

The Age of Reason (1687-1789)

PART I

In Search of Natural Laws

gravitational *reasoning*
predict

In 1687 Isaac Newton published a book entitled *Mathematic Principles of Natural Philosophy*. In this book, Newton explained how the Law of Gravitation applied to the universe as a whole. He also showed how the Law of Gravitation could be described mathematically. Newton's book caused a great sensation in Europe. He was considered the greatest scientific thinker of his time, or indeed, of any other time in history.

Newton Discovers A Natural Law

Newton had shown that the *gravitational* force in the universe was orderly, and that the force of gravity could be described by using mathematics. In other words, with the proper information, a person could *predict* with certainty the movement of any falling object on Earth. Or with equal certainty, a person could accurately predict the movement of the moon and the planets.

What was exciting about this finding was that Newton had discovered the natural law of gravitation by using only his *reasoning* ability. Newton had conducted no experiments. Yet, by reason alone, he was able to discover a mathematical law that controls the movement of heavenly bodies.

The Power of Reason

Although Newton's work was published in a scientific book, his ideas influenced non-scientists as well. People began to think of the universe as a kind of huge machine that worked by natural laws, or rules.

At that time, one of the most orderly machines known was the clock. A clock ticks off the minutes of the day in a predictable, orderly way. Newton, some people thought, had discovered a "clockwork universe." The power of the reasoning ability of the human mind appeared very impressive.

It was believed that Newton's work had shown that if people used careful, scientific reasoning the truth about how nature worked could be discovered. Many non-scientists thought that if nature followed natural laws, there may be natural laws or rules that govern the behavior of human beings and their societies. Scientific reasoning was now seen as a tool to solve the problems of poverty, ignorance, and crime.

People who believed in the value of scientific reasoning were called “enlightened” thinkers. To be “enlightened” meant that a person was free from the “darkness” of ignorance and superstition. Enlightened thinkers were willing to ask difficult questions and to search for the truth about how nature and human societies really worked.

The period between the publication of Isaac Newton’s book in 1687 to the start of the French Revolution in 1789 is called the Age of Reason.

During this time, many enlightened thinkers believed that they had taken the first steps toward improving how humans lived. Their goal was to avoid careless thinking or emotional feelings that they believed had prevented human beings from making steady progress to improve their societies.

As one enlightened thinker wrote, “Not only is progress possible, but there is no limit that can be assigned to it in advance.” The enlightened thinkers argued that



Isaac Newton was a famous English physicist and mathematician. Newton discovered many scientific principles, or laws, which once explained much of nature. His most famous law is the Law of Universal Gravitation.

scientific reasoning should be used to examine every part of a society’s social and political life, including its education, religion, economics, law, and government.

STOP AND REVIEW

Directions: Write *True* or *False* for each statement. If the statement is false, rewrite it to make it a true statement.

1. Isaac Newton conducted many experiments to discover the Law of Gravitation.
2. Because of Newton's scientific discoveries, people began to think of the universe as a "giant clock."
3. Enlightened thinkers believed in scientific reasoning.
4. Enlightened thinkers thought that scientific reasoning should be used to study only nature.
5. Because important thinkers believed in the power of reason, most of the eighteenth century was called the Age of Reason.

