1512, French defeat and Spanish victory led to the reestablishment of Medici power in Florence. Staunch republicans, including Machiavelli, were sent into exile. Forced to give up politics, the great love of his life, Machiavelli now reflected on political power and wrote books, including *The Prince* (1513), one of the most famous treatises on political power in the Western world.

THE PRINCE Machiavelli's ideas on politics stemmed from two major sources, his knowledge of ancient Rome and his preoccupation with Italy's political problems. As a result of his experiences, Machiavelli fully realized that the small Italian states were no match for the larger monarchical states outside Italy's borders and that Italy itself had become merely a battleground for the armies of foreign states. His major concerns in *The Prince* were the acquisition and expansion of political power as the means to restore and maintain order in his time. In the Middle Ages, many political theorists stressed the ethical side of a prince's activity—how a ruler ought to behave based on Christian moral principles. Machiavelli bluntly contradicted this approach:

> My hope is to write a book that will be useful, at least to those who read it intelligently, and so I thought it sensible to go straight to a discussion of how things are in real life and not waste time with a discussion of an imaginary world. . . . For the gap between how people actually behave and how they ought to behave is so great that anyone who ignores everyday reality in order to live up to an ideal will soon discover he has been taught how to destroy himself, not how to preserve himself.[10]

Machiavelli considered his approach far more realistic than that of his medieval forebears.

In Machiavelli's view, a prince's attitude toward power must be based on an understanding of human nature, which he perceived as basically self-centered: "For of men one can, in general, say this: They are ungrateful, fickle, deceptive and deceiving, avoiders of danger, eager for gain." Political activity, therefore, could not be restricted by moral considerations. The prince acts on behalf of the state and for the sake of the state must be willing to let his conscience sleep. As Machiavelli put it:

> You need to understand this: A ruler, and particularly a ruler who is new to power, cannot conform to all those rules that men who are thought good are expected to respect, for he is often obliged, in order to hold on to power, to break his word, to be uncharitable, inhumane, and irreligious. So he must be mentally prepared to act as circumstances and changes in fortune require. As I have said, he should do what is right if he can; but he must be prepared to do wrong if necessary.[11]

Machiavelli found a good example of the new Italian ruler in Cesare Borgia (CHAY-zah-ray BOR-juh), the son of Pope Alexander VI, who used ruthless measures to achieve his goal of carving out a new state in central Italy. As Machiavelli said: "So anyone who decides that the policy to follow when one has newly acquired power is to destroy one's enemies, to secure some allies, to win wars, whether by force or by fraud, make oneself both loved and feared by one's subjects, . . . cannot . . . to find, in the recent past, a better model to imitate than Cesare Borgia."[12] Machiavelli was among the first to abandon morality as the basis for the analysis of political activity (see the box on p. 345).

The Intellectual Renaissance in Italy

FOCUS QUESTION: What was humanism, and what effect did it have on philosophy, education, attitudes toward politics, and the writing of history?

Individualism and **secularism**—two characteristics of the Italian Renaissance—were most noticeable in the intellectual and artistic realms. Italian culture had matured by the fourteenth century. For the next two centuries, Italy was the cultural leader of Europe. This new Italian culture was primarily the product of a relatively wealthy, urban lay society. The most important literary movement associated with the Renaissance was **humanism**.

Italian Renaissance Humanism

Renaissance humanism was an intellectual movement based on the study of the Classical literary works of Greece and Rome. Humanists examined the *studia humanitatis* ("the studies of humanity")—grammar, rhetoric, poetry, moral philosophy or ethics, and history—all based on the writings of ancient Greek and Roman authors. These are the subjects we call the humanities.

The central importance of literary preoccupations in Renaissance humanism is evident in the professional status or occupations of the humanists. Some of them were teachers of the humanities in secondary schools and universities, where they either gave occasional lectures or held permanent positions, often as professors of rhetoric. Others served as secretaries in the chancelleries of Italian city-states or at the courts of princes or popes. All of these occupations were largely secular, and most humanists were laymen rather than members of the clergy.

