Archivio di Stato, Bologna//Alinari/Art Resource, NY

The Popularization of Science in the Age of the Enlightenment. During the Enlightenment, the ideas of the Scientific Revolution were spread and popularized in a variety of ways. Scientific societies funded by royal and princely patrons were especially valuable in providing outlets for the spread of new scientific ideas. This illustration shows the German prince Frederick Christian visiting his Academy of Sciences in 1739. Note the many instruments of the new science around the rooms—human skeletons, globes, microscopes, telescopes, and orreries (mechanical models of the solar system).

A NEW SKEPTICISM The great scientists of the seventeenth century, including Kepler, Galileo, and Newton, had pursued their work in a spirit of exalting God, not undermining Christianity. But as scientific knowledge spread, more and more educated men and women began to question religious truths and values. Skepticism about religion and a growing secularization of thought were especially evident in the work of Pierre Bayle (PYAYR BELL) (1647–1706), who remained a Protestant while becoming a leading critic of traditional religious attitudes. Bayle attacked superstition, religious intolerance, and dogmatism. In his view, compelling people to believe a particular set of religious ideas (as Louis XIV was doing at the time in Bayle's France) was wrong. It simply created hypocrites and in itself was contrary to what religion should be about. Individual conscience should determine one's actions. Bayle argued for complete religious toleration, maintaining that the existence of many religions would benefit rather than harm the state.

THE IMPACT OF TRAVEL LITERATURE Skepticism about both Christianity and European culture itself was nourished by travel reports. As we saw in Chapter 14, Europeans had embarked on voyages of discovery to other parts of the world in the late fifteenth and sixteenth centuries. In the course of the seventeenth century, traders, missionaries, medical practitioners, and explorers began to publish an increasing number of travel books that gave accounts of many different cultures. Then, too, the new geographic adventures of the eighteenth century, especially the discovery of the Pacific island of Tahiti and of New Zealand and Australia by James Cook, aroused much enthusiasm. Cook's *Travels*, an account of his journey, became a best-seller. Educated Europeans responded to these accounts of lands abroad in different ways. For some intellectuals, exotic peoples, such as the natives of Tahiti, presented an image of a "natural man" who was far happier than many Europeans. One intellectual wrote:

> The life of savages is so simple, and our societies are such complicated machines! The Tahitian is close to the origin of the world, while the European is closer to its old age. . . . [The Tahitians] understand nothing about our manners or our laws, and they are bound to see in them nothing but shackles disguised in a hundred different ways. Those shackles could only provoke the indignation and scorn of creatures in whom the most profound feeling is a love of liberty.[2]

The idea of the "noble savage" would play an important role in the political work of some philosophes.

The travel literature of the seventeenth and eighteenth centuries also led to the realization that there were highly developed civilizations with different customs in other parts of the world. China was especially singled out. One German university professor praised Confucian morality as superior to the intolerance of Christianity. Some European intellectuals began to evaluate their own civilization relative to others. Practices that had seemed to be grounded in reason now appeared to be merely matters of custom. Certainties about European practices gave way to **cultural relativism**.

Cultural relativism was accompanied by religious skepticism. As these travel accounts made clear, the Christian perception of God was merely one of many. Some people were devastated by this revelation: "Some complete their demoralization by extensive travel, and lose whatever shreds of religion remained to them. Every day they see a new religion, new customs, new rites."[3]

As Europeans were exposed to growing numbers of people around the world who were different from themselves, some intellectuals also began to classify people into racial groups. One group espoused polygenesis, or the belief in separate human species; others argued for monogenesis, or the belief in one human species characterized by racial variations. Both groups were especially unsympathetic to Africans and placed them in the lowest rank of humankind. In his *Encyclopedia*, the intellectual Denis Diderot (see "Diderot and the *Encyclopedia*" later in this chapter) maintained that all Africans were black and characterized the Negro as a "new species of mankind."

THE LEGACY OF LOCKE AND NEWTON The intellectual inspiration for the Enlightenment came primarily from two Englishmen, Isaac Newton and John Locke, acknowledged by the philosophes as great minds. Newton was frequently singled out for praise as the "greatest and rarest genius that ever rose for the ornament and instruction of the species." One English poet declared: "Nature and Nature's Laws lay hid in Night; God said, 'Let Newton be,' and all was Light." Enchanted by the grand design of the Newtonian world-machine, the intellectuals of the Enlightenment were convinced that by following Newton's rules of reasoning, they could discover the natural laws that governed politics, economics, justice, religion, and the arts.