PART 2

New Theories On Government

aristocrat
influential

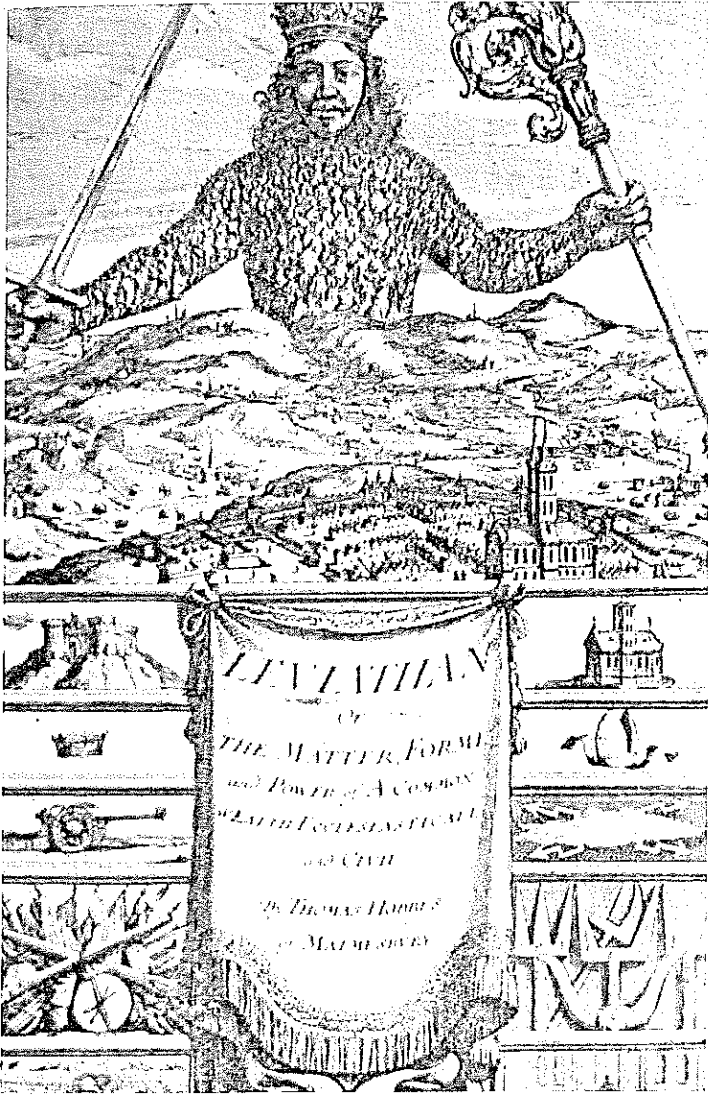
phony

One of the first areas where enlightened thinkers directed their attention was to question how societies should be governed. These thinkers asked very basic questions. Then they used logic and reason to find answers. What was the best form of government? Are there natural laws or rules that should be followed by people in establishing a government? Thomas Hobbes, John Locke, Baron de Montesquieu [MON-tus kyew], and Jean Jacques Rousseau [roo SOH] were three men who thought carefully about these and other questions of government. Their theories of government became very *influential*.

Thomas Hobbes:

"The Ruler Has Absolute Power"

In 1651 Thomas Hobbes published a book on government entitled *Leviathan*. Hobbes argued in his book that the best government was one in which the ruler had absolute power. According to Hobbes, before there was any government or any laws, people lived violent lives that were "nasty, brutish, and short." Hobbes thought that at some point in the distant past people agreed to give up their freedom to a ruler to gain order and



In his book Leviathan, Thomas Hobbes argued that keeping order in a society requires a strong monarch. The cover of his book shows the power of the state and the church.

safety. Hobbes called this agreement a contract between the ruler and the ruled. Under the agreement, people now had no right to disobey the ruler or rebel even if he ruled poorly. Without the absolute power

of the ruler to keep order, Hobbes believed that people would return to a state where they would constantly fight among themselves. For Thomas Hobbes, order in a society was more important than freedom.

John Locke: "People Have Basic Rights"

John Locke was an Englishman born in 1632. In 1690, nearly forty years after the appearance of Hobbes' book, John Locke published a book that challenged Hobbes' ideas. His book was entitled *Two Treatises on Government*. Like Hobbes, Locke thought that the purpose of government was to keep order in a society. Locke also agreed that government was a contract between the ruler and those ruled. Locke, however,

thought that people did not give up all their freedom or rights when they agreed to be governed.

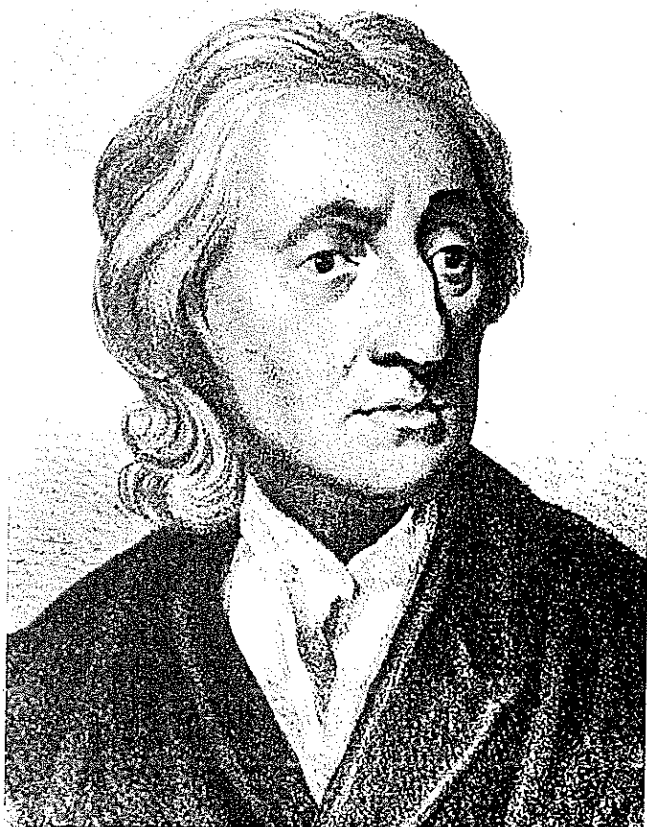
Unlike Hobbes, Locke believed that people were basically reasonable. Given the chance, Locke

thought, people would cooperate and act in an orderly manner. One of Locke's most influential ideas was that people were born with three basic rights. People, said John Locke, had a right to life, liberty, and property. It was the duty of government, Locke believed, to protect these rights. He argued that a ruler should only stay in power as long as he had the agreement of the people. He called this agreement the "consent of the governed." According to Locke, people had a right to rebel against and replace any government that did not protect their basic rights.