THE EMERGENCE OF HUMANISM Petrarch (1304–1374) has often been called the father of Italian Renaissance humanism (see Chapter 11 on his use of the Italian vernacular). Petrarch rejected his father's desire that he become a lawyer and took up a literary career instead. Although he lived in Avignon for a time, most of his last decades were spent in Italy as the guest of various princes and city governments. With his usual lack of modesty, Petrarch once exclaimed, "Some of the greatest kings of our time have loved me and cultivated my friendship. . . . When I was their guest it was more as if they were mine."[13]

Petrarch did more than any other individual in the fourteenth century to foster the development of Renaissance humanism. He was the first intellectual to characterize the

Petrarch: Mountain Climbing and the Search for Spiritual Contentment

PETRARCH HAS LONG BEEN REGARDED as the father of Italian Renaissance humanism. One of his literary masterpieces was *The Ascent of Mount Ventoux*, a colorful description of his attempt to climb a mountain in Provence in southern France and survey the world from its top. Petrarch's primary interest is in presenting an allegory of his own soul's struggle to achieve a higher spiritual state. The work is addressed to a professor of theology in Paris who had initially encouraged Petrarch to read Augustine. The latter had experienced a dramatic conversion to Christianity almost a thousand years earlier.

Petrarch, *The Ascent of Mount Ventoux*

Today I ascended the highest mountain in this region, which, not without cause, they call the Windy Peak. Nothing but the desire to see its conspicuous height was the reason for this undertaking. For many years I have been intending to make this expedition. You know that since my early childhood, as fate tossed around human affairs, I have been tossed around in these parts, and this mountain, visible far and wide from everywhere, is always in your view. So I was at last seized by the impulse to accomplish what I had always wanted to do. . . .

[After some false starts, Petrarch finally achieves his goal and arrives at the top of Mount Ventoux.]

I was glad of the progress I had made, but I wept over my imperfection and was grieved by the fickleness of all that men do. In this manner I seemed to have somehow forgotten the place I had come to and why, until I was warned to throw off such sorrows, for which another place would be more appropriate. I had better look around and see what I had intended to see in coming here. . . . Like a man aroused from sleep, I turned back and looked toward the west. . . . One could see most distinctly the mountains of the province of Lyons to the right and, to the left, the sea near Marseilles as well as the waves that break against Aigues-Mortes. . . . The Rhône River was directly under our eyes.

I admired every detail, now relishing earthly enjoyment, now lifting up my mind to higher spheres after the example of my body, and I thought it fit to look in the volume of Augustine's *Confessions* which I owe to your loving kindness and preserve carefully, keeping it always in my hands. . . . I opened it with the intention of reading whatever might occur to me first: . . . I happened to hit upon the tenth book of the work. . . . Where I fixed my eyes first, it was written: "And men go to admire the high mountains, the vast floods of the sea, the huge streams of the rivers, the circumference of the ocean, and the revolutions of the stars—and desert themselves." I was stunned, I confess. I bade my brother [who had accompanied him], who wanted to hear more, not to molest me, and closed the book, angry with myself that I still admired earthly things. Long since I ought to have learned, even from pagan philosophers, that "nothing is admirable besides the soul; compared to its greatness nothing is great."

I was completely satisfied with what I had seen of the mountain and turned my inner eye toward myself. From this hour nobody heard me say a word until we arrived at the bottom. These words occupied me sufficiently. I could not imagine that this had happened to me by chance: I was convinced that whatever I had read there was said to me and to nobody else. I remembered that Augustine once suspected the same regarding himself, when, while he was reading the Apostolic Epistles, the first passage that occurred to him was, as he himself relates: "Not in banqueting and drunkenness, not in chambering and wantonness, not in strife and envying; but put you on the Lord Jesus Christ, and make no provision for the flesh to fulfill your lusts."

What about his own intellectual pursuits troubled Petrarch? How does the conflict within Petrarch reflect the historical debate about the nature of the Renaissance?

