrait from the Renaissance. Her famous hint of a smile and calm pose were strikingly original at the time and inspired many later portraits.

Although Leonardo's skill as a painter would have satisfied most men longing for greatness, he saw this medium only as a beginning, a means to a larger end. "Painting should increase the artist's knowledge of the physical world," he explained.

Leonardo left a collection of notebooks that showed his intense interest in the world. His drawings of plants revealed a skill and meticulousness that any botanist would envy, and his sketches of water in motion would have impressed the most accomplished of engineers. Leonardo's imagination seemed boundless—his sketches included tanks and other war machines, a submarine, textile machines, paddle boats, a "horseless carriage," and many other inventions that lay in the future.

Scientific notebooks

Leonardo also took an interest in the inner workings of the human body. Although some medieval physicians conducted dissections, the practice was not common. During the Renaissance, however, physicians and scholars began to approach the study of the human body empirically by regularly dissecting cadavers. At the time, both artists and physicians saw dissection as a way to improve their portrayal of the human form. Like many other artists, Leonardo dissected cadavers to understand anatomy and thereby make his paintings as realistic as possible (as well as to satisfy



FIGURE 10.13 Leonardo da Vinci, *Mona Lisa*, ca. 1504
 Leonardo's most famous painting displays his genius at portrait painting as well as landscape perspective (in the background). Notice that the form of the aqueduct by the subject's left shoulder is echoed in the drapery over that shoulder. This is only one way in which the artist connected the sitter to her environment.

his insatiable curiosity). **Figure 10.14** shows Leonardo's sketches and descriptions of human shoulders and arms, including the bones of the left foot and lower leg. The image demonstrates how Leonardo drew from cadaver studies as it shows the intricate connections of the ligaments in the joint as well as the various parts of the muscles as they encase the arm bones.

King Francis I of France (r. 1515–1547) once said of Leonardo, "No other man had been born who knew so much." Unfortunately for the future of science and engineering, Leonardo's voluminous notebooks were lost for centuries after his death. In retrospect, perhaps Leonardo's greatest achievement was that he showed how multitalented human beings could be. He proved the humanists' belief that an educated man could accomplish anything in all fields. Leonardo died at the court of Francis I, who had proudly served as his patron.

RENAISSANCE OF THE "NEW MONARCHIES" OF THE NORTH, 1453–1640

As we saw in Chapter 9, the medieval political structures of Europe began to fall apart under the pressures of the many disasters of the fourteenth century. The monarchies of the fifteenth century could no longer rely on feudal contracts and armies of mounted knights and began to search for new ways to rule their countries. To bypass their sometimes unreliable nobility, monarchs concentrated their royal authority by appointing bureaucrats who owed their status only to the will of the king or queen. As they looked for new sources of income to pay growing mercenary armies, kings and queens kept imposing new taxes and, in general, were receptive to new ideas to help them consolidate their power. Many hired Italians trained in the humanist tradition to work in their courts, and slowly and fitfully from the late thirteenth through the sixteenth century, the ideas of the Renaissance spread to northern European countries. As Renaissance notions traveled north and bore fruit in the courts of powerful rulers, the ideas were further transformed. This migration of ideas also accelerated the changes triggered by the disasters of the fourteenth century.

France: Under the Italian Influence

France offers a case study in how slowly and sporadically Renaissance ideas moved and how much this new spirit depended on the patronage of monarchs. The French king Charles V (r. 1364–1380), known as "the Wise," encouraged Renaissance learning among his subjects, gathering a circle of intellectuals around him. However, this early flowering of learning withered when his mentally unstable son, Charles VI (r. 1380–1422), took

RENAISSANCE ARTISTS AND WRITERS

- ca. 1267–1337** Giotto, Italy
- 1304–1374** Petrarch, Italy
- ca. 1395–1441** Jan van Eyck, Flemish painter (Chapter 9)
- 1436** Brunelleschi completes dome of Florence cathedral
- 1452–1519** Leonardo da Vinci, Italy and France
- ca. 1454** Johann Gutenberg begins printing books, Germany
- 1466–1536** Desiderius Erasmus, Holland
- 1475–1564** Michelangelo, Italy
- 1478–1535** Thomas More, England
- 1483–1520** Raphael, Italy
- 1513** Machiavelli, *The Prince*, Italy
- 1564–1616** William Shakespeare, England