**Montesquieu:
"Separate and Balance
Government Powers"**

Baron de Montesquieu, a French aristocrat and lawyer, was also interested in discovering the basic ideas or principles for good government. He studied the history of the government of ancient Rome as well as government in his own time. Seven years before his death he published *The Spirit of the Laws*.

Montesquieu thought that there was a "spirit" that acted as a foundation for every type of government. The "spirit" of a dictatorship was



John Locke argued that the government should only exist by the consent of the governed. He thought that leaders should be removed from power if they failed to protect the people's rights to life, liberty, and property.

fear. The spirit of a monarchy was "honor." Kings and nobles thought they were the superior people in their society. The king and other nobles were to be respected because they were honorable men. They had a special responsibility to use their wealth and power to govern for the good of the whole society. The spirit of a republic was

“virtue.” The strength of a republican form of government, he thought, was in electing people of good character who would serve for the good of the community. Montesquieu believed the spirit of a government was so important that if it weakened, the government would fail.

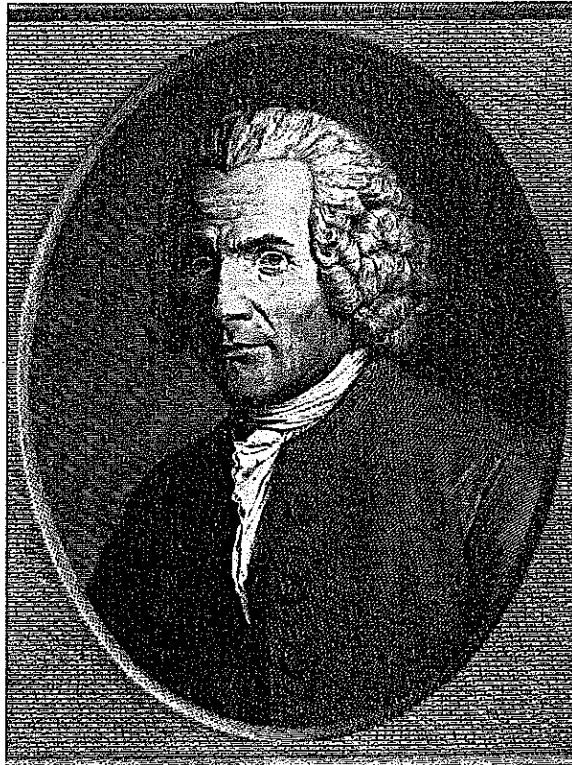
Montesquieu admired the English system of government in the 1700s. He thought that power in the English government was divided into three branches. One branch, Parliament, made the laws. A second branch, the king, enforced the laws. The third branch, the courts, interpreted the laws or decided what the laws meant. Montesquieu thought that separating the powers of government would guard against one part of government from becoming too powerful. Each branch of government acted to “check and balance” the powers of the other branches.

Although Montesquieu was not entirely correct in how the English government worked, his idea of the importance of a “separation of powers” and “checks and balances” was used by the individuals who wrote the Constitution for the United States of America. Montesquieu’s ideas on separating and balancing the powers of government became the foundation for the government of the United States.

Rousseau:

“Man is born free, but. . .”

Another important political thinker during this time was Jean Jacques Rousseau. Unlike Montesquieu, Rousseau was born into poverty. He was an emotional, undisciplined man. Much of his early life was spent wandering from one job to another. For a time he was a music teacher, though he knew little about teaching music. Then, in 1750, this unknown man became famous when he won an essay contest.



Rousseau's writings were a major influence on the French revolutionaries. His writing also had an impact on the education of children.

His essay, *Discourse on the Arts and Sciences*, argued that before civilizations developed people's behavior had been basically good. People cooperated. There was no crime. Shockingly, Rousseau proposed that civilized societies caused people to act in ways that were bad. Rousseau used the societies of Native Americans and others as models of peaceful, cooperative people who lived in a natural, simpler state. He called these people "noble savages."

Thomas Hobbes had written that people were born basically greedy and selfish. Civilization, he thought, made people act more responsibly. Rousseau turned this idea upside down. Rousseau said that people were born good, and that civilization makes them act badly. "Man is born free," he wrote, "but everywhere he is in chains."

Rousseau strongly believed that all people were equal. Whether king or noble, no one, he argued, should have any special rank or privilege in a society.