Middle Ages as a period of darkness, promoting the mistaken belief that medieval culture was ignorant of Classical antiquity. Petrarch's interest in the classics led him on a quest for forgotten Latin manuscripts and set in motion a ransacking of monastic libraries throughout Europe. In his preoccupation with the classics and their secular content, Petrarch worried at times that he might not be sufficiently attentive to spiritual ideals (see the box above). His qualms, however, did not prevent him from inaugurating the humanist emphasis on the use of pure Classical Latin, making it fashionable for humanists to use Cicero as a model for prose and Virgil for poetry. As Petrarch said, "Christ is my God; Cicero is the prince of the language."

HUMANISM IN FIFTEENTH-CENTURY ITALY In Florence, the humanist movement took a new direction at the beginning of the fifteenth century when it became closely tied to Florentine civic spirit and pride, giving rise to what one modern scholar has labeled **civic humanism**. Fourteenth-century humanists such as Petrarch had described the intellectual life as one of solitude. They rejected family and a life of action in the community. In the busy civic world of Florence, however, intellectuals began to take a new view of their role as intellectuals. The Classical Roman statesman and intellectual Cicero became their model. Leonardo Bruni (leh-ah-NAHR-doh BROO-nee) (1370–1444), a humanist, Florentine patriot, and

chancellor of the city, wrote a biography of Cicero titled *The New Cicero*, in which he waxed enthusiastic about the fusion of political action and literary creation in Cicero's life. From Bruni's time on, Cicero served as the inspiration for the Renaissance ideal that intellectuals had a duty to live an active life for their state. An individual only "grows to maturity—both intellectually and morally—through participation" in the life of the state. Civic humanism reflected the values of the urban society of the Italian Renaissance. Humanists came to believe that their study of the humanities should be put to the service of the state. It is no accident that humanists served the state as chancellors, councillors, and advisers.

Also evident in the humanism of the first half of the fifteenth century was a growing interest in Classical Greek civilization. Bruni was one of the first Italian humanists to gain a thorough knowledge of Greek. He became an enthusiastic pupil of the Byzantine scholar Manuel Chrysoloras (man-WEL kris-uh-LAHR-uss), who taught in Florence from 1396 to 1400. Humanists eagerly perused the works of Plato as well as those of Greek poets, dramatists, historians, and orators, such as Euripides, Sophocles, and Thucydides, all of whom had been ignored by the scholastics of the High Middle Ages as irrelevant to the theological questions they were examining.

By the fifteenth century, a consciousness of being humanists had emerged. This was especially evident in the career of Lorenzo Valla (1407–1457). Valla was brought up in Rome and educated in both Latin and Greek. Eventually, he achieved his chief ambition of becoming a papal secretary. Valla's major work, *The Elegances of the Latin Language*, was an effort to purify medieval Latin and restore Latin to its proper position over the vernacular. The treatise examined the proper use of Classical Latin and created a new literary standard. Early humanists had tended to take as Classical models any author (including Christians) who had written before the seventh century C.E. Valla identified different stages in the development of the Latin language and accepted only the Latin of the last century of the Roman Republic and the first century of the empire.

HUMANISM AND PHILOSOPHY In the second half of the fifteenth century, a dramatic upsurge of interest in the works of Plato occurred, especially evident among the members of an informal discussion group known as the Florentine Platonic Academy. Cosimo de' Medici, the de facto ruler of Florence, encouraged this development by commissioning a translation of Plato's dialogues by Marsilio Ficino (mar-SIL-yoh fee-CHEE-noh) (1433–1499), one of the academy's leaders. Ficino dedicated his life to the translation of Plato and the exposition of the Platonic philosophy known as **Neoplatonism**.

In two major works, Ficino undertook the synthesis of Christianity and Platonism into a single system. His Neoplatonism was based on two primary ideas, the Neoplatonic hierarchy of substances and a theory of spiritual love. The former postulated the idea of a hierarchy of substances, or great chain of being, from the lowest form of physical matter (plants) to the purest spirit (God), in which humans occupied a central or middle position. They were the link between the material world (through the body) and the spiritual world (through the soul), and their highest duty was to ascend toward that union with God that was the true end of human existence. Ficino's theory of spiritual or Platonic love maintained that just as all people are bound together in their common humanity by love, so too are all parts of the universe held together by bonds of sympathetic love.