John Locke's theory of knowledge especially influenced the philosophes. In his *Essay Concerning Human Understanding*, written in 1690, Locke denied Descartes's belief in innate ideas. Instead, argued Locke, every person was born with a *tabula rasa* (TAB-yuh-luh RAH-suh), a blank mind:

> Let us then suppose the mind to be, as we say, white paper, void of all characters, without any ideas. How comes it to be furnished? Whence comes it by that vast store which the busy and boundless fancy of man has painted on it with an almost endless variety? Whence has it all the materials of reason and knowledge? To this I answer, in one word, from experience. . . . Our observation, employed either about external sensible objects or about the internal operations of our minds perceived and reflected on by ourselves, is that which supplies our understanding with all the materials of thinking.[4]

Our knowledge, then, is derived from our environment, not from heredity; from reason, not from faith. Locke's philosophy implied that people were molded by their environment, by the experiences that they received through their senses from their surrounding world. By changing the environment and subjecting people to proper influences, they could be changed and a new society created. And how should the environment be changed? Newton had already paved the way by showing how reason enabled enlightened people to discover the natural laws to which all institutions should conform. No wonder the philosophes were enamored of Newton and Locke. Taken together, their ideas seemed to offer the hope of a "brave new world" built on reason.

The Philosophes and Their Ideas

The intellectuals of the Enlightenment were known by the French term *philosophe* (fee-loh-ZAWF), although not all of them were French and few were actually philosophers. The **philosophes** were literary people, professors, journalists, statesmen, economists, political scientists, and above all, social reformers. They came from both the nobility and the middle class, and a few even stemmed from lower origins. Although it was a truly international and **cosmopolitan** movement, the Enlightenment also enhanced the dominant role being played by French culture. Paris was its recognized capital, and most of the leaders of the Enlightenment were French (see Map 17.1). The French philosophes in turn affected intellectuals elsewhere and created a movement that engulfed the entire Western world, including the British and Spanish colonies in America.

Although the philosophes faced different political circumstances depending on the country in which they lived, they shared common bonds as part of a truly international movement. They were called philosophers, but what did philosophy mean to them? The role of philosophy was to change the world, not just discuss it. As one writer said, the philosophe is one who "applies himself to the study of society with the purpose of making his kind better and happier." To the philosophes, rationalism did not mean the creation of a grandiose system of thought to explain all things. Reason was scientific method, an appeal to facts and experience. A spirit of rational criticism was to be applied to everything, including religion and politics.

The philosophes' call for freedom of expression is a reminder that their work was done in an atmosphere of censorship. The philosophes were not free to write whatever they chose. State censors decided what could be published, and protests from any number of government bodies could result in the seizure of books and the imprisonment of their authors, publishers, and sellers. The philosophes found ways to get around state censorship. Some published under pseudonyms or anonymously or abroad, especially in Holland. The use of double meanings, such as talking about the Persians when they meant the French, became standard procedure for many. Books were also published and circulated secretly or in manuscript form to avoid the censors.

Although the philosophes constituted a kind of "family circle" bound together by common intellectual bonds, they often disagreed. Spanning almost a century, the Enlightenment evolved over time, with each succeeding generation becoming more radical as it built on the contributions of the previous one. A few people, however, dominated the landscape completely, and we might best begin our survey of the ideas of the philosophes by looking at three French giants—Montesquieu, Voltaire, and Diderot.

MONTESQUIEU AND POLITICAL THOUGHT Charles de Secondat, the baron de Montesquieu (MOHN-tess-kyoo) (1689–1755), came from the French nobility. He received a Classical education and then studied law. In his first work, the *Persian Letters*, published in 1721, he used the format of two Persians supposedly traveling in western Europe and sending their impressions back home to enable him to criticize French institutions, especially the Catholic Church and the French monarchy. Much of the program of the French Enlightenment is contained in this work: the attack on traditional religion, the advocacy of religious toleration, the denunciation of slavery, and the use of reason to liberate human beings from their prejudices.

Montesquieu's most famous work, *The Spirit of the Laws*, was published in 1748. This treatise was a comparative study of governments in which Montesquieu attempted to apply the scientific method to the social and political arena to ascertain

MAP 17.1 The Enlightenment in Europe. "Have the courage to use your own intelligence!" Kant's words epitomize the role of the individual in using reason to understand all aspects of life—the natural world and the sphere of human nature, behavior, and institutions.

Which countries or regions were at the center of the Enlightenment, and what could account for peripheral regions being less involved?

the "natural laws" governing the social relationships of human beings. Montesquieu distinguished three basic kinds of governments: republics, suitable for small states and based on citizen involvement; monarchy, appropriate for middle-sized states and grounded in the ruling class's adherence to law; and despotism, apt for large empires and dependent on fear to inspire obedience. Montesquieu used England as an example of the second category, and it was his praise and analysis of England's constitution that led to his most far-reaching and lasting contribution to political thought—the importance of checks and balances created by means of a **separation of powers** (see the box on p. 507). He believed that England's system, with its separate executive, legislative, and judicial powers that served to limit and control each other, provided the greatest freedom and security for a state. In large part, Montesquieu misread the English situation and insisted on a separation of powers because he wanted the nobility of France (of which he was a member) to play an active role in running the French government. The translation of his work into English two years after publication ensured that it would be read by American philosophes, such as Benjamin Franklin, James Madison, John Adams, Alexander Hamilton, and Thomas Jefferson, who incorporated its principles into the U.S. Constitution (see Chapter 19).

