



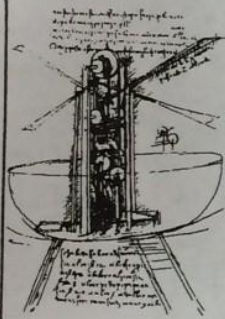
- early 1300s The Renaissance begins in Italy.
- 1304–1374 Petrarch, great Italian poet and Humanist, lives. ◀
- 1313–1375 Boccaccio, author of the

Decameron, lives.

- 1300s Gunpowder is introduced into Europe.
- 1347–1351 The Black Death ravages Europe, killing about 25 million people.

- 1300s (Japan) First Nō dramas emerge.
- 1300s (West Africa) The Mali empire controls the gold trade.
- 1324 (West Africa) The Muslim emperor of Mali, Mansa Musa, makes a religious pilgrimage to Mecca.
- 1328–1341 (Russia) Moscow emerges as an important city.

- 1425 The artist Massaccio is the first to use perspective in a fresco.
- 1450s Gutenberg uses his invention of movable type to print the Bible.
- 1452 Leonardo da Vinci, great Italian Renaissance artist and inventor, is born. ▼



- 1431 (Southeast Asia) Angkor, capital of Cambodia, is abandoned after being pillaged. ▼
- 1453 (Turkey) Ottoman Turks conquer Constantinople.
- 1462–1505 (Russia) During the reign of Ivan III, Moscow extends its power.



- 1516 Christian Humanist Erasmus publishes his annotations of the Greek New Testament.
- 1519 Magellan begins his voyage around the world.
- 1524–1585 Pierre de Ronsard, French poet, lives.
- 1527 Niccolò Machiavelli, author of *The Prince*, dies.
- 1543 Polish astronomer Nicolaus Copernicus declares in print that Earth circles the sun.
- 1546 Martin Luther, founder of the Protestant Reformation, dies.
- c. 1550 Approximate date for the end of the Renaissance in Italy.



- 1513 (China) The Portuguese arrive at Macau, a peninsula and islands off China's coast.
- 1513 (America) Ponce de León lands in Florida and claims it for Spain.
- 1517 (Middle East) Ottoman Turks conquer Syria and Egypt.
- 1519–1521 (Mexico) ▲ Cortés conquers the Aztec empire.

- 1605 Cervantes publishes the first part of *Don Quixote*.
- 1608–1674 English poet John Milton lives.
- 1609 Galileo improves the telescope and begins observing the solar system with telescopes of increasing magnification.
- 1610 Galileo observes four moons orbiting around Jupiter. ▼



- 1625 The Renaissance in England ends.
- 1657 Pascal begins writing his *Pensées*.
- 1660 The Royal Society, a group formed to promote science, is founded in London, England.
- 1664–1666 There is an outbreak of plague in London, England.
- 1687 Sir Isaac Newton publishes a book describing the laws of gravity and motion.
- 1613 (Russia) The Time of Troubles, a fifteen-year period of political crisis, ends.
- 1633 (Japan) The Tokugawas close Japan to the rest of the world. ▼



- 1644 (China) The Ming dynasty is overthrown by armies from Manchuria.
- 1644–1694 (Japan) Haiku poet Matsuo Bashō lives.
- 1669 (Greece) The Ottoman empire seizes Crete.

- 1702 First daily English newspaper appears.
- early 1700s Addison and Steele publish periodicals.
- 1744 English poet Alexander Pope dies.
- 1765 James Watt helps launch the Industrial Revolution by improving the steam engine.
- 1772 Diderot completes the *Encyclopédie*, a major achievement of the Enlightenment.
- 1778 Voltaire, author of *Candide*, dies.



■ Knight of Angkor, c. 1788, or "Pandaic Delirium," Bibliothèque Nationale, Paris, Graudon

- 1787–1799 The French Revolution is fought. ▲
- 1799 Napoleon Bonaparte assumes control in France.
- 1703 (Russia) Czar Peter the Great begins the construction of St. Petersburg. ▼
- 1776–1781 (America) The colonies defeat Great Britain in the American Revolution.