RENAISSANCE HERMETICISM **Hermeticism** was another product of the Florentine intellectual environment of the late fifteenth century. At the request of Cosimo de' Medici, Ficino translated into Latin a Greek work titled *Corpus Hermeticum* (KOR-pus hur-MET-i-koom). The Hermetic manuscripts contained two kinds of writings. One type stressed the occult sciences, with an emphasis on astrology, alchemy, and magic; the other focused on theological and philosophical beliefs and speculations. Some Hermetic writings espoused **pantheism**, seeing divinity embodied in all aspects of nature and in the heavenly bodies as well as in earthly objects. As Giordano Bruno (jor-DAHN-oh BROO-noh), one of the most prominent sixteenth-century Hermeticists, stated, "God as a whole is in all things."[14]

For Renaissance intellectuals, the Hermetic revival offered a new view of humankind. They believed that human beings had been created as divine beings endowed with divine creative power but had freely chosen to enter the material world (nature). Humans could recover their divinity, however, through a regenerative experience or purification of the soul. Thus regenerated, they became true sages or magi, as the Renaissance called them, who had knowledge of God and of truth. In regaining their original divinity, they reacquired an intimate knowledge of nature and the ability to employ the powers of nature for beneficial purposes.

In Italy, the most prominent magi in the late fifteenth century were Ficino and his friend and pupil, Giovanni Pico della Mirandola (PEE-koh DELL-uh mee-RAN-doh-lah) (1463–1494). Pico produced one of the most famous pieces of writing of the Renaissance, the *Oration on the Dignity of Man*. Pico combed diligently through the works of many philosophers of different backgrounds for the common "nuggets of universal truth" that he believed were all part of God's revelation to humanity. In the *Oration* (see the box on p. 348), Pico offered a ringing statement of unlimited human potential: "To him it is granted to have whatever he chooses, to be whatever he wills."[15] Like Ficino, Pico took an avid interest in Hermetic philosophy, accepting it as the "science of the Divine," which "embraces the deepest contemplation of the most secret things, and at last the knowledge of all nature."[16]

Education in the Renaissance

The humanist movement had a profound effect on education. Renaissance humanists believed that human beings could be dramatically changed by education. They wrote books on education and developed secondary schools based on their ideas. Most famous was the school founded in 1423 by Vittorino da Feltre at Mantua, where the ruler of that small Italian state, Gian Francesco I Gonzaga, wished to provide a

Pico della Mirandola and the Dignity of Man

Giovanni Pico della Mirandola was one of the foremost intellects of the Italian Renaissance. Pico boasted that he had studied all schools of philosophy, which he tried to demonstrate by drawing up nine hundred theses for public disputation at the age of twenty-four. As a preface to his theses, he wrote his famous *Oration on the Dignity of Man*, in which he proclaimed the unlimited potentiality of human beings.

Pico della Mirandola, *Oration on the Dignity of Man*

At last the best of artisans [God] ordained that that creature to whom He had been able to give nothing proper to himself should have joint possession of whatever had been peculiar to each of the different kinds of being. He therefore took man as a creature of indeterminate nature, and assigning him a place in the middle of the world, addressed him thus: "Neither a fixed abode nor a form that is yours alone nor any function peculiar to yourself have we given you, Adam, to the end that according to your longing and according to your judgment you may have and possess what abode, what form, and what functions you yourself desire. The nature of all other beings is limited and constrained within the bounds of laws prescribed by Us. You, constrained by no limits, in accordance with your own free will, in whose hand We have placed you, shall ordain for yourself the limits of your nature. We have set you at the world's center that you may from there more easily observe whatever is in the world. We have made you neither of heaven nor of earth, neither mortal nor immortal, so that with freedom of choice and with honor, as though the maker and molder of yourself, you may fashion yourself in whatever shape you shall prefer. You shall have the power to degenerate into the lower forms of life, which are brutish. You shall have the power, out of your soul's judgment, to be reborn into the higher forms, which are divine."