The Separation of Powers

THE ENLIGHTENMENT AFFECTED THE NEW WORLD of America as much as it did the old world of Europe. American philosophes were well aware of the ideas of European Enlightenment thinkers. This selection from Montesquieu's *Spirit of the Laws* enunciates the "separation of powers" doctrine.

Montesquieu, "Of the Constitution of England"

In every government there are three sorts of power: the legislative; the executive in respect to things dependent on the law of nations; and the executive in regard to matters that depend on the civil law.

By virtue of the first, the prince or magistrate enacts temporary or perpetual laws, and amends or abrogates those that have been already enacted. By the second, he makes peace or war, sends or receives embassies, establishes the public security, and provides against invasions. By the third, he punishes criminals, or determines the disputes that arise between individuals. The latter we shall call the judiciary power, and the other simply the executive power of the state.

The political liberty of the subject is a tranquility of mind arising from the opinion each person has of his safety. In order to have this liberty, it is requisite the government be so constituted as one man need not be afraid of another.

When the legislative and executive powers are united in the same person, or in the same body of magistrates, there can be no liberty; because apprehensions may arise, lest the same monarch or senate should enact tyrannical laws, to execute them in a tyrannical manner.

Again, there is no liberty, if the judiciary power be not separated from the legislative and executive. Were it joined with the legislative, the life and liberty of the subject would be exposed to arbitrary control; for the judge would be then the legislator. Were it joined to the executive power, the judge might behave with violence and oppression.

There would be an end of everything, were the same man or the same body, whether of the nobles or of the people, to exercise those three powers, that of enacting laws, that of executing the public resolutions, and of trying the causes of individuals.

As seen in this excerpt, what is Montesquieu's doctrine of the separation of powers? What are the underlying moral and political justifications for this system of government? How was this doctrine incorporated into the U.S. Constitution?

VOLTAIRE AND THE ENLIGHTENMENT The greatest figure of the Enlightenment was François-Marie Arouet (frahn-SWAH-ma-REE ahr-WEH), known simply as Voltaire (vohl-TAYR) (1694–1778). Son of a prosperous middle-class family from Paris, Voltaire received a Classical education in Jesuit schools. Although he studied law, he wished to be a writer and achieved his first success as a playwright. By his mid-twenties, Voltaire had been hailed as the successor to Racine (see Chapter 15) for his tragedy *Œdipe* and his epic *Henriade* on his favorite king, Henry IV. His wit made him a darling of the Parisian intellectuals but also involved him in a quarrel with a dissolute nobleman that forced him to flee France and live in England for almost two years.

Well received in English literary and social circles, the young playwright was much impressed by England. His *Philosophic Letters on the English*, written in 1733, expressed a deep admiration of English life, especially its freedom of the press, its political freedom, and its religious toleration. In judging the English religious situation, he made the famous remark that "if there were just one religion in England, despotism would threaten; if there were two religions, they would cut each other's throats; but there are thirty religions, and they live together peacefully and happily." Although he clearly exaggerated the freedoms England possessed, in a roundabout way Voltaire had managed to criticize many of the ills oppressing France, especially royal absolutism and the lack of religious toleration and freedom of thought. The criticism of absolute monarchy by Voltaire and other philosophes reflected the broader dissatisfaction of middle-class individuals with their society. In the course of the eighteenth century, this would help lead to revolutionary upheavals in France and other countries (see Chapter 19).

On his return to France, Voltaire's reputation as the author of the *Philosophic Letters* made it necessary for him to retire to Cirey, near France's eastern border, where he lived in semi-seclusion on the estate of his mistress, the marquise du Châtelet (mahr-KEEZ duh shat-LAY) (1706–1749). Herself an early philosophe, the marquise was one of the first intellectuals to adopt the ideas of Isaac Newton, and in 1759 her own translation of Newton's famous *Principia* was published. While Voltaire lived with her at her château at Cirey, the two collaborated on a book about the natural philosophy of Newton.

Voltaire eventually settled on a magnificent estate at Ferney. Located in France near the Swiss border, Ferney gave Voltaire the freedom to write what he wished. By this time, through his writings, inheritance, and clever investments, Voltaire had become wealthy and now had the leisure to write an almost endless stream of pamphlets, novels, plays, letters, and histories.

Although he touched on all of the themes of importance to the philosophes, Voltaire was especially well known for his

Chateaux de Versailles et de Trianon (Gérard Blot), Versailles//© RMN-Grand Palais/ Art Resource, NY

Voltaire. François-Marie Arouet, better known as Voltaire, achieved his first success as a playwright. A philosophe, Voltaire was well known for his criticism of traditional religion and his support of religious toleration. Maurice-Quentin de La Tour painted this portrait of Voltaire holding one of his books in 1736.

criticism of traditional religion and his strong attachment to the ideal of religious toleration (see the box on p. 509). He lent his prestige and skills as a polemicist to fighting cases of intolerance in France. The most famous incident was the Calas affair. Jean Calas (ZHAHNH ka-LAH) was a Protestant from Toulouse who was accused of murdering his own son to stop him from becoming a Catholic. Tortured to confess his guilt, Calas died shortly thereafter. An angry and indignant Voltaire published devastating broadsides that aroused public opinion and forced a retrial in which Calas was exonerated when it was proved that his son had actually committed suicide. The family was paid an indemnity, and Voltaire's appeals for toleration appeared all the more reasonable. In 1763, he penned his *Treatise on Toleration*, in which he argued that religious toleration had created no problems for England and Holland and reminded governments that "all men are brothers under God." As he grew older, Voltaire became ever more strident in his denunciations. "Crush the infamous thing," he thundered repeatedly—the infamous thing being religious fanaticism, intolerance, and superstition.