## The Renaissance and Rationalism (c. 1300–1800)

### Historical Background

**The Renaissance in Western Europe** The Renaissance, which means “rebirth,” is a period that saw many changes and innovations. Among them were the rediscovery of classical art and literature; the exploration of regions of the globe that were previously unknown in Europe; the discovery that Earth revolves around the sun; and an upsurge in trade and invention. This rebirth, which lasted in Italy from the early 1300s until 1550, gradually extended its influence northward. In England, it lasted from 1485 to 1625.

**Status and Insecurity** The Renaissance was a period during which rank and status mattered a great deal. For every social class, however, this era was a time of insecurity. The Black Death (see page 720) devastated Europe in the late 1340s, toward the beginning of the Italian Renaissance.

In addition to sickness, other disasters contributed to the insecurity of the times. With the exception of castles and churches, most buildings were built of wood, and fire in cities was a constant hazard.

**Kings Up, Nobles Down** Against this backdrop of general insecurity, the power of kings tended to increase during the Renaissance. This centralization of power helped create the nations that are familiar to us today.

### Themes in

#### World Masterpieces

#### Point/Counterpoint

##### Was the Renaissance a Rebirth of Consciousness?

Did the Renaissance mark a complete rebirth of human consciousness? Two scholars—writing about a hundred years apart—disagree on this question.

**Yes!** In the Middle Ages both sides of human consciousness—that which was turned within as that which was turned without—lay dreaming or half awake beneath a common veil. The veil was woven of faith, illusion, and childish prepossession, through which the world and history were seen clad in strange hues. Man was conscious of himself only as a member of a race, people, party, family, or corporation—only through some general category. In Italy this veil first melted into air . . . man became a spiritual individual. . . .  
—Jacob Burckhardt, from *The Civilization of the Renaissance in Italy* (1860)

**No!** Certainly the hundred years before and after 1450 were enormously fertile in innovation. But the great discoveries and historical mutations of the age were not confined to Italy; while even in Italy continuity and tradition mark the age as deeply as change and innovation. The history of discovery and novelty must be balanced by the equally interesting and important story of the survival and adaptation of traditional institutions, social distinctions, professional disciplines, and modes of thought.  
—Eugene F. Rice, Jr., from *The Columbia History of the World* (1972)

Meanwhile, the great nobility were losing their importance. Their mighty castles, for instance, were threatened by the introduction of gunpowder into Europe in the 1300s. Castle walls became vulnerable to cannon shot, and even well-armored knights could be toppled by a well-placed bullet.

**Humanism: Out of the “Dark” Ages** The most important cultural movement of the Renaissance was Humanism, which advocated a return to classical studies and ideals. This movement began in fourteenth-century Italy, where the first Humanists were the famous writers Petrarch (pē’ trāk’) and Boccaccio (bō kā’ chō). For the first time in about a thousand years, the intellectual life of Western Europe was directly influenced by the works of classical writers known before only through inaccurate summaries or quotations. The Humanists viewed the classics as sources of moral and practical wisdom. Humanist ideals also influenced Italian Renaissance artists like Michelangelo (mī’ kəl an’ jō lō’) and Leonardo da Vinci (dē vin’ chē), who followed classical artists in portraying the beauty of the human form.

According to the Humanists, the Middle Ages were “dark” because the Germanic tribes that had invaded Rome, the Goths, had destroyed classical civilization. Humanists believed that with the rediscovery of classical learning, these “dark” times had given way to an age of “enlightenment.” Today, scholars no longer accept this belief, which might be called the Humanist Myth, without qualifications. (See Point/Counterpoint on page 718.)

Humanism started in Italy, yet as it moved northward it changed somewhat in character. The enthusiasm for classical antiquity remained, but it was influenced by a Christian fervor. This slightly different movement, called Christian Humanism, tended to look back to early Christian as well as classical sources. Unlike medieval thinkers, Christian Humanists stressed the importance of the active life. They also ridiculed the performing of mechanical acts in the place of inner worship. In this way, Christian Humanism prepared for the more radical protests of the Reformation.