Rousseau's ideas about the importance of a simple life became very popular. The queen of France even had a simple village built at the magnificent palace of Versailles. This powerful queen would visit the *phony* village and make believe she was a simple, poor woman whose job was to milk cows.

Rousseau's "General Will"

In 1762 Rousseau published an important book on government entitled *The Social Contract*. Rousseau's idea of the social contract differed from Hobbes and Locke. Rousseau believed that in order to get along people made a contract with each other and not with a ruler. In Rousseau's opinion, a community of people was held together by shared customs, values, and traditions. Rousseau called these shared feelings the "general will." According to Rousseau, the community expressed what it wanted through the "general will." For this reason, Rousseau favored the rule of the majority. Rousseau's writings encouraged both those that favored democratic governments and nationalism.

▣ STOP AND REVIEW

Directions: Complete the following statements.

1. Thomas Hobbes believed that a government should be ruled by an absolute ...
2. John Locke believed that people were born with basic ...
3. Montesquieu believed that the powers of a government should be ...
4. Rousseau thought "man was born free, but ..."
5. The title of Rousseau's book was the ...

PART 3

The Influence of Enlightened Thinkers

*divine treason
toleration*

Enlightened thinkers were interested in more than just how people should be governed. They wanted to study and improve every part of a society. These enlightened thinkers wanted to change or reform the institutions, traditions, and customs which they thought were not reasonable for their societies. Generally, enlightened thinkers believed that a society should allow individuals political, economic, and religious freedoms. Enlightened thinkers thought that allowing more freedom and liberty in a society appeared to be the most reasonable approach to improving the lives of individuals.

In France, during the middle of the 1700s, there were many people who criticized their societies. They were known as "philosophes" [FIL oh sofs], the French word for "philosophers." The philosophes were mostly writers and artists who were convinced that most social problems could be solved by using reason. During the 1700s the movement by writers and artists to question their society is called the Enlightenment. Although the enlightened thinkers were found throughout Europe, the center of Enlightenment was the city of Paris.

Salons Attract Enlightened Thinkers

An important part of the Enlightenment was the need to freely exchange and discuss new ideas. In the city of Paris, wealthy women invited writers, artists, and educated nobles to gather socially in their homes. These meetings were known as salons. During the evening, a guest might recite a poem, or another guest might perform a musical selection. New books or plays as well as the latest scientific ideas were discussed. With so many intelligent, well-educated people in attendance conversations at the salons were often lively.

The most famous of these salons was given by Marie Therese Geoffrin [zoh FRAHN]. Every Monday and Wednesday she gave dinner parties that were attended by some of the most important people of the Enlightenment, including Jean Jacques Rousseau. Madame Geoffrin's salon was so influential that Catherine the Great, the ruler of Russia, paid someone to attend the dinners so that she would know what had occurred.

Voltaire Criticizes French Society

One of the most important enlightened thinkers was Francois Arouet [AH rweh]. He called himself Voltaire [vol TAIR]. Voltaire was born in Paris in 1694. Throughout most of his life, he was critical of

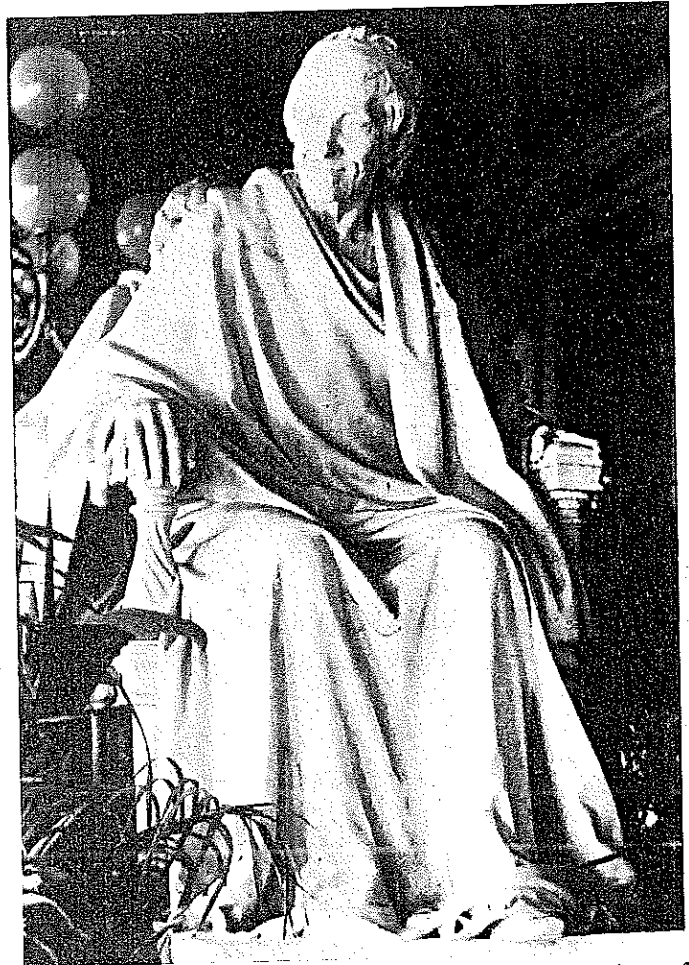
the wealth and privileges of French kings and nobles. King Louis XV twice put him in jail to silence his bitter criticism. Although trained as a lawyer, he spent his life as a writer. He wrote histories, poetry, and over fifty plays.