O supreme generosity of God the Father, O highest and most marvelous felicity of man! To him it is granted to have whatever he chooses, to be whatever he wills. Beasts as soon as they are born bring with them from their mother's womb all they will ever possess. Spiritual beings, either from the beginning or soon thereafter, become what they are to be for ever and ever. On man when he came into life the Father conferred the seeds of all kinds and the germs of every way of life. Whatever seeds each man cultivates will grow to maturity and bear in him their own fruit. If they be vegetative, he will be like a plant. If sensitive, he will become brutish. If rational, he will grow into a heavenly being. If intellectual, he will be an angel and the son of God.

What did Pico mean by the "dignity of man"? Why would Pico be regarded as one of the Renaissance magi?

humanist education for his children. Vittorino based much of his educational system on the ideas of Classical authors, particularly Cicero and Quintilian.

At the core of humanist schools were the "liberal studies." A treatise on education called *Concerning Character* by Pietro Paolo Vergerio (PYAY-troh PAH-oh-loh vur-JEER-ee-oh) (1370–1444) especially influenced the Renaissance view of the value of the liberal arts. This work stressed the importance of liberal studies as the key to true freedom, enabling individuals to reach their full potential. According to Vergerio, "We call those studies liberal which are worthy of a free man; those studies by which we attain and practice virtue and wisdom; that education which calls forth, trains, and develops those highest gifts of body and mind which ennoble men."[17] The liberal studies included history, moral philosophy, eloquence (rhetoric), letters (grammar and logic), poetry, mathematics, astronomy, and music. The purpose of a liberal education was thus to produce individuals who followed a path of virtue and wisdom and possessed the rhetorical skills with which to persuade others to do the same. Following the Greek precept of a sound mind in a sound body, Vittorino's school at Mantua also stressed physical education. Pupils were taught the skills of javelin throwing, archery, and dancing and encouraged to run, wrestle, hunt, and swim.

Humanist education was thought to be a practical preparation for life. Its aim was not to create great scholars but rather to produce complete citizens who could participate in the civic life of their communities. As Vittorino said, "Not everyone is obliged to excel in philosophy, medicine, or the law, nor are all equally favored by nature; but all are destined to live in society and to practice virtue."[18] Humanist schools, combining the classics and Christianity, provided the model for the basic education of the European ruling classes until the twentieth century.

Although a small number of children from the lower classes received free educations, humanist schools such as Vittorino's were primarily geared for the education of an elite, the ruling classes of their communities. Also largely absent from such schools were females. Vittorino's only female pupils were the two daughters of the Gonzaga ruler of Mantua. Though these few female students studied the classics and were encouraged to know some history and to ride, dance, sing, play the lute, and appreciate poetry, they were discouraged from learning mathematics and rhetoric. In the

A Woman's Defense of Learning

As a young woman, Laura Cereta was proud of her learning but was condemned by a male world that found it unseemly for women to be scholars. One monk said to her father, "She gives herself to things unworthy of her—namely, the classics." Before being silenced, Laura Cereta wrote a series of letters, including one to a male critic who had argued that her work was so good it could not have been written by a woman.

Laura Cereta, *Defense of the Liberal Instruction of Women*

My ears are wearied by your carping. You brashly and publicly not merely wonder but indeed lament that I am said to possess as fine a mind as nature ever bestowed upon the most learned man. You seem to think that so learned a woman has scarcely before been seen in the world. You are wrong on both counts. . . .

I would have been silent. . . . But I cannot tolerate your having attacked my entire sex. For this reason my thirsty soul seeks revenge, my sleeping pen is aroused to literary struggle, raging anger stirs mental passions long chained by silence. With just cause I am moved to demonstrate how great a reputation for learning and virtue women have won by their inborn excellence, manifested in every age as knowledge. . . .