**The Reformation: From Debate to Bloodshed** In the early 1500s, an obscure German professor of theology, Martin Luther, protested against the corruption of the church. His key ideas—that salvation depends on one’s faith, rather than one’s actions, and that the priesthood and church ritual are less important than the truths of the Bible—launched the movement called the Reformation. This movement gave birth to new Protestant



Mona Lisa, Leonardo da Vinci, Louvre, Dep. des Peintures, Paris, France

##### ▲ Critical Viewing

The Mona Lisa by Leonardo da Vinci is one of the most famous paintings of all time. Many critics and viewers have remarked on the “mystery” of the subject’s smile. What, if anything, do you think is mysterious about her expression? Explain.

[Interpret]



denominations, whose name comes from the term *to protest*. Protestants dominated in Switzerland, northern Germany, parts of France, and eventually in England and Scotland. The Catholic Church, on the other hand, was strong in Spain, Italy, most of France, and southern Germany. Religious debates soon escalated into war, and in France the civil conflict led to years of bloodshed.

**The Globe Explored, the Earth Displaced** Not only were religious truths being questioned, but the face of the globe was changing with each new voyage of discovery. (See the map on page 721.) In 1492, for instance, Columbus sailed to the West Indies; and in 1519, Magellan began a voyage around the world.

The image of the universe itself was changing. According to older views, Earth was the center of the universe. The astronomer Copernicus (1473–1543), however, argued that Earth revolved around the sun.

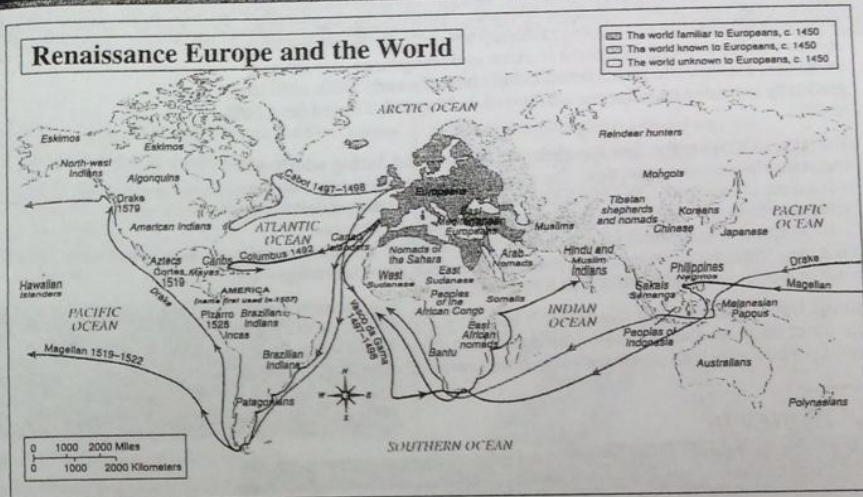
**The Age of Rationalism: From Lore to Law** The Renaissance ushered in the Age of Rationalism, or the Enlightenment, an era that spanned the seventeenth and eighteenth centuries. During this time, reason was accepted as the greatest authority in art, thought, and politics. Philosophers challenged folk wisdom, attempting to replace traditional lore with formal laws based on the analysis of natural phenomena.

▼ **Critical Viewing**

This image is a detail from a picture depicting the effects of the Great Plague of London in 1665. What do the gestures of the skeleton indicate about the outbreak of the plague? Why? [Infer]



**Renaissance Europe and the World**



**Rationalism and Nature: Mud Baths and Artful Foliage** The application of reason to natural phenomena coincided with a renewed focus on nature throughout society. Notable painters, such as the French artist Jean-Antoine Watteau (wā tō'), for example, captured the beauty of outdoor scenes. In addition, people who could afford to do so made pilgrimages to spas and hot springs. There, nature could exert its healing influence as sufferers bathed in the waters and coated their limbs with medicinal mud. Nature could also delight the eye in formal gardens, whose symmetrical rows of plants showed that even foliage followed reason's laws.