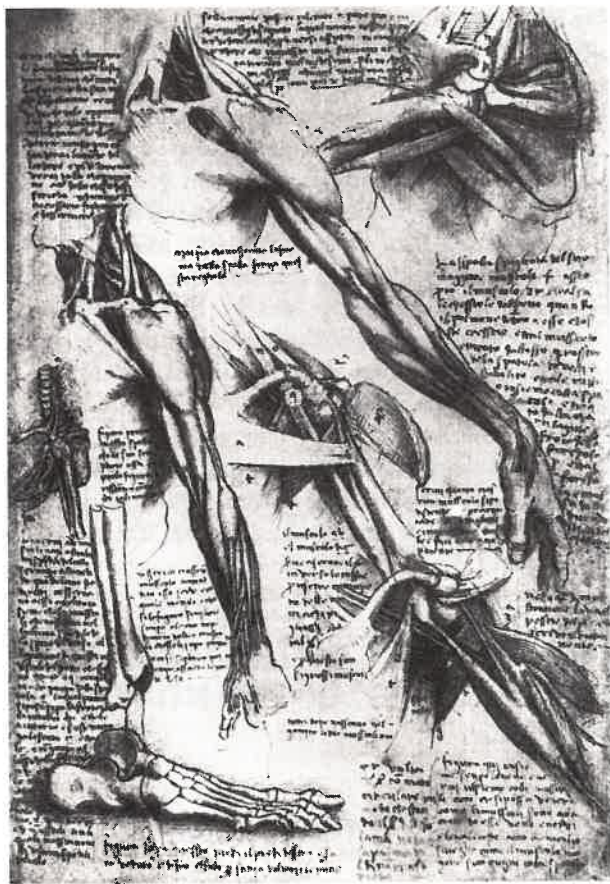


FIGURE 10.14 Leonardo's Notebooks, ca. 1510
Leonardo, like many other artists at the time, studied dissections of cadavers to learn about humans and in doing so forwarded science as well as art. This figure shows his drawings of a shoulder and arm.

power. Integration of Renaissance ideals in this northern court would have to wait until the end of the Hundred Years' War in 1453 (discussed in Chapter 9).

France eventually triumphed in the Hundred Years' War, but a new threat from the neighboring state of Burgundy immediately arose. As we saw in Chapter 9, Burgundy had allied with England to weaken France, and England's defeat did not weaken Burgundy's land hunger. As Map 10.3 shows, the rulers of Burgundy were trying to forge a state between France and the Holy Roman Empire, and their hundred-year expansion represented a real threat to France. Instead of

Louis the Spider

leading armies in the old chivalric manner, however, the French king Louis XI (r. 1461–1483) skillfully brought a new kind of diplomacy to bear in confronting this next challenge. His contemporaries called him "Louis the Spider" because he spun a complex web of intrigue and diplomatic machinations worthy of Machiavelli—bribing his allies and murdering his enemies. Louis subsidized Swiss mercenaries, who eventually defeated the Burgundian ruler. France then seized the Duchy of Burgundy and added the sizable new territory to its lands. (As Map 10.3 shows, the Low

Countries remained in the hands of Mary, the Duke of Burgundy's daughter, and they later formed part of the inheritance of her grandson, Charles V, whose fortunes we will follow in Chapter 11.) Louis left France strong and prosperous and well placed to play a powerful political role in the coming centuries. Document 10.3 offers a contemporary's view of this complex king.

As Map 10.3 shows, the French kings succeeded in slowly taking the lands from the nobles who had retained their holdings since the Middle Ages. With its increasing strength, France next began expanding across the Alps into Italy to assert dynastic claims in Naples, because, as we saw previously, the French royal family was related to the rulers in Naples. However, the French came back with much more than wealth. Nobles leading mercenary armies in the Italian campaigns of 1494 came in search of land and left feeling dazzled by the cultural accomplishments of the Italian Renaissance. In a letter to his courtiers back home, the French king Charles VIII (r. 1483–1498) gushed about discovering the "best artists" in Italy. He returned home with some 20 Italian workmen whom he instructed to build "in the Italian style." The aesthetic ideals of Italy thus moved north with the retreating French armies, and the early Renaissance spirit in France was reawakened.