Throughout his life, Voltaire championed not only religious tolerance but also **deism**, a religious outlook shared by most other philosophes. Deism was built on the Newtonian world-machine, which suggested the existence of a mechanic (God) who had created the universe. Voltaire said, "In the opinion that there is a God, there are difficulties, but in the contrary opinion there are absurdities." To Voltaire and most other philosophes, God had no direct involvement in the world he had created and allowed it to run according to its own natural laws. God did not extend grace or answer prayers as Christians liked to believe. Jesus might be a "good fellow," as Voltaire called him, but he was not divine, as Christianity claimed.

DIDEROT AND THE *ENCYCLOPEDIA* Denis Diderot (duh-NEE DEE-droh) (1713–1784), the son of a skilled craftsman from eastern France, became a freelance writer so that he could study many subjects and read in many languages. One of his favorite topics was Christianity, which he condemned as fanatical and unreasonable. As he grew older, his literary attacks on Christianity grew more vicious. Of all religions, he maintained, Christianity was the worst, "the most absurd and the most atrocious in its dogma" (see the box on p. 510). Near the end of his life, he argued for an essentially materialistic conception of life: "This world is only a mass of molecules."

Diderot's most famous contribution to the Enlightenment was the twenty-eight-volume *Encyclopedia, or Classified Dictionary of the Sciences, Arts, and Trades*, that he edited and called the "great work of his life." Its purpose, according to Diderot, was to "change the general way of thinking." It did precisely that in becoming a major weapon of the philosophes' crusade against the old French society. The contributors included many philosophes who expressed their major concerns. They attacked religious superstition and advocated toleration as well as a program for social, legal, and political improvements that would lead to a society that was more cosmopolitan, more tolerant, more humane, and more reasonable. In later editions, the price of the *Encyclopedia* was drastically reduced, dramatically increasing its sales and making it available to doctors, clergy, teachers, lawyers, and even military officers. The ideas of the Enlightenment were spread even further as a result.

THE NEW "SCIENCE OF MAN" The Enlightenment belief that Newton's scientific methods could be used to discover the natural laws underlying all areas of human life led to the emergence in the eighteenth century of what the philosophes called the "science of man," or what we would call the social sciences. In a number of areas, philosophes arrived at natural laws that they believed governed human actions. If these "natural laws" seem less than universal to us, it reminds us how much the philosophes were people of their times reacting to the conditions they faced. Nevertheless, their efforts did at least lay the foundations for the modern social sciences.

That a science of man was possible was a strong belief of the Scottish philosopher David Hume (1711–1776). An important figure in the history of philosophy, Hume has also been called "a pioneering social scientist." In his *Treatise on Human Nature*, which he subtitled "An Attempt to Introduce the Experimental Method of Reasoning into Moral Subjects," Hume argued that observation and reflection, grounded in "systematized common sense," made conceivable a "science of man." Careful examination of the experiences that constituted human life would lead to the knowledge of human nature that would make this science possible.

The Physiocrats and Adam Smith have been viewed as founders of the modern discipline of economics. The leader of the Physiocrats was François Quesnay (frahn-SWAH keh-NAY) (1694–1774), a highly successful French court physician. Quesnay and the Physiocrats claimed they would discover the natural economic laws that governed human society. Their first principle was that land constituted the only source of wealth and that wealth itself could be increased only by agriculture because all other economic activities were unproductive and sterile. Even the state's revenues should come from a single tax on land rather than the hodgepodge of inequitable taxes and privileges currently in place. In stressing the economic primacy of agricultural production, the Physiocrats were rejecting the mercantilist emphasis on the significance of money—that is, gold and silver—as the primary determinants of wealth (see Chapter 14).

Their second major "natural law" of economics also represented a repudiation of mercantilism, specifically, its emphasis on a controlled economy for the benefit of the state. Instead, the Physiocrats stressed that the existence of the natural economic forces of supply and demand made it imperative that individuals should be left free to pursue their own economic self-interest. In doing so, all of society would ultimately benefit. Consequently, they argued that the state should in no way interrupt the free play of natural economic forces by government regulation of the economy but rather should just leave it alone, a doctrine that subsequently became known by its French name, ***laissez-faire*** (less-ay-FAYR) (noninterference; literally, "let people do as they choose").

The Attack on Religious Intolerance

VOLTAIRE'S LUCID PROSE, BITING SATIRE, AND clever wit caused his works to be widely read and all the more influential. These two selections present different sides of Voltaire's attack on religious intolerance. The first is from a straightforward treatise, *The Ignorant Philosopher*, and the second is from his only real literary masterpiece, the novel *Candide*, where he used humor to make the same fundamental point about religious intolerance.