The new interest in nature included human nature as well. The English Enlightenment philosopher John Locke described the human mind as a blank slate on which impressions are recorded. By denying the existence of prenatal, and therefore unlearned, ideas, Locke placed a stronger emphasis on experience and the satisfaction of natural curiosity.

**Rationalism and Science: Falling Apples and Orbiting Planets** In science, the delights of curiosity led to intellectual triumphs. Sir Isaac Newton, the greatest scientist of the age, discovered the laws of motion, the law of gravitation, and the mathematical system called calculus. By showing that gravity governed both apples and planets, Newton seemed to prove that the world was rational and that the mind could make sense of matter.

▲ **Critical Viewing**

Compare and contrast the world familiar or known to Europeans in 1450 with the world unknown to them. [Read a Map]

*Themes in*  
**World Masterpieces**

Close-up on History

**The Black Death**

Between 1347 and 1351, a disease people called the Black Death, and which we know as the plague, ravaged Europe. It killed about one fourth of the population, perhaps 25 million people. Those afflicted with the disease developed fever and other symptoms, either swellings that turned into black spots or infected lungs together with weakness and loss of memory. Few recovered.

The plague was usually spread by fleas that lived on rodents—the rats that in fourteenth-century Europe were everywhere in the overcrowded and dirty cities and in the countryside as well. When a rat died, its fleas often migrated to a nearby person. To people of the time, however, it seemed a terrible mystery why some were spared and some perished.

Faced with this horrible and mysterious disease, people looked for someone to blame. Usually, outsiders of some kind—Arabs, lepers, or Jews—were chosen as scapegoats. Massacres of these groups only added to the sum of suffering.

Among the longer-lasting effects of the plague were a decrease in farmed land, an increase in wages for surviving workers, and—in northern Europe—a new obsession with death. Thomas Nashe, writing about a later outbreak of plague in England, expressed such a mood in his poem "Litany in Time of Plague": "Physic [the doctor] himself must fade, / all things to end are made."



While Newton was revealing the laws that controlled distant heavenly bodies, Antonie van Leeuwenhoek (ä' van hōōk') used the microscope to study the miniature worlds that swarmed in a drop of rainwater. Also, Robert Boyle earned a reputation as the "father of chemistry," and Edward Jenner discovered a vaccination for the deadly disease smallpox.

#### The Industrial Revolution: Steam Flexes Its Muscles

Across a wide span of human activities, people were employing reason not only to advance theory but also to regulate and enhance their daily existence. James Watt's significant improvements to the steam engine in 1765 helped revolutionize industrial production and paved the way for steam-powered railroad engines and ships.

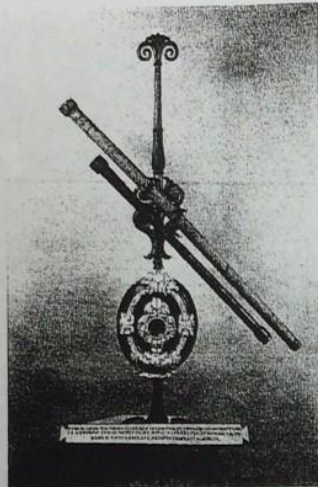
Further, inventions such as the syringe, air pump, mercury thermometer, mainspring clock, and cotton gin provided effective new ways of solving old problems. The establishment of the Greenwich Observatory in England (1675) led to the systematic use of astronomy for such practical purposes as navigation and timekeeping.

#### Rationalism and Politics: Experiment and Explosion

Like a chemistry experiment, the application of reason to political discontent led to an explosion called revolution. John Locke declared that government was a contract between ruler and ruled and that all people had natural rights to life, liberty, and property. These two "rational" ideas undermined the notion that kings had a divine right to rule. In America, these ideas added to the dissatisfaction of colonists with British repression, a dissatisfaction that erupted into the American Revolution (1776–1781). After the colonists won, the ideas of Locke and other Enlightenment thinkers influenced the framers of the American Constitution.