Italian influence increased further with the substantial growth of the French court, which opened positions to Italian humanists and diplomats. France's kings employed more officials than any other state in Europe—one estimate places the number of bureaucrats at more than

Italians in France

4,000 during the reign of Francis I (r. 1515–1547). (Leonardo da Vinci was among those brought to France by this powerful and sophisticated patron.) Under Francis's rule, humanist literature flourished, and the new learning influenced university curricula from languages to mathematics to law. The king even ordered Castiglione's *Book of the Courtier* to be translated into French and read to him nightly.

The French Renaissance did not merely copy the Italian movement. Indeed, many works by French artists and writers during this period show a unique blend of humorous skepticism and creative power. The imaginative humanist François Rabelais embodies this unmistakable French version of Renaissance ideals. His books *Pantagruel* and *Gargantua*—bawdy tales about giants with enormous appetites—are masterpieces of satire. Both stories continue to captivate modern readers. France had left its own mark on the Renaissance spirit.

Visual Arts in Northern Europe

Painters in the Netherlands had developed the use of oil paint and the technique of realistic portraiture at the same time as the Italians were forging new

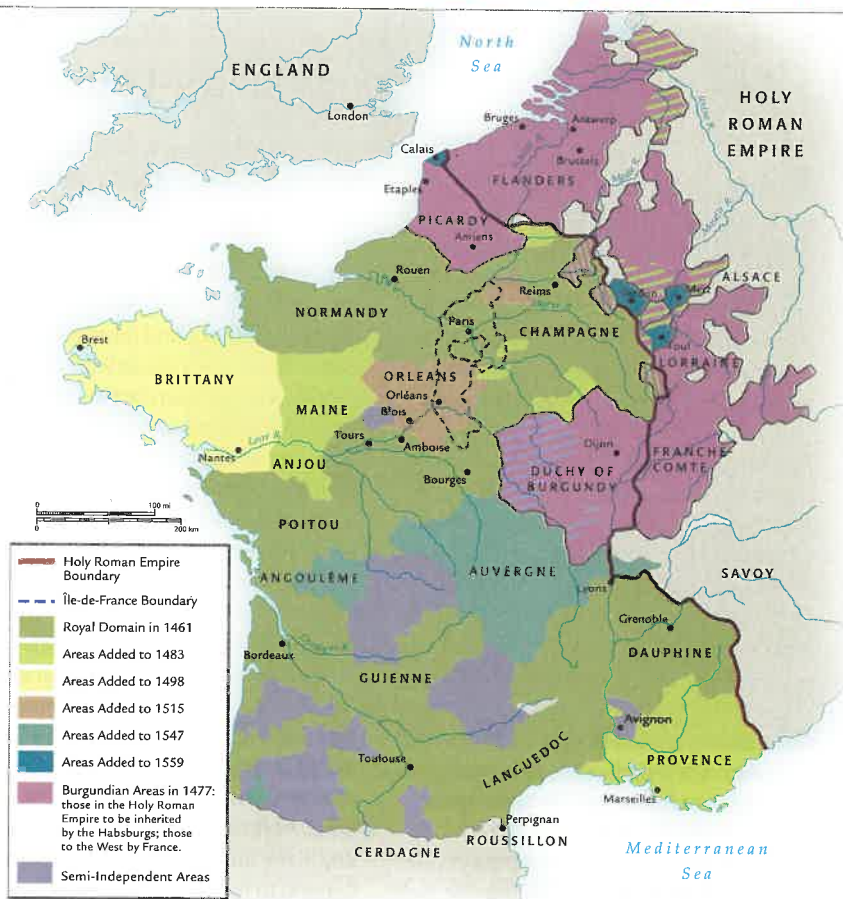
MAP 10.3

France in the Fifteenth and Sixteenth Centuries

This map shows the growth of the royal domain of the French kings from 1461 through 1559.

Explore the Map

1. Why did the Duchy of Burgundy pose a threat to the French kings?
2. Considering the location of Avignon, where the popes had lived so long, why did many in Europe accuse those popes of being pro-French?



ground in painting techniques. Jan van Eyck, whose famous painting *Giovanni Arnolfini and His Bride* is shown in Figure 9.9 on page 281, is one example of an artist using these innovative techniques. Other painters in the Netherlands who made use of these techniques include Hieronymus Bosch and Pieter Brueghel the Elder. As Renaissance ideas moved north, artists in Germany and other northern countries also experimented with new ways of depicting the world.

