Chapter Seventeen: The Age of Reason

CHAPTER OUTLINE

New Heaven, New Earth: The Scientific Revolution
  The Advent of Infinity
  Man the Machine: Exploration of the Human Body
  Hard Facts and Pure Reason: New Modes of Thinking
  The End of Magic

The Lights Go On: The Enlightenment
  Common Sense
  Social Contracts
  Other Places, Other Customs

A Little Learning: Literacy and Education
  Pleasure Reading
  A Cat and a Catte: Women and Learning
  Halls of Reason: The Social Context

CHAPTER SUMMARY

The focus of chapter seventeen is the development of new schools of thought. A wide range of scientists, from Copernicus forward, explored alternative ways of thought, often in direct defiance of the Catholic Church. Some, like Galileo, recanted their findings to save their own lives; others were burned at the stake for their heresies. New and rediscovered forms of science, such as medicine, became important for the philosophes of the age. Artists and scientists began to explore the anatomy of the human body, and the manner in which it works. Anatomists began, for the first time, to understand the differences between the male and female bodies.

Many of the scientists influenced the philosophes of the age. John Locke responded to both Bacon and Galileo when writing his essays on government. Other thinkers, known as moderns, questioned the findings of the ancients and expanded on their ways of thinking. Previous explanations, including the use of magic, were disproved, as science made inroads into the occult. Magic did not entirely die, but it lost much of the impetus that had made it important in the Middle Ages. Rather, more practical explanations were offered, as the philosophes believed that the truth could be understood by everyone, and did not necessarily require explanation. The Enlightenment—the movement of philosophy and education which began in France and spread throughout Europe and into the colonies—remained dominated by the French, but welcomed in thinkers as diverse as Thomas Jefferson and Cesare Beccaria. The war on traditional thought would be fought on multiple continents.

These new waves in philosophy impacted more than just education. Unlike many of the previous philosophers, who believed that a life of contemplation was sufficient, the philosophes maintained that thought had to be put into action. As a result, many of the philosophes became involved in government, education, and other aspects of life. The most important of the philosophes, Voltaire, wrote extensively on a wide range of subjects, including industrialization and government. Other writers, including Diderot, Montesquieu, and Smith, wrote about changes that needed to be made in education, law, and economics. Their writings were initially welcomed by some monarchs (the so-called Enlightened despots), but the French Revolution brought a dramatic end to much of the Enlightenment movement. Exploration and travel by Europeans also brought the ideas of the Enlightenment to other areas, but most of the emphasis remained in Europe.

The Enlightenment led to great changes in the everyday lives of Europeans. More and more people engaged in pleasure reading, as rates of literacy increased. Many professions required a certain level of literacy, and the rates of literacy in the vernacular increased in virtually all areas. The invention of the printing press allowed for a wider audience for the writings of the Enlightenment figures, as well as other forms of literature. The standardization of the vernacular languages throughout Europe enabled more people to increase their knowledge of everything from economics to philosophy. This applied to women as well as men, as female literacy rates also increased. While the number of female authors was limited, those who were writing, such as Mary Wollstonecraft, wrote
works that survived for the ages. Women were also responsible for many of the novels that were written during this period, thus providing their contemporaries with reading material in both fiction and nonfiction.

**KEY POINTS**

**New Heaven, New Earth:** Scientists from Copernicus to Newton transform Western models of the cosmos (now it would be infinite, governed by universal laws, defined by mathematics); they explore the workings of the human body, search for clear, distinct truths, and discard magic and superstition.

**The Lights Go On:** Demanding hard facts, and guided by clear reason, the *philosophes* question the norms of politics and society, and create the culture of the Enlightenment.

**A Little Learning:** In an era of greater educational opportunities, as printing presses produce pamphlets, newspapers, and books, ideas are more rapidly disseminated than ever and the rate of literacy rises.

**SUGGESTED FILMS**

*Voltaire Presents Candide: An Introduction to the Age of Enlightenment.* Encyclopaedia Britannica, 34 minutes

*Civilization X: The Smile of Reason.* Time-Life, 52 minutes