The French Revolution (1787–1799) was also inspired by Enlightenment ideas, especially those of Jean-Jacques Rousseau (zhān zhāk rōō sō'). This philosopher wrote in *The Social Contract* (1762), "Man was born free, but he is everywhere in chains." In France, however, sharper differences between the rich and the poor made the conflict more of a war between classes than the American Revolution had been. The result was a Reign of Terror in the early 1790s during which the king and many aristocrats were executed. By 1799, the revolution yielded to the dictatorial rule of Napoleon Bonaparte.

These two "experiments" in revolution indicated two different ways in which the Age of Rationalism would influence politics in the following centuries: on the one hand, the "reasonableness" of democratic institutions; on the other, the use of "reason" to justify revolt or even repression.



#### ▲ Critical Viewing

This telescope belonged to Galileo, the Italian Renaissance scientist who pioneered astronomical studies. Galileo's observations helped dispel the belief that, in contrast to Earth, the heavens were a perfect, unchanging realm. What, if anything, does this telescope reveal about the attitudes of Galileo and his Renaissance colleagues toward scientific observation? Why? [Infer]

## Literature

**Renaissance Literature: A Branch of Rhetoric** During the years of the Renaissance, literature was classified as a branch of rhetoric—the art of using spoken language to teach, give pleasure, and persuade. Literature was therefore closely related to the art of speechmaking, and it is not surprising that Renaissance writing is full of elaborate speeches. As a branch of rhetoric, literature also had the function of persuading readers to do good. Its purpose was to train the will by increasing our horror of evil and by strengthening our resolve to act well.

**Machiavelli: Do Well, Not Good** One major exception to literature in the service of the good is *The Prince*, a book of political philosophy by Niccolò Machiavelli (nē kō lō' mak' ē ə ve' ē). While other theorists said that public deeds should reflect private morality, Machiavelli insisted that personal morality has no place in politics. Rulers are saved not by their goodness but by their strength, cunning, and ability. Because he took this approach, the adjective *Machiavellian* has come to mean "crafty and deceitful."

**Literature and the Vernacular** In the Middle Ages, literature in native languages, or the vernacular, had already begun to emerge. The Renaissance, however, saw a new emphasis on Italian, French, Spanish, German, Dutch, and English. In this period of linguistic patriotism, many of the great works of the period were written in the vernacular: in Italian, the sonnets of Petrarch, Boccaccio's prose tales in the *Decameron*, and Machiavelli's *The Prince*; in French, the poetry of Pierre de Ronsard (pē er' də rōn sār'); and in Spanish, the novel *Don Quixote* by Miguel de Cervantes (mē gel' the ser vān' tes).

Latin, however, still served an important function. The Dutch scholar Erasmus, who translated the New Testament into Latin, Sir Thomas More, and many of the great Humanists wrote primarily in Latin.

**Originality Through Imitation: "as the bees make honey"** Rather than inventing new stories or forms, Renaissance authors often altered old forms to give them new meanings. Many authors, for example, wrote epics modeled in part on Virgil's *Aeneid*, odes modeled on the odes of Horace, and histories modeled on the work of Pliny and Tacitus. Yet just as the Romans copied and changed the forms of Greek literature to fit their own

#### ▼ Critical Viewing

Which details in this portrait of Lorenzo de' Medici, an Italian Renaissance merchant prince, suggest that he had the leadership qualities recommended by Machiavelli? Explain. [Connect]



Lorenzo il Magnifico, G. Vasari, Scala



## Themes in World Masterpieces

### Art in the Historical Context

#### The Invention of Perspective

You may assume that viewing a painting should always give you the illusion of looking into three-dimensional space. Yet it was Renaissance artists who invented perspective, the method for conveying this illusion. In the Middle Ages, paintings did not convey an accurate sense of depth. The Renaissance architect Brunelleschi (brū' nel les k ə) devised the system by which lines of sight, perpendicular to the vertical plane of the picture, seem to converge at a vanishing point on the horizon within the picture.