The most famous northern artist of the High Renaissance was a German, Albrecht Dürer. As a young man, he made two trips to Venice, where he learned Italian Renaissance painting techniques. The self-portrait in Figure 10.15 shows his debt to the Italian Renaissance. When Dürer returned to Nuremberg, his home city in Germany, he made his living by selling prints and woodcuts. He profited from the new book market created by the printing press, marketing his illustrations in this new medium. Dürer was an influential figure in Germany, and his use of Italian artistic developments helped the tradition of painting to take hold in Germany.

English Humanism

When Henry VII (r. 1485–1509) became king in England after the Wars of the Roses (see Chapter 9), he succeeded in taming the rowdy and independent nobility and established a strong, centralized monarchy. Under the dynasty that he initiated, England again prospered. The English monarchs now turned their attention to the new spirit emanating from the



FIGURE 10.15 Albrecht Dürer, *Self-Portrait*, 1498
This portrait shows a clear debt to the Italian Renaissance, from the style of the pose to the three-dimensional landscape in the back. The fine lines of detail in the subject's hair curls and ribbon hint at Dürer's future as an engraver of book illustrations.

DOCUMENT 10.3

A Courtier Describes a Suspicious King—Louis the Spider

Philippe de Commines (ca. 1447–1511) served Louis XI and wrote an account of the king's reign shortly after Louis' death in 1483. Commines had been raised at the court of Burgundy until he found it politically expedient to change sides and work for France. Thus, he was well placed to view the king with the eye of an outsider as well as a courtier.

The King had ordered several cruel prisons to be made; some were cages of iron, and some of wood, but all were covered with iron plates both within and without, with terrible locks, about eight feet wide and seven high. . . . I lay in one of them eight months together in the minority of our present King. . . . However, I have seen many eminent and deserving persons in these prisons, with these nets about their legs, who afterwards came forth with great joy and honor, and received great rewards from the King. . . .

It may be urged that other princes have been more given to suspicion than he, but it was not in our time; and, perhaps, their wisdom was not so eminent, nor were their subjects so good. They might too,

probably, have been tyrants, and bloody-minded; but our king never did any person a mischief who had not offended him first, though I do not say all who offended him deserved death. I have not recorded these things merely to represent our master as a suspicious and mistrustful prince; but . . . that those princes who may be his successors, may learn by his example to be more tender and indulgent to their subjects, and less severe in their punishments than our master had been: although I will not censure him, or say I ever saw a better prince; for though he oppressed his subjects himself, he would never see them injured by anybody else. . . .

I knew him, and was entertained in his service in the flower of his age, and at the height of his prosperity, yet I never saw him free from labor and care. Of all diversions he loved hunting and hawking in their seasons; but his chief delight was in dogs. As for ladies, he never meddled with any in my time; for about the time of my coming to his court he lost a son, at whose death he was extremely afflicted, and he made a vow to God in my presence never to have intercourse with any other woman

but the queen; and though this was no more than what he was bound to do by the canons of the church, yet it was more that his self-command should be so great that he should be able to persevere in his resolution so firmly, considering that the queen (though an excellent princess in other respects) was not a person in whom a man could take any great delight. . . .

He was involved [in warfare that] . . . lasted till his death, and many brave men lost their lives in it, and his treasury was exhausted by it; so that he had but a little time during the whole year to spend in pleasure, and even then the fatigues he underwent were excessive. . . . When he was at war he labored for a peace or a truce, and when he had obtained it, he was impatient for war again.

FROM: A.R. Scoble, trans. and annotator, *The Memoirs of Philip de Commines* (London: G. Bell & Sons, 1936), vol. II, pp. 75–81.

Analyze the Source

1. What qualities did Commines value in the king and which did he criticize?
2. Would Machiavelli have considered Louis a good prince? Why or why not?

south as they began to surround themselves with courtiers and art that served as the hallmarks of the courts of new monarchs. Delayed because of internal strife, the English Renaissance (1500–1640) gained momentum just as the Italian movement waned.

During the reign of Henry VII, English scholars intrigued by Renaissance thought traveled to Italy and studied under noted humanists. They frequented the newly established Vatican library and consulted with the papal librarian, and then returned home brimming with new ideas. By 1500, these scholars had so transformed the curriculum at Oxford that England could offer as fine a classical education as Italy. The forward-thinking English monarchs also brought back technological innovations. They embraced new artillery and set English engineers to work making gunpowder. Henry VII included a fireworks display at his wedding, in so doing importing this Italian skill into England and beginning a long tradition of English pyrotechnics. (See Thinking about Science and Technology in Chapter 11.)