Voltaire, *The Ignorant Philosopher*

The contagion of fanaticism then still subsists. . . . The author of the *Treatise upon Toleration* has not mentioned the shocking executions wherein so many unhappy victims perished in the valleys of Piedmont. He has passed over in silence the massacre of six hundred inhabitants of Valtelina, men, women, and children, who were murdered by the Catholics in the month of September, 1620. I will not say it was with the consent and assistance of the archbishop of Milan, Charles Borome, who was made a saint. Some passionate writers have averred this fact, which I am very far from believing; but I say, there is scarce any city or borough in Europe, where blood has not been spilt for religious quarrels; I say, that the human species has been perceptibly diminished, because women and girls were massacred as well as men; I say, that Europe would have had a third larger population, if there had been no theological disputes. In fine, I say, that so far from forgetting these abominable times, we should frequently take a view of them, to inspire an eternal horror for them; and that it is for our age to make reparation by toleration, for this long collection of crimes, which has taken place through the want of toleration, during sixteen barbarous centuries. Let it not then be said, that there are no traces left of that shocking fanaticism, of the want of toleration; they are still everywhere to be met with, even in those countries that are esteemed the most humane. The Lutheran and Calvinist preachers, were they masters, would, perhaps, be as little inclined to pity, as obdurate, as insolent as they upbraid their antagonists with being.

Voltaire, *Candide*

At last he [Candide] approached a man who had just been addressing a big audience for a whole hour on the subject of charity. The orator peered at him and said:

"What is your business here? Do you support the Good Old Cause?"

"There is not effect without a cause," replied Candide modestly. "All things are necessarily connected and arranged for the best. It was my fate to be driven from Lady Cunégonde's presence and made to run the gantlet, and now I have to beg my bread until I can earn it. Things should not have happened otherwise."

"Do you believe that the Pope is Antichrist, my friend?" said the minister.

"I have never heard anyone say so," replied Candide; "but whether he is or he isn't, I want some food."

"You don't deserve to eat," said the other. "Be off with you, you villain, you wretch! Don't come near me again or you'll suffer for it."

The minister's wife looked out of the window at that moment, and seeing a man who was not sure that the Pope was Antichrist, emptied over his head a chamber pot, which shows to what lengths ladies are driven by religious zeal.

Q *Compare the two approaches that Voltaire uses to address the problem of religious intolerance. Do you think one is more effective? Why?*

Sources: Voltaire, *The Ignorant Philosopher*. From CANDIDE OR OPTIMISM by Voltaire, translated by John Butt (Penguin Classics, 1947). This edition copyright © John Butt, 1947. Voltaire, *Candide*. From CANDIDE OR OPTIMISM by Voltaire, translated by John Butt (Penguin Classics, 1947). This edition copyright © John Butt, 1947. Reproduced by permission of Penguin Books, Ltd.

Diderot Questions Christian Sexual Standards

Denis Diderot was one of the boldest thinkers of the Enlightenment. In his *Supplement to the Voyage of Bougainville*, he constructed a dialogue between Orou, a Tahitian who symbolizes the wisdom of a philosophe, and a chaplain who defends Christian sexual mores. The dialogue gave Diderot the opportunity to criticize the practice of sexual chastity and monogamy.

Denis Diderot, *Supplement to the Voyage of Bougainville*

[Orou, speaking to the Chaplain.] "You are young and healthy and you have just had a good supper. He who sleeps alone sleeps badly; at night a man needs a woman at his side. Here is my wife and here are my daughters. Choose whichever one pleases you most, but if you would like to do me a favor, you will give your preference to my youngest girl, who has not yet had any children. . . ."

The chaplain replied that his religion, his holy orders, his moral standards and his sense of decency all prevented him from accepting Orou's invitation.

Orou answered: "I don't know what this thing is that you call religion, but I can only have a low opinion of it because it forbids you to partake of an innocent pleasure to which Nature, the sovereign mistress of us all, invites everybody. It seems to prevent you from bringing one of your fellow creatures into the world, from doing a favor asked of by a father, a mother and their children, from repaying the kindness of a host, and from enriching a nation by giving it an additional citizen. . . . Look at the distress you have caused to appear on the faces of these four women—they are afraid you have noticed some defect in them that arouses your distaste. . . ."

The Chaplain: "You don't understand—it's not that. They are all four of them equally beautiful. But there is my religion! My holy orders! . . . [God] spoke to our ancestors and gave them laws; he prescribed to them the way in which he wishes to be honored; he ordained that certain actions are good and others he forbade them to do as being evil."

Orou: "I see. And one of these evil actions which he has forbidden is that of a man who goes to bed with a woman or girl. But in that case, why did he make two sexes?"

The Chaplain: "In order that they might come together—but only when certain conditions are satisfied and only after certain initial ceremonies one man belongs to one woman and only to her; one woman belongs to one man and only to him."

Orou: "For their whole lives?"

The Chaplain: "For their whole lives. . . ."