In 1425, Masaccio (Mā sāch' ē ō) became the first artist to use perspective in a fresco, or wall painting. His work *The Holy Trinity with the Virgin and St. John* shows Jesus being crucified in a space that is truly three-dimensional. (See this painting to the right.) From this time on, flat surfaces could open into imaginary but realistic worlds. The scholar Eugene F. Rice, Jr., compares the invention of perspective in art to the newly acquired historical perspective by which Renaissance thinkers viewed classical antiquity as a separate period in history. Medieval scholars, says Rice, could not make such a distinction.



*The Trinity (detail), Masaccio, 1425. Credit: G. B. Scuderi*

#### ▲ Critical Viewing

Masaccio painted this picture on a church wall so that the platform supporting the cross is about at eye level. Where is the point at which all sightlines going "into" the picture seem to converge? Explain.

[Analyze]

culture, so the writers of Renaissance Europe changed classical forms. Petrarch, for instance, asserted that "we must write just as the bees make honey, not keeping the flowers [works of other writers] but turning them into a sweetness all our own, blending many different flavors into one, which shall be unlike them all, and better."

**The Classics in the Age of Reason** Like Renaissance Humanists, Enlightenment writers admired ancient Greek and Roman literature. The English poet John Milton (1608–1674), for example, mastered Greek, Latin, and Hebrew, as well as several modern European languages. Not only was he widely read in the classics, but he used Homer's *Iliad* and *Odyssey* and Virgil's *Aeneid* as models for his own Christian epic, *Paradise Lost*.

**The Classics Pay** Alexander Pope (1688–1744), an English Neoclassical (or "new classical") poet, translated Homer's *Iliad* and *Odyssey* into elegant eighteenth-century verse. His efforts earned him the princely sum of £10,000 and assured his financial independence.

In France, Jean de La Fontaine (zhān' də lā fōn ten') based many of his fables in verse on the prose fables of the Greek author Aesop (ē' səp). In addition, the grace and restraint of La Fontaine's style are qualities that mark his writing as classical in spirit.

**Reason Rolls up Its Sleeves** Invention, the use of reason to solve life's problems, affected reading habits as well as navigation and industry. The creation of movable type by Johannes Gutenberg in the mid-1400s had

made possible the printing and widespread distribution of the Bible for the first time, paving the way for the Protestants' emphasis on biblical authority. Then, in the 1600s, the new methods of printing helped foster the growth of newspapers. The first English daily newspaper appeared in 1702, and a few years later, the English authors Addison and Steele founded *The Tatler* and *The Spectator*. These periodicals served up humorous essays and witty commentaries on current topics. The growth of newspapers and periodicals created a new entity called Public Opinion.

**The Encyclopedia Is Born** In France, Denis Diderot (dē' də rō') brought to a public hungry for knowledge the world's first *encyclopedia*—a word based on the Greek for "instruction in the circle of arts and sciences." Because its commentary often clashed with accepted principles, this multivolume work suffered repeated censorship. Yet upon its completion in 1772 after long years of toil, the *Encyclopedia* became a major achievement of the Enlightenment.

**Pascal and Voltaire: Reason's Differing Children** Finally, it is worth remembering that in an age of reason, not every thinker reasoned in the same way. Blaise Pascal (blez' pas kaf'), for example, was a French mathematician and physicist whose credentials as a rationalist were as good as anyone's. Yet in his book *Pensées* ("Thoughts"), he emphasizes human frailty and urges readers to approach God through feelings, not thought. His fellow Frenchman Voltaire (1694–1778), author of the novel *Candide*, disapproved of Pascal's concern with finding happiness in heaven. Voltaire stressed the use of reason to foster progress and happiness on Earth.

#### ▼ Critical Viewing

This illustration, showing the composing room of a print shop, was an engraving in Diderot's *Encyclopedia*. In a sense, Diderot was demonstrating the very technology that helped bring his own work to a wider reading public. What do the various details in the engraving reveal about the process of printing during the eighteenth century? Explain. [Infer]