Voltaire firmly believed in free speech and a free press. He also supported freedom of religion. Voltaire was especially concerned that government or any other authority not interfere or deny individuals these basic rights. Voltaire defended the right of the individual to think and say whatever he pleases. He is reported to have said, "I do not agree with a word you say, but I will defend to the death your right to say it."

Voltaire lived a long life. His clear mind and sharp wit made him one of the most popular and influential persons who lived during the Enlightenment. He died in 1778 at the age of 84, eleven years before the French Revolution.

Publishing the First Encyclopedia

Denis Diderot [DEE dah roh], a Frenchman, planned to publish in a set of books all the new knowledge



Voltaire was one of the greatest thinkers of the Age of Reason. He believed strongly in the rights of individuals to think, speak, and write freely.

discovered during the Age of Reason. Diderot said his goal was nothing less than "to assemble the knowledge scattered over the face of the earth,...and to transmit it to those who come after us...." Beginning in the 1740s, Diderot spent thirty years working on his encyclopedia. The term "encyclopedia" meant a course of general education. More than two

Frauds, Fakes, and Quacks

During the 18th century, scholars called on people to use their reasoning ability to solve problems. One writer challenged people to "have the courage to use your own intelligence!" But as in any other period of history, there were still many educated and uneducated people who failed to use reason to think clearly. Even in the Age of Reason, there were still fakes who fooled people and there were still plenty of frauds who cheated people. There was even a new kind of faker called a quack. Quacks were people who convinced the sick that they had "scientific cures" for illnesses.

Medical quacks used many methods to "cure" people. One man treated patients with a special metal instrument. He claimed that the metal could draw the illness out of people. The metal instrument was given an impressive scientific-sounding name. The quack called his medical tool, "Metallic Tractors." Even careful thinkers like Benjamin Franklin thought that "Metallic Tractors" could cure a person of illness.

The use of magnets to cure illnesses was also popular. Franz Mesmer claimed to have discovered the power to heal by using "animal magnetism." This cure was supposed to work in different ways. With one method people sat around a tub of water with ropes tied to their bodies. Somehow the "animal magnetism" flowed from the tub of water to the patients. "Animal magnetism" was actually a mystery to Mesmer's patients, as well as to Mesmer himself.

One man claimed that he had developed a completely new science. He believed that he could know a person's character by examining his face. He even had a practical use for his discovery. He suggested that judges need only look at the facial features of people accused of crimes to determine their guilt or innocence.

In England, many people were convinced that a certain woman named Mary Tofts could give birth to rabbits! As unbelievable as it may seem, she became so popular that the king of England was willing to give her a yearly pension. Mary Tofts' foolish claim was found out when it was learned that someone was secretly buying rabbits for her at the local market.

hundred important enlightened thinkers, such as Rousseau and Voltaire, wrote articles for the encyclopedia. Madame Geoffrin, famous for her salon, helped finance Diderot's work.

The encyclopedia was not just a collection of articles exploring new areas of learning. The encyclopedia called into question the teachings of authorities in every field of

learning. After the first volume was published in 1751, Diderot feared that he would be imprisoned by the French government. Twenty-one years later, the encyclopedia was completed with the publication of the 28th and final volume. Thousands of sets of the encyclopedia were sold in France and other countries of Europe. The work of Diderot and the other Encyclopedists,

as they were known, helped spread the ideas of the Enlightenment.

Enlightened Monarchs

Eventually the ideas of the Enlightenment influenced several monarchs in Europe. Monarchs who accepted the importance of using reason in governing their country were called "enlightened monarchs." Voltaire believed that the best form



Maria Theresa of Austria was a strong monarch who fought Frederick the Great for control of German lands. She reigned from 1740 to 1780. One of her children was Marie Antoinette who later became the Queen of France.

of government was one ruled by an enlightened monarch. He argued against democracy. He wrote, "I hate the idea of government by the masses." Voltaire lived and worked for two years as a writing teacher for the most famous enlightened ruler — Frederick the Great, who ruled Prussia from 1740 to 1786.