Orou: "I find these strange precepts contrary to nature, and contrary to reason. . . . Furthermore, your laws seem to me to be contrary to the general order of things. For in truth is there anything so senseless as a precept that forbids us to heed the changing impulses that are inherent in our being, or commands that require a degree of constancy which is not possible, that violate the liberty of both male and female by chaining them perpetually to one another? . . . I don't know what your great workman [God] is, but I am very happy that he never spoke to our forefathers, and I hope that he never speaks to our children, for if he does, he may tell them the same foolishness, and they may be foolish enough to believe it."

Q *What attack does Diderot make on Christian sexual standards? What does this passage say about enlightened conceptions of nature and the place of physical pleasure in healthy human life?*

The best statement of *laissez-faire* was made in 1776 by a Scottish philosopher, Adam Smith (1723–1790), in his *Inquiry into the Nature and Causes of the Wealth of Nations*, known simply as *The Wealth of Nations*. In the process of enunciating three basic principles of economics, Smith presented a strong attack on mercantilism. First, he condemned the mercantilist use of tariffs to protect home industries. If one country can supply another country with a product cheaper than the latter can make it, it is better to purchase the product than to produce it. To Smith, free trade was a fundamental economic principle. Smith's second principle was his labor theory of value. Like the Physiocrats, he claimed that gold and silver were not the source of a nation's true wealth, but unlike the Physiocrats, he did not believe that land was either. Rather labor—the labor of individual farmers, artisans, and merchants—constituted the true wealth of a nation. Finally, like the Physiocrats, Smith believed that the state should not interfere in economic matters; indeed, he assigned to government only three basic functions: to protect society from invasion (army), defend individuals from injustice and oppression (police), and keep up certain public works, such as roads and canals, that private individuals could not afford. Thus, in Smith's view, the state should stay out of the lives of individuals. In emphasizing the economic liberty of the individual, the Physiocrats and Adam Smith laid the foundation for what became known in the nineteenth century as **economic liberalism**.

THE LATER ENLIGHTENMENT By the late 1760s, a new generation of philosophes who had grown up with the worldview of the Enlightenment began to move beyond their predecessors' beliefs. Baron Paul d'Holbach (dawl-BAHK) (1723–1789), a wealthy German aristocrat who settled in Paris, preached a doctrine of strict atheism and materialism. In his *System of Nature*, written in 1770, he argued that everything in the universe consisted of matter in motion. Human beings were simply machines; God was a product of the human mind and was unnecessary for leading a moral life. People needed only reason to live in this world: "Let us persuade men to be just, beneficent, moderate, sociable; not because the gods demand it, but because they must please men. Let us advise them to abstain from vice and crimes; not because they will be punished in the other world, but because they will suffer for it in this."[5] Holbach shocked almost all of his fellow philosophes with his uncompromising atheism. Most intellectuals remained more comfortable with deism and feared the effect of atheism on society.

Marie-Jean de Condorcet (ma-REE-ZHAHNH duh kohn-dor-SAY) (1743–1794), another French philosophe, made an exaggerated claim for progress. Condorcet was a victim of the turmoil of the French Revolution and wrote his chief work, *The Progress of the Human Mind*, while in hiding during the Reign of Terror (see Chapter 19). His survey of human history convinced him that humans had progressed through nine stages of history. Now, with the spread of science and reason, humans were about to enter the tenth stage, one of perfection, in which they will see that "there is no limit to the perfecting of the powers of man; that human perfectibility is in reality indefinite, that the progress of this perfectibility . . . has no other limit than the duration of the globe upon which nature has placed us." Shortly after composing this work, the prophet of humankind's perfection died in a French revolutionary prison.

Musée d'Art et d'Histoire, Geneva/Erich Lessing/Art Resource, NY

Jean-Jacques Rousseau. By the late 1760s, a new generation of philosophes arose who began to move beyond and even to question the beliefs of their predecessors. Of the philosophes of the late Enlightenment, Rousseau was perhaps the most critical of his predecessors. Shown here is a portrait of Rousseau by Maurice-Quentin de La Tour.

ROUSSEAU AND THE SOCIAL CONTRACT No one was more critical of the work of his predecessors than Jean-Jacques Rousseau (ZHAHNH-ZHAHK roo-SOH) (1712–1778). Born in Geneva, he spent his youth wandering about France and Italy holding various jobs. He went back to school for a while to study music and the classics (he could afford to do so after becoming the paid lover of an older woman). Eventually, he made his way to Paris, where he was introduced into the circles of the philosophes. He never really liked the social life of the cities, however, and frequently withdrew into long periods of solitude.

Rousseau's political beliefs were presented in two major works. In his *Discourse on the Origins of the Inequality of Mankind*, Rousseau began with humans in their primitive condition (or state of nature—see Chapter 15), where they were happy. There were no laws, no judges; all people were equal. But what had gone wrong?

