Science And The Age Of The Enlightenment Essay, Research Paper

There were many people involved in the Scientific Revolution and the Enlightenment. Most of these people were fine scholars. It all started out with Copernicus and his book called On the Revolutions of the Heavenly Spheres. This book marked the beginning of modern astrology.

The current dispute at times echoes the tensions that existed in the sixteenth century between believers in the Copernican theory of the universe and the Ptolemaic established order, which preached that the earth was the center of the galaxy.

His theory was anathema to the church and a threat to the established way of thinking about the world and the people in it. Skeptical thinkers, such as Galileo and Kepler, produced treatises that helped build a case for an alternative way of viewing the solar system. It was a gradual shift in professional allegiances in educational evaluation. No promises can be made for the power of a new paradigm offers a new set of explanations of our educational system.

Descartes’ contemporary, the English philosopher Francis Bacon, took a somewhat stronger line concerning how conclusions should be reached. Bacon rejected deducing knowledge from self-evident principles and instead argued that only through observation and repeatable experiments could theories be built.

Bacon thus relied on proofs that could be demonstrated physically, not through deductive logic. He believed that the pursuit of scientific knowledge would enrich human life immeasurably.

Galileo’s lunar observations extend from 1609 to 1638 when failing eyesight compelled him to abandon his astronomical research. During these three decades, he discovered an important contribution to our understanding of three important aspects of the moon.

1. The discovery of the mountainous surface of the moon and the first lunar maps;

2. The discovery of the moon’s liberations;

3. The interpretation of the moon’s secondary light.

In 1632, Galileo was still firmly convinced that the moon always shows the same face to the earth and he sought to explain all the differences in his lunar observations. Galileo’s important discovery destroyed the age-old belief that the moon always presented the same aspect to the earth.

One of Newton’s early notebooks, Add. MS 3975 in the Portsmouth collection suggests a pattern for his early interest in alchemy. Originally, the notebook appears to have been a continuation of the section entitled Questiones quaedam Philosophiae in an earlier notebook (Add. MS 3996), a section which records Newton’s introduction to the mechanical philosophy of nature while he was still an undergraduate.

Meanwhile Newton’s introduction to the art involved a dimension beyond the intellectual. Among his papers is a collection of alchemical manuscripts, in three different hands, mostly of tracts, which have never been published.

Since Newton corrected a couple of the poems in the collection against Ashmole, where these specific ones were published, numbered quite a few of the recipes, and copied some of the tracts, we can be sure that he studied the collection with care.

John Locke, another English philosopher, considered these ideas but interpreted them differently. Locke supported the Parliament in the struggles with James II. He articulated the principles on which supporters of the Glorious Revolution acted in 1688, publishing them in his Two Treatises of Government in 1690. Much like Hobbes, Locke believed that people had first lived individually and then made a social contract. He also believed that people had given up only some of their individual rights and had kept others.

According to Locke, a ruler who violated these rights violated natural law and broke the unwritten social contract. The people had the right to overthrow such a ruler and replace him with one who pledged to observe and protect their rights.

Locke thus defended the actions of those who had forced James II to leave the throne, and provided a justification for offering the crown to William and Mary. Locke’s ideas would influence later revolutions in America and France as well.

Voltaire acquired a great admiration for English liberty, commerce, science, and religious toleration. His angriest words were directed against established Christianity, to which he attributed many of the ills of French society.

He regarded Christianity as “the Christ-worshiping superstition,” which someday would be destroyed “by the weapons of reason.” Many Christian dogmas are incomprehensible, yet Christians have slaughtered one another to enforce obedience to these doctrines.

After serving two sentences in the Bastille, Voltaire fled for a time to England. He commented on the political system of England and English customs in Philosophical Letters (1734), which helped popularize English ideas in France.

When he returned to France, Voltaire attacked everything he considered sham or superstition. He wrote a variety of works, including plays, histories, essays, poems, and books. His novel Candide is a satire that ridicules everything from oppressive government to prejudice and bigotry.

Although England and its allies curbed Louis XIV’s expansion of French rule and maintained the balance of power, France remained both the strongest political power and the dominant cultural influence in Europe. People throughout Europe spoke and wrote French. They all read the Encyclopedia, a handbook or reference book on the Enlightenment, which became the most famous publication of the period.

The philosopher Denis Diderot edited the Encyclopedia. He and his co-editor, Jean d’Alembert, published the first edition of this book in 28 volumes between 1751 and 1772.

The leading philosophers all contributed articles to the Encyclopedia. Their writings criticized the church, the government, the slave trade, torture, taxes, and war. They covered nearly every subject – many of them technical in nature – in the rational, questioning style of the Enlightenment.

When delegates to a Second Continental Congress met in Philadelphia in May of 1775, many still hoped for reconciliation. Then news of the fighting at Lexington spread and attitudes changed. A little more than a year later, the delegates voted to declare their freedom from Great Britain. On July 4, 1776, they adopted the Declaration of Independence, which established the United States of America as an independent nation. Thomas Jefferson, the declaration’s principal author, expressed American settlements with nobility and grandeur.

The Declaration of Independence shows the influence of Enlightenment philosophers such as John Locke. It states that all men are created equal and have certain “unalienable rights.” Among these rights are “Life, Liberty, and the pursuit of Happiness.” This idea – the right to equal opportunity and equal justice – is the foundation of our democratic ideal.

Although the ideal was not stated to include women or slaves, the demand for a broader equality and justice concerned many people. The declaration also stated that all powers of government come from the people. No government can exist without the consent of its citizens because citizens create governments to protect individual rights. These were extreme ideas. It’s one thing to reject absolute monarchy. It is quite another to give people the right to abolish a government that does not uphold the rights of the citizens.

Many historians see a relationship between the Enlightenment and the French Revolution. The philosphes were not revolutionaries, but their attacks on the pillars of the established order helped to create revolutionary psychology.

As Henri Peyre observes:

Eighteenth-century philosophy taught the Frenchmen to find his condition wretched. Or in any case, unjust and illogical and made him disinclined to the patient resignation to his troubles that had long characterized his ancestors. . . The propaganda of the “Philosphes” perhaps more than any other factor accounted for the fulfillment of the preliminary condition of the French Revolution, namely discontent with the existing state of things.

As the Revolution progressed, its leaders utilized the philsophes’ ideas and language to justify their own reform program. Because the bourgeois were the principal leaders and chief beneficiaries of the French Revolution, many historians have viewed it, along with the English revolutions of the seventeenth century and the growth of capitalism, as “an episode in the general rise of the bourgeoisie.” A decadent and reactionary aristocracy sought to regain the powers that it had lost under Louis XIV.

Many important people were involved in the Scientific Revolution and the Enlightenment, as you can see. If it weren’t for these people accomplishing the things that they did, our world would be a different place than it is today.

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