Frederick the Great of Prussia

Frederick the Great rejected the idea that a king ruled by *divine* right because he thought it unreasonable. Frederick argued instead that he was king because he was the most capable person. He called himself the "first servant of the state." He wrote to Voltaire that his most important responsibility was "to fight the ignorance and the prejudices in [his] country." He said, "I must enlighten my people." Frederick the Great favored reforming his country. He changed the court system to make it more just. Except for murder or *treason*, he banned torture as a means of making people confess to a crime. He urged the *toleration* of different Christian religions. He improved the lives of German farmers by giving them seed and rebuilding homes and barns. Voltaire was so impressed with Frederick that he was the first to call him "Frederick the Great."

Empress Maria Theresa of Austria

Other European rulers were influenced by the Enlightenment. Each in their own way tried to change old, long-standing practices to improve the lives of their people. In 1774 Empress Maria Theresa of Austria used government money to establish schools for all children between the ages of 6 and 13.

STOP AND REVIEW

1. Who were the "philosophes"?
2. What was the purpose of a salon?
3. Why would Voltaire be considered a French "philosophe"?
4. Why did Diderot want to publish an encyclopedia?
5. Name two enlightened monarchs.

PART 4

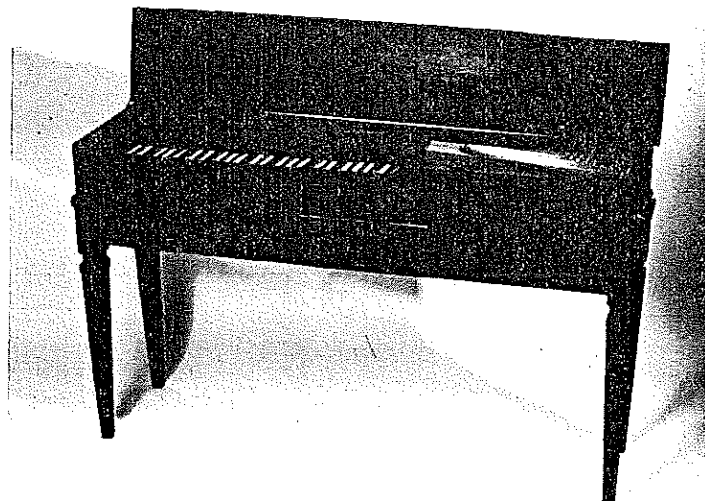
Enlightenment Ideas Influence Artists

composer

The ideas of the Enlightenment did not just influence scientists, philosophers, social reformers, and rulers. Artists were also influenced by the idea of an orderly universe governed by natural laws. Painters, musicians, and writers emphasized order and reason in their works of art and literature.

New Musical Forms Developed

The Age of Reason produced important new musical forms. During the end of the 1600s and early 1700s, a form of music called "baroque" [ba ROAK] became popular. The term



The clavichord was a popular keyboard instrument during the 1600 and 1700s. It fell out of favor when the piano was invented.



During the Age of Reason, dance reflected the ideas of the times. Dances were orderly and followed a precise pattern of movement. The minuet was one of the better-known dances of the time.

baroque means odd or bizarre in French. Baroque music was more complex than the simpler sounding Renaissance music. One important example of baroque music is called the "fugue" [fewg]. A fugue is a form of music where the *composer* repeats the melody in various ways using different instruments. The

melody might be heard first on a violin. Then the composer slightly changes the melody and repeats it on another instrument, such as a trumpet. Often two or three melodies are used in a single fugue. Johann Sebastian Bach and George Frederick Handel were the greatest baroque composers.

Classical Music

By the mid-1700s, another new style of music appeared. Following the ideas of the Enlightenment, the new music was orderly and balanced. Like many other artists, musicians admired the order and balance of the art of ancient classical Greece. The new music came to be known as classical music. The classical period of European music lasted from 1750 to 1820. Classical musicians developed new forms of music that are still popular. One of the most important of the new forms was the sym-

phony. A symphony is a long musical work played by an orchestra made up of many different instruments.

Two of the most important classical composers were Joseph Haydn [HIGH den] and Wolfgang Amadeus Mozart [ah ma DAY us MOH zart]. Joseph Haydn is known as the "father of the symphony." He was the first European to compose a complete symphony using string and woodwind musical instruments. Amadeus Mozart was the student of Haydn. Mozart was a musical genius. He began to compose music at the age of five. He was performing on the piano for European nobles at the age of eight. As a youngster, he even gave a performance for the king of England. He wrote his first opera before his 13th birthday. During his short life, Mozart wrote more than 600 musical works. His music is more popular today than when he was alive. His operas, *The Magic Flute* and *The Marriage of Figaro*, are performed worldwide. Yet, when Mozart died at the age of 35, he was so poor that he was buried in an unmarked grave.

Writers Examine Human Nature

Writers during the Age of Reason used their careful and thoughtful observation to point out the foolish actions of people. In 1726 Jonathan Swift published *Gulliver's Travels*. Swift used humor to point out how foolish human beings can be. In his novel *Robinson Crusoe*, Daniel Defoe told the story of a man shipwrecked on a deserted island.