Henry VIII (r. 1509–1547) proved an even more vigorous patron of Renaissance learning than his father. As we will see in Chapter 11, Henry met the French king Francis I and tried to outdo that Renaissance prince in splendor and patronage. The English king cultivated interest in astronomy, literature, and music—all the fields advocated by the humanists. Still, the talented monarch was outdone by his Lord Chancellor, Sir Thomas More (1478–1535).

More published a biography of the humanist Pico della Mirandola that revealed the author's debt to the Italian movement. The English scholar mastered classical learning and the **Thomas More** humanist curriculum and applied his skills in public life in the best tradition of civic humanism. More's masterpiece, however, was *Utopia*, a work that commented on contemporary evils while offering a vision of a society free of poverty, crime, and corruption. More's work, with its visions of exploration and decidedly political orientation, points to distinct characteristics of the

English Renaissance. More's studies gave him strong views on religion, which, as we will see in Chapter 11, led to a fatal conflict with his king.

Many Englishwomen also wrote during this Renaissance. The first wife of Henry VIII, Catherine of Aragon (1485–1536), had grown up with a love of the new learning encouraged by her mother, Isabella of Castile. When Catherine came to England, she stimulated interest among courtiers and scholars in the proper education of women. Consequently, Englishwomen wrote more

Renaissance queens

publicly than their Italian counterparts. In fact, Italian travelers to England wrote disparagingly of the "brazen and violently assertive" Englishwomen. This tradition of education strongly influenced Queen Elizabeth I (r. 1558–1603), under whose rule England prospered and the Renaissance flowered.

Renaissance London: A Booming City

Sixteenth-century London—a vibrant city—scintillated during the English Renaissance, expanding physically and intellectually. Between 1560 and 1603, the population almost doubled, from 120,000 to more than 200,000, and travelers flocked there to see its wonders. Figure 10.16 shows a 1616 painting of London by Claes von Visscher. In this cityscape, the great sailing ships that made London a bustling commercial hub waft by, along with small vessels that supplied the city's growing population. Rows of houses stand in front of St. Paul's cathedral, which dominates the skyline.

In the foreground of the painting is the south bank of the Thames, which had been a center of prostitution from the time of the Roman settlement of London. The south bank remained the unseemly quarter of the city, inhabited by criminals and prostitutes, and notorious for its violent forms of entertainment, such as bear baiting and dog fights. The

The south bank

south bank also housed private prisons, including the infamous "clink"

that housed some of the fiercest criminals. Yet, the south bank was also home to the theaters where crowds gathered to watch the plays of the great Renaissance dramatists. The two tall, round structures in the foreground of Figure 10.16 are examples of these theaters. The one on the right is inaccurately labeled "The Globe." Known as Shakespeare's theater, the building had burned down in 1613 because of sparks from fireworks set off as part of a play. This took place before Visscher painted his London scene. During the late sixteenth century, however, the Globe served as a backdrop for the work of the greatest writer England has ever produced, and crowds today gather to see plays performed in a newly rebuilt Globe Theater on the south bank of the Thames.



FIGURE 10.16 Claes von Visscher, *Map of London (detail)*, 1616

The south bank of the Thames is shown in the foreground of the image. In this seedy part of town, patrons came to see bear baiting and dog fights. But also here, in the circular theaters, Shakespeare and other playwrights created masterworks of English drama that have come down to us through the ages.

England's Pride: William Shakespeare

The new social mobility of the Renaissance permitted William Shakespeare (1564–1616) to rise to prominence. William's father, a modest glove maker, married a woman above his station, the daughter of a wealthy landowner. Shakespeare probably attended the local school in Stratford-upon-Avon and received a humanist education. At the age of 18, the young scholar married Anne Hathaway, about eight years his elder, who was pregnant with their first child. In 1592, William journeyed to London, where he worked as an actor and wrote comedies, histories, and tragedies.