Only the question of the rarity of outstanding women remains to be addressed. The explanation is clear: women have been able by nature to be exceptional, but have chosen lesser goals. For some women are concerned with parting their hair correctly, adorning themselves with lovely dresses, or decorating their fingers with pearls and other gems. Others delight in mouthing carefully composed phrases, indulging in dancing, or managing spoiled puppies. Still others wish to gaze at lavish banquet tables, to rest in sleep, or, standing at mirrors, to smear their lovely faces. But those in whom a deeper integrity yearns for virtue, restrain from the start their youthful souls, reflect on higher things, harden the body with sobriety and trials, and curb their tongues, open their ears, compose their thoughts in wakeful hours, their minds in contemplation, to letters bonded to righteousness. For knowledge is not given as a gift, but [is gained] with diligence. The free mind, not shirking effort, always soars zealously toward the good, and the desire to know grows ever more wide and deep. It is because of no special holiness, therefore, that we [women] are rewarded by God the Giver with the gift of exceptional talent. Nature has generously lavished its gifts upon all people, opening to all the doors of choice through which reason sends envoys to the will, from which they learn and convey its desires. The will must choose to exercise the gift of reason. . . .

I have been praised too much; showing your contempt for women, you pretend that I alone am admirable because of the good fortune of my intellect. . . . Do you suppose, O most contemptible man on earth, that I think myself sprung [like Athena] from the head of Jove? I am a school girl, possessed of the sleeping embers of an ordinary mind. Indeed I am too hurt, and my mind, offended, too swayed by passions, sighs, tormenting itself, conscious of the obligation to defend my sex. For absolutely everything—that which is within us and that which is without—is made weak by association with my sex.

How did Cereta explain her intellectual interests and accomplishments? Why were Renaissance women rarely taken seriously when they sought educational opportunities and recognition for their intellectual talents? Were any of those factors unique to the Renaissance era?

Source: Laura Cereta, "Defense of the Liberal Instruction of Women," from *Her Immaculate Hand: Selected Works by and about the Women Humanists of Quattrocento Italy*, ed. by Margaret King and Albert Rabil (Pegasus Press, Asheville, NC, 2000). Reprinted by permission.

educational treatises of the time, religion and morals were thought to "hold the first place in the education of a Christian lady."

WAS THERE A RENAISSANCE FOR WOMEN? Historians have disagreed over the benefits of the Renaissance for women. Some maintain that during the Middle Ages upper-class women in particular had greater freedom to satisfy their emotional needs and that upper-class women in the Renaissance experienced a contraction of both social and personal options as they became even more subject to male authority and patterns. Other historians have argued that although conditions remained bleak for most women, some women, especially those in courtly, religious, and intellectual environments, found ways to develop a new sense of themselves as women. This may be especially true of women who were educated in the humanist fashion and went on to establish their own literary careers.

Isotta Nogarola (ee-ZAHT-uh NOH-guh-roil-uh), born to a noble family in Verona, mastered Latin and wrote numerous letters and treatises that brought her praise from male Italian intellectuals. Cassandra Fedele (FAY-duh-lee) of Venice, who learned both Latin and Greek from humanist tutors hired by her family, became well known in Venice for her public recitations of orations. Laura Cereta (say-REE-tuh) was educated in Latin by her father, a physician from Brescia. Laura defended the ability of women to pursue scholarly pursuits (see the box above).

Humanism and History

Humanism had a strong impact on the writing of history. Influenced by Roman and Greek historians, the humanists approached the writing of history differently from the chroniclers of the Middle Ages. The humanists' belief that Classical civilization had been followed by an age of barbarism (the Middle Ages), which had in turn been succeeded by their own age, with its rebirth of the study of the classics, enabled them to think in terms of the passage of time, of the past as past. Their division of the past into ancient world, dark ages, and their own age provided a new sense of chronology or periodization in history.