Mozart was a musical genius. As a young boy he shocked people with his talent. Although he died young, he created some of the world's most beautiful music.



Moliere was one of the most important playwrights in 17th century France. His plays made fun of the wealthy, noble class of France.

Based on a true story, Defoe told an exciting tale of a man forced to live alone in nature far from his civilized world. The plays of the French playwright, Moliere [moh LYER], made fun of the behavior of French nobles and middle-class people. The serious study of history also became popular during the Age of Reason. Historians were especially interested in the civilization of ancient Greece and Rome. Edward Gibbon wrote

an important study of the Roman Empire entitled *The Decline and Fall of the Roman Empire*.

▣ STOP AND REVIEW

Directions: Complete the following statements.

1. One example of baroque music is the ...
2. Orderly, balanced music played during the eighteenth century is called ...
3. Two important classical composers during the eighteenth century were ...
4. The author of *Gulliver's Travels* is ...
5. Edward Gibbon wrote an important history of the Roman Empire entitled ...

What Is The Enlightenment?

Immanuel Kant was a German philosopher (1724-1804) who supported the use of reason to solve human problems. People who accepted the idea of using human reason were said to be enlightened. In an essay written in 1784, Kant wrote an essay defining the term "enlightenment."

Enlightenment is man's leaving his self-incapacity to use one's intelligence without the guidance of another. Such immaturity is self-caused if it is not caused by lack of intelligence, but by lack of determination and courage to use one's own intelligence without being guided by another.... Have the courage to use your own intelligence! is therefore the motto of the enlightenment.

Through laziness and cowardice a large part of mankind, even after nature has freed them from alien guidance, gladly remain immature. It is because of laziness and cowardice that it is so easy for others to usurp the role of guardians. It is so comfortable to be a minor! If I have a book which provides meaning for me, a pastor who has conscience for me, a doctor who will judge my diet for me and so on, then I do not need to exert myself. I do not have any need to think; if I can pay, others will take over the tedious job for me. The guardians who have kindly undertaken the supervision will see to it that by far the largest part of mankind, including the entire "beautiful sex," should consider the step into maturity, not only as difficult but as very dangerous....

But it is more nearly possible for a public to enlighten itself: this is even incapable if only the public is given its freedom....

All that is required for this enlightenment is *freedom*; and particularly the least harmful of all that may be called freedom, namely, the freedom for man to make public use of his reason in all matters....

The question may now be put: Do we live at present in an enlightened age? The answer is: No, but in an age of enlightenment. Much still prevents men from being placed in a position or even being placed into position to use their own minds securely and well in matters of religion. But we do have very definite indications that this field of endeavor is being opened up for men to work freely and reduce gradually the hindrances preventing a general enlightenment and an escape from self-caused immaturity. In this sense, this age is the age of enlightenment and the age of Frederick [the Great]....*

*Immanuel Kant, "What Is Enlightenment?" in the *Philosophy of Kant*, Carl J. Friedrich, editor. (New York: Random House, Inc., 1949).

Stop and Review

1. Who was Immanuel Kant?
2. How does Kant define immaturity?
3. What does Kant say is the motto of the enlightenment?
4. What does Kant say is needed before the public can enlighten themselves?
5. Why did Kant believe that he was not yet living in an enlightened age?

SPOTLIGHT STORY

IN DEFENSE OF WOMEN'S RIGHTS

“I wish to see women neither heroines nor brutes; but reasonable creatures.” So wrote Mary Wollstonecraft in 1792 in her book, *The Vindication of the Rights of Women*. In Mary’s time women had few rights. They could not own property. They could not keep their own pay if they worked. If they were married, they had to turn their pay over to their husbands. Or, if they were not married, their wages were to be given to their fathers. They had few rights as wives. A husband could divorce his wife and take her children. A woman was forbidden to do the same. Even Jean Jacques Rousseau, who called for more rights for the common man, wrote, “Women have, or ought to have, but little liberty.” Mary Wollstonecraft would play an important role in fighting these views about women.

Mary Wollstonecraft was born in 1759 in London, England. Her father was a successful businessman. When Mary reached her teens, her father had become an abusive parent. Her mother was of little comfort to her. Her mother was more interested in her oldest son, Edward, than she was in Mary. While Edward was sent away for a proper education, Mary was allowed to attend a day school to learn French and written composition.

In her twenties, she started a school for small children. It failed when she was called to Portugal to help a friend with her first child. After returning to England, she wrote her first book, *Thoughts on the Education of Daughters*. It sold poorly.

Needing work she reluctantly took a job as a child’s governess for an upper-class family in Ireland. When she arrived in Ireland, she wrote, “I entered the great gates [of the house] with the same kind of feeling I should have if I was going to the Bastille.” The Bastille refers to a prison in Paris, France.