> The first man who, having enclosed a piece of ground, thought of saying, This is mine, and found people simple enough to believe him, was the true founder of civil society. How many crimes, wars, murders; how much misery and horror the human race would have been spared if someone had pulled up the stakes and filled in the ditch, and cried to his fellow men: "Beware of listening to this impostor. You are lost if you forget that the fruits of the earth belong to everyone and that the earth itself belongs to no one!"[6]

To preserve their private property, people adopted laws and governors. In so doing, they rushed headlong not to liberty but into chains. "What then is to be done? Must societies be totally abolished? . . . Must we return again to the forest to live among bears?" No, civilized humans could "no longer subsist on plants or acorns or live without laws and magistrates." Government was an evil, but a necessary one.

In his celebrated treatise *The Social Contract*, published in 1762, Rousseau tried to harmonize individual liberty with governmental authority (see the box on p. 512). The social contract was basically an agreement on the part of an entire society to be governed by its general will. If any individual wished to follow his own self-interest, he should be compelled to abide by the general will. "This means nothing less than that he will be forced to be free," said Rousseau, because the general will represented a community's highest aspirations, whatever was best for the entire community. Thus, liberty was achieved through being forced to follow what was best for all people because, he believed, what was best for all was best for each individual. True freedom is adherence to laws that one has imposed on

A Social Contract

Although Jean-Jacques Rousseau was one of the French philosophes, he has also been called "the father of Romanticism." His political ideas have proved extremely controversial. Though some people have hailed him as the prophet of democracy, others have labeled him an apologist for totalitarianism. This selection is taken from one of his most famous books, *The Social Contract.*

Jean-Jacques Rousseau, *The Social Contract*

Book 1, Chapter 6: "The Social Pact"

"How to find a form of association which will defend the person and goods of each member with the collective force of all, and under which each individual, while uniting himself with the others, obeys no one but himself, and remains as free as before." This is the fundamental problem to which the social contract holds the solution. . . .

Book 1, Chapter 7: "The Sovereign"

Despite their common interest, subjects will not be bound by their commitment unless means are found to guarantee their fidelity.

For every individual as a man may have a private will contrary to, or different from, the general will that he has as a citizen. His private interest may speak with a very different voice from that of the public interest; his absolute and naturally independent existence may make him regard what he owes to the common cause as a gratuitous contribution, the loss of which would be less painful for others than the payment is onerous for him; and fancying that the artificial person which constitutes the state is a mere rational entity, he might seek to enjoy the rights of a citizen without doing the duties of a subject. The growth of this kind of injustice would bring about the ruin of the body politic.

Hence, in order that the social pact shall not be an empty formula, it is tacitly implied in that commitment—which alone can give force to all others—that whoever refused to obey the general will shall be constrained to do so by the whole body, which means nothing other than that he shall be forced to be free; for this is the condition which, by giving each citizen to the nation, secures him against all personal dependence, it is the condition which shapes both the design and the working of the political machine, and which alone bestows justice on civil contracts—without it, such contracts would be absurd, tyrannical and liable to the grossest abuse.

What was Rousseau's concept of the social contract? What implications did it have for political thought, especially in regard to the development of democratic ideals?

oneself. To Rousseau, because everybody was responsible for framing the general will, the creation of laws could never be delegated to a parliamentary institution:

> Thus, the people's deputies are not and could not be its representatives; they are merely its agents; and they cannot decide anything finally. Any law which the people has not ratified in person is void; it is not law at all. The English people believes itself to be free; it is gravely mistaken; it is free only during the election of Members of Parliament; as soon as the Members are elected, the people is enslaved; it is nothing.[7]

This is an extreme and idealistic statement, but it is the ultimate statement of participatory democracy.

Another influential treatise by Rousseau also appeared in 1762. Titled *Émile,* it is one of the Enlightenment's most important works on education. Written in the form of a novel, the work is really a general treatise "on the education of the natural man." Rousseau's fundamental concern was that education should foster rather than restrict children's natural instincts. Life's experiences had shown Rousseau the importance of the promptings of the heart, and what he sought was a balance between heart and mind, between sentiment and reason. This emphasis on heart and sentiment made him a precursor of the intellectual movement called **Romanticism** that dominated Europe at the beginning of the nineteenth century.

But Rousseau did not necessarily practice what he preached. His own children were sent to foundling homes, where many children died young. Rousseau also viewed women as "naturally" different from men: "To fulfill [a woman's] functions, an appropriate physical constitution is necessary to her. . . . She needs a soft sedentary life to suckle her babies. How much care and tenderness does she need to hold her family together." In *Émile,* Sophie, who was Émile's intended wife, was educated for her role as wife and mother by learning obedience and the nurturing skills that would enable her to provide loving care for her husband and children. Not everyone in the eighteenth century agreed with Rousseau, however, making ideas of gender an important issue in the Enlightenment.

THE "WOMAN'S QUESTION" IN THE ENLIGHTENMENT

For centuries, men had dominated the debate about the nature and value of women. In general, many male intellectuals had argued that the base nature of women made them inferior to men and made male domination of women necessary (see Chapter 16). In the seventeenth and eighteenth centuries, many male thinkers reinforced this view by arguing that it was based on "natural" biological differences between men and women. Like Rousseau, they argued that the female constitution destined women to be mothers. Male writers, in particular, were critical of the attempts of some women in the Enlightenment to write on intellectual issues, arguing that women were by nature intellectually inferior to men. Nevertheless, some Enlightenment thinkers offered more positive views of women. Diderot, for example, maintained that men and women were not all that different, and Voltaire asserted that "women are capable of all that men are" in intellectual affairs.