The humanists were also responsible for secularizing the writing of history. Humanist historians reduced or eliminated the role of miracles in historical interpretation, not because they were anti-Christian but because they took a new approach to sources. They wanted to use documents and exercised their newly developed critical skills in examining them. Greater attention was paid to the political events and forces that affected their city-states or larger territorial units. Thus, Leonardo Bruni wrote the *History of the Florentine People*. The new emphasis on secularization was also evident in the humanists' conception of causation in history. Medieval historical literature often portrayed historical events as being caused by God's active involvement in human affairs. Humanists de-emphasized divine intervention in favor of human motives, stressing political forces or the role of individuals in history.

GUICCIARDINI The high point of Renaissance historiography was achieved at the beginning of the sixteenth century in the works of Francesco Guicciardini (frahn-CHESS-koh gwee-char-DEE-nee) (1483–1540). To many historians, his *History of Italy* and *History of Florence* represent the beginning of "modern analytical historiography." To Guicciardini, the purpose of writing history was to teach lessons, but he was so impressed by the complexity of historical events that he felt those lessons were not always obvious. From his extensive background in government and diplomatic affairs, he developed the skills that enabled him to analyze political situations precisely and critically. Emphasizing political and military history, his works relied heavily on personal examples and documentary sources.

The Impact of Printing

The Renaissance witnessed the invention of printing, one of the most important technological innovations of Western civilization. The art of printing made an immediate impact on European intellectual life and thought. Printing from hand-carved wooden blocks had been done in the West since the twelfth century and in China even before that. What was new to Europe in the fifteenth century was multiple printing with movable metal type. The development of printing from movable type was a gradual process that culminated between 1445 and 1450; Johannes Gutenberg (yoh-HAH-nuss GOO-ten-bayrk) of Mainz played an important role in bringing the process to completion. Gutenberg's Bible, completed in 1455 or 1456, was the first true book in the West produced from movable type.

The new printing spread rapidly throughout Europe in the second half of the fifteenth century. Printing presses were established throughout the Holy Roman Empire in the 1460s and within ten years had spread to both western and eastern Europe. Especially well known as a printing center was Venice, home by 1500 to almost one hundred printers who had produced almost 2 million volumes.

By 1500, there were more than a thousand printers in Europe who had published almost 40,000 titles (between 8 million and 10 million copies). Probably 50 percent of these books were religious—Bibles and biblical commentaries, books of devotion, and sermons. Next in importance were the Latin and Greek classics, medieval grammars, legal handbooks, works on philosophy, and an ever-growing number of popular romances.

Printing became one of the largest industries in Europe, and its effects were soon felt in many areas of European life. The printing of books encouraged the development of scholarly research and the desire to attain knowledge. Moreover, printing facilitated cooperation among scholars and helped produce standardized and definitive texts. Printing also stimulated the development of an ever-expanding lay reading public, a development that had an enormous impact on European society. Indeed, without the printing press, the new religious ideas of the Reformation would never have spread as rapidly as they did in the sixteenth century.

The Artistic Renaissance

FOCUS QUESTION: What were the chief characteristics of Renaissance art, and how did it differ in Italy and northern Europe?

Leonardo da Vinci (dah VEEN-chee), one of the great Italian Renaissance artists, once explained: "Hence the painter will produce pictures of small merit if he takes for his standard the pictures of others, but if he will study from natural objects he will bear good fruit. . . . Those who take for their standard any one but nature . . . weary themselves in vain."[19] Renaissance artists considered the imitation of nature their primary goal. Their search for naturalism became an end in itself: to persuade onlookers of the reality of the object or event they were portraying. At the same time, the new artistic standards reflected a new attitude of mind as well, one in which human beings became the focus of attention, the "center and measure of all things," as one artist proclaimed.

Art in the Early Renaissance

Leonardo and other Italians maintained that it was Giotto in the fourteenth century (see Chapter 11) who began the imitation of nature. But what Giotto had begun was not taken up again until the work of Masaccio (muh-ZAH-choh) (1401–1428) in Florence. Masaccio's cycle of frescoes in the Brancacci Chapel has long been regarded as the first masterpiece of Early Renaissance art. With his use of monumental figures, a more realistic relationship between figures and landscape, and visual representation of the laws of perspective, a new realistic style of painting was born. Onlookers become aware of a world of reality that appears to be a continuation of their