This master of the English language articulated all the Renaissance ideals: Shakespeare's love of the classics showed in his use of Roman histories in his plays (*Julius Caesar*) and in his study of Roman playwrights that offered him models of theater. Furthermore, Hamlet's words "What a piece of work is man" expressed Renaissance optimism in human accomplishment; *Romeo and Juliet* re-created the story of "star-crossed lovers" (a reference to the Renaissance love of astrology) in the

streets of Italy. *The Tempest* featured Renaissance magicians, and Shakespeare's histories described the fortunes of princes as surely as Machiavelli's analysis of history and politics had. His plays incorporated Renaissance music and modern warfare with cannons and fireworks. In Shakespeare's hands, the ideals of the Renaissance were given a new, enduring form—popular theater that reached the masses. However, some modern literary critics believe the great playwright accomplished much

more than perfecting Renaissance ideas. Some claim that by expressing complex human emotions in magnificent language, Shakespeare created an understanding of humanity for the West. In this, perhaps, we can see the ideals of the Renaissance come full circle—the early humanists in Italy transformed themselves by the texts they read, and Shakespeare used the written word to shape our understanding of who we are. Western civilization was dramatically transformed.

LOOKING BACK & MOVING FORWARD

Summary In the crucible of the fourteenth century—in which plague, famine, warfare, and religious instability swirled—new ideas percolated in the turbulent Italian city-states. Scholars and statesmen alike resuscitated a pride in human dignity, a confidence in human activism, and a fascination with classical ideals, and they expressed these ideas primarily in the secular arena. Writers, painters, and politicians looked with new realism at the world around them and strove to exert an impact on it. Although all these ideas had a precedent in the Middle Ages, their prevalence and novel applications created a new spirit that historians call the Renaissance.

This age of the Renaissance ushered in a period that had both great and shameful aspects. In booming economies, Italian city-states were able to support architects and artists who created masterpieces that have set Western standards of beauty for centuries. At the same time, many of these enterprising individualists turned a blind eye to social problems—increased crime, new slavery, and growing anti-Semitism.

The new ideas of the Renaissance flowed northward with humanist courtiers and talented artists and artisans. In the process, they helped transform the old feudal monarchies. At the same time, scholars in each country put their own stamp on the Renaissance spirit. For example, France gloried in court architecture and brilliant satire, and England most notably brought these ideas to the popular theater.

As we will see in Chapter 11, Spain and Germany, too, would mold the praise of individualism and literary criticism to their own interests. Like Savonarola in Florence, German humanists applied Renaissance ideas to spiritual matters. Their efforts would eventually bring about an upheaval in religion as great as the Renaissance revolution in art and ideas.

KEY TERMS

Renaissance p.292

humanists p.294

civic humanists p.295

Christian

humanists p.295

condottieri p.299

doge p.300

theocracy p.303

contra posto p.311

linear perspective p.312

madrigals p.314

alchemy p.314

REVIEW, ANALYZE, & CONNECT TO TODAY

REVIEW THE PREVIOUS CHAPTER

Chapter 9—“The West Struggles and Eastern Empires Flourish”—told of the disasters of the fourteenth century that contributed to the breakdown of medieval structures. It also told of the rise of empires in the East that would soon cast a long shadow on politics in the West.

1. Review the political order of northern Europe in the Middle Ages and contrast it with the political life of fourteenth-century Italy. How did the turbulent politics of Italy contribute to the growth of Renaissance thought?
2. Contrast medieval art, architecture, and literature with that of the Renaissance artists and humanists.

ANALYZE THIS CHAPTER

Chapter 10—“A New Spirit in the West”—considers the characteristics we have come to associate with the term *Renaissance*. It looks at the politics and social life of the Italian city-states that fostered these ideas and the magnificent accomplishments in the arts and science that accompanied them. It also follows the fortunes of the “new monarchies” of the north as Renaissance ideas spread.

1. Review the characteristics of the Renaissance and consider what contributed to the development.
2. One theme this chapter traces is the relationship between ideas—like individualism and realism—and actual events and accomplishments. Analyze some aspects of life and accomplishments of Renaissance Italy in light of these values, and consider how they were related.
3. How did Renaissance ideas spread northward, and how were they transformed in France and England?

CONNECT TO TODAY

Think about these key values of the Renaissance: individualism over community, realism over faith, and activism over passive obedience.

1. In what ways do contemporary U.S. society and culture also exhibit these values? In what ways are they expressed in public policy today?
2. Does the Western tradition of taking these values for granted prevent positive interactions with societies that do not share these values? Explain.
3. What examples can you cite from the world today wherein societies have censored religious criticism or suppressed individual liberties to strengthen the community? What do you think of such measures?