A year later her luck changed. She was offered a job as an editor. She published two more

1. What was the title of Mary Wollstonecraft's most important book?
2. What did Mary Wollstonecraft think of the French Revolution?
3. How did she show her interest in children?
4. What was Jean Jacques Rousseau's opinion on the rights of women?
5. Who was Mary Wollstonecraft's daughter, and why is she remembered in history?

Stop and Review

ment was noted nearly a hundred years later, in 1889, by two American women. Elizabeth Cady Stanton and Susan B. Anthony dedicated their book, *History of Women Suffrage*, to Mary Wollstonecraft.

Her daughter, Mary Godwin, grew up to be a writer like her mother. She is known to history as Mary Wollstonecraft Shelley. Her husband was the 19th century poet, Percy Shelley. Mary Shelley's book is still well-known today. She published it in 1818 when she was just 21 years old. Her book is the story of a scientist who created a monster. The scientist's name is the title of the book: Frankenstein!

books. One book was a collection of original stories for children. The other book was a defense of the French Revolution. This book sold well, but Mary was still not a very well-known writer. In 1792 she published her most important book, *The Vindication of the Rights of Women*. Vindication means that she intended to defend the idea of women's rights. Women, Mary Wollstonecraft argued, should have the same rights as men. A woman should be entitled to the same education given to men. In other words she strongly believed that women's minds should be developed and that they should be able to speak their minds as freely as men. She attacked Jean Jacques Rousseau for his narrow views on women. During these revolutionary times, her book became popular. Her name became well-known throughout Europe. Encouraged by her success, she began work on a history of the French Revolution. She married a man named William Godwin. Godwin was a free-thinking writer who had published a book on political justice. In August of 1797, Mary gave birth to a little girl. Ten days later, Mary Wollstonecraft died. She was 38 years old. Her place in the history of the women's move-

C H A P T E R

Chapter 18 Summary

In 1687 Isaac Newton published a book entitled *Mathematic Principles of Natural Philosophy*. In this book, Newton explained how the law of gravitation applied to the whole universe. People began to think of the universe as a huge machine that worked by natural laws. People who believed in scientific reasoning were called "enlightened" thinkers.

The period between the publication of Newton's book in 1687 to the start of the French Revolution in 1789 is called the Age of Reason. Enlightened thinkers directed their attention to the question of how societies should be governed.

Enlightened thinkers wanted to study and improve every part of a society. One of the most important enlightened critics of a society's institution was Voltaire. Voltaire believed that the best form of government was one ruled by an enlightened monarch like Frederick the Great of Prussia.

Ideas of the Enlightenment did not just influence scientists, philosophers, social reformers, and rulers. Artists were influenced by the idea of an orderly universe governed by natural laws. Painters, musicians, and writers emphasized order and reason in their works of art and literature.

Chapter 18 Review

I. Who Am I?

Directions: After you find the answer, rewrite the sentence using the person's name instead of the words "I" or "me."

1. My book on the *Mathematic Principles of Natural Philosophy* made people in Europe appreciate the value of scientific reasoning.
2. I argued in my book, *Leviathan*, that a ruler of a country should have absolute power.
3. I firmly believed that all people had basic rights that the government should not violate.
4. Every type of government, in my opinion, had a certain spirit as its foundation.
5. To me all individuals are born good and free.
6. I held the most famous salon in Paris.
7. My criticism of the French nobles landed me in jail.
8. I published the first encyclopedia.

II. True or False

Directions: Write *True* if the statement is true or *False* if the statement is false.

1. Isaac Newton was a popular artist during the Age of Reason.
2. Enlightened thinkers believed that reason could lead them to the truth.
3. Thomas Hobbes believed that freedom was more important than order in a society.
4. John Locke thought that people had the right to life, liberty, and property.
5. According to Montesquieu, the spirit of a republic is fear.
6. The philosophes praised the French king and nobles.
7. Diderot's encyclopedia challenged the views of many authorities.
8. Voltaire favored a democratic form of government.

III. Vocabulary

Directions: Match the words in Column A with the definitions in Column B.

- | | |
|--|---|
| <p>Column A</p> <ol style="list-style-type: none"> 1. predict 2. reasoning 3. toleration 4. treason 5. composer | <p>Column B</p> <ol style="list-style-type: none"> a. accepting of the different beliefs of others b. one who creates or writes music c. to give aid to the enemy of one's country d. to think logically about a problem e. to foretell a future event |
|--|---|

IV. Critical Thinking Skills

1. The enlightened thinkers during the Age of Reason believed that it was possible to make societies and people better by using reason. Do you agree with this belief?
2. What value is there to an encyclopedia?
3. According to Rousseau people are born good and it is society that creates bad people. Do you think that Rousseau is correct?