It was women thinkers, however, who added new perspectives to the "woman's question" by making specific suggestions for improving the condition of women. Mary Astell (AST-ul) (1666–1731), daughter of a wealthy English coal merchant, argued in 1697 in *A Serious Proposal to the Ladies* that women needed to become better educated. Men, she believed, would resent her proposal, "but they must excuse me, if I be as partial to my own sex as they are to theirs, and think women as capable of learning as men are, and that it becomes them as well."[8] In a later work titled *Some Reflections upon Marriage,* Astell argued for the equality of the sexes in marriage: "If absolute sovereignty be not necessary in a state, how comes it to be so in a family . . . ? For if arbitrary power is evil in itself, and an improper method of governing rational and free agents, it ought not be practiced anywhere. . . . If all men are born free, how is it that all women are born slaves?"[9]

The strongest statement for the rights of women in the eighteenth century was advanced by the English writer Mary Wollstonecraft (WULL-stun-kraft) (1759–1797), viewed by many as the founder of modern European **feminism**. In *Vindication of the Rights of Woman,* written in 1792, Wollstonecraft pointed out two contradictions in the views of women held by such Enlightenment thinkers as Rousseau. To argue that women must obey men, she said, was contrary to the beliefs of the same individuals that a system based on the arbitrary power of monarchs over their subjects or slave owners over their slaves was wrong. The subjection of women to men was equally wrong. In addition, she argued, the Enlightenment was based on the ideal that reason is innate in all human beings. If women have reason, then they are entitled to the same rights that men have. Women, Wollstonecraft declared, should have equal rights with men in education and in economic and political life as well (see the box on p. 514).

CHRONOLOGY Works of the Philosophes

Montesquieu, *Persian Letters*	1721
Voltaire, *Philosophic Letters on the English*	1733
Hume, *Treatise on Human Nature*	1739–1740
Montesquieu, *The Spirit of the Laws*	1748
Voltaire, *The Age of Louis XIV*	1751
Diderot, *Encyclopedia*	1751–1765
Rousseau, *The Social Contract; Émile*	1762
Voltaire, *Treatise on Toleration*	1763
Beccaria, *On Crimes and Punishments*	1764
Holbach, *System of Nature*	1770
Smith, *The Wealth of Nations*	1776
Gibbon, *The Decline and Fall of the Roman Empire*	1776–1788
Wollstonecraft, *Vindication of the Rights of Woman*	1792
Condorcet, *The Progress of the Human Mind*	1794

The Social Environment of the Philosophes

The social background of the philosophes varied considerably, from the aristocratic Montesquieu to the lower-middle-class Diderot and Rousseau. The Enlightenment was not the preserve of any one class, although obviously its greatest appeal was to the aristocracy and upper middle classes of the major cities. The common people, especially the peasants, were little affected by the Enlightenment.

Of great importance to the Enlightenment was the spread of its ideas to the literate elite of European society. Although the publication and sale of books and treatises were crucial to this process, the salon was also a factor. **Salons** came into being in the seventeenth century but rose to new heights in the eighteenth. These were the elegant drawing rooms in the urban houses of the wealthy where invited philosophes and guests gathered to engage in witty, sparkling conversations that often centered on the ideas of the philosophes. In France's rigid hierarchical society, the salons were important in bringing together writers and artists with aristocrats, government officials, and wealthy bourgeoisie.

As hostesses of the salons, women found themselves in a position to affect the decisions of kings, sway political opinion, and influence literary and artistic taste. Salons provided havens for people and views unwelcome in the royal court. When the *Encyclopedia* was suppressed by the French authorities, Marie-Thérèse de Geoffrin (1699–1777), a wealthy bourgeois widow whose father had been a valet, welcomed the encyclopedists to her salon and offered financial assistance to complete the work in secret. Madame Geoffrin was not without rivals, however. The marquise du Deffand (mahr-KEEZ duh duh-FAHNH) (1697–1780) had abandoned her husband in the provinces and established herself in Paris, where her ornate drawing room attracted many of the Enlightenment's great figures, including Montesquieu, Hume, and Voltaire.

Although the salons were run by women, the reputation of a salon depended on the stature of the males a hostess was able to attract (see Images of Everyday Life on p. 515). Despite this male domination, both French and foreign observers complained that females exerted undue influence in French political affairs. Though exaggerated, this perception led to the decline of salons during the French Revolution.

The salons served an important role in promoting conversation and sociability between upper-class men and women as well as spreading the ideas of the Enlightenment. But other means of spreading Enlightenment ideas were also available. Coffeehouses, cafés, reading clubs, and public lending libraries established by the state were gathering places for the exchange of ideas. Learned societies were formed in cities throughout Europe and America. At such gatherings as the Select Society of Edinburgh, Scotland, and the American Philosophical Society