in philosophy and, as regards theological truth, to be at least erroneous in faith."

The next day Pope Paul V was notified of their opinion. He asked Cardinal Bellarmine to warn Galileo that if he did not abstain from discussing his theory as fact, he could be imprisoned. Galileo accepted this warning, and all was quiet for sixteen years. But in 1632 Galileo published his Dialogue on the Great World Systems, which once again advanced heliocentrism. He was called before the Inquisition. The proceedings were not of the highest quality. Galileo's enemies produced a forged document stating that Galileo had been absolutely forbidden to teach heliocentrism, instead of being forbidden to teach it as fact; and Galileo lied about the circumstances of the publication of his book. The Inquisition, on June 22, 1633, decreed that Galileo had rendered himself "vehemently suspected of heresy." He was to renounce his errors before the Inquisition, which he did, and he was placed under comfortable house arrest. That his arrest was not painful is shown by the fact that while under arrest he wrote an important book on mechanics, including his theories on acceleration, motion and inertia.

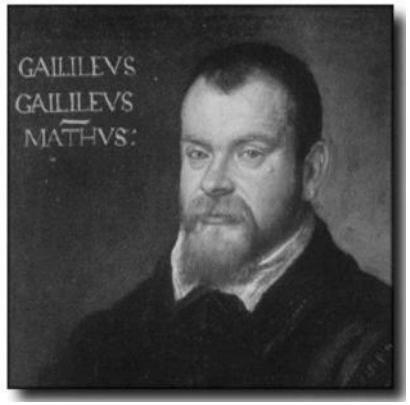
With these facts, we can now refute the two charges. As for the first charge, Galileo was clearly not persecuted, nor did he seem to suffer much for his views.

Such punishment as he received, he brought upon himself by refusing to moderate his statements or to take account of the dangers to the faith of ordinary people by widespread teaching of his ideas.

As for the second charge, at no time did any official Church teaching condemn heliocentrism as heretical. The Pope did not, nor did any bishop, nor did the Inquisition itself. The only statement was a theological opinion issued by the theologians of the Holy Office. Theological opinion does not represent the Magisterium (official teaching) of the Church. Other scientists then and later were perfectly willing to accept Church guidance in this area, and gradually heliocentrism came to be accepted.

ACKNOWLEDGEMENT
Carroll, Anne W. "Galileo."
In *Christ the King: Lord of History*. 276-279
Rockford Illinois:
Tan Books and Publishers Inc., 1994
Reprinted by permission of the author

Pope John Paul II Society of Evangelists
P.O. Box 5584, Bakersfield, California 93388
E-mail: info@pjpiisoe.org Phone: 661 393-3239
Https://www.pjpiisoe.com Pamphlet 230W



GALILEO

Anne W. Carroll

In terms of its effect on science, the scientific revolution was all to the good. However, since the universe came to be seen as working according to rigid laws, God began to be thought of as unnecessary to its day-to-day operation. Out of the scientific revolution came a controversy which has been used ever since to attack the Church, the Galileo case. There are two main areas of attack: that the Church persecuted and severely punished Galileo for his scientific beliefs and that the Church condemned his scientific beliefs as heretical, thus showing that the Church is not infallible. Both of these accusations will be examined.

The Scientific Revolution

History in the seventeenth century was not made only on the battlefields and in the cloisters. During this century, there was a great explosion in scientific knowledge. New inventions such as the telescope led to new discoveries. Probably the greatest genius

of the scientific revolution was Isaac Newton (1642-1727). This brilliant Englishman made many of his discoveries by the time he was 25. At the age of 24 he published his theory on the universal law of gravitation. He explained planetary motion and developed laws of motion. He wrote the Principia Mathematica. He made discoveries in optics and discovered the principles of calculus. Though many of his theories have been superseded by Einstein's work, his laws accurately explain the visible motions of the universe.

Another Englishman, William Harvey, played an important role in the area of medicine. In 1628 he discovered the circulation of blood. Harvey emphasized the use of experiment, observation and dissection in medicine, rather than relying on classical authorities.

In terms of its effect on science, the scientific revolution was all to the good. But it had harmful consequences philosophically and theologically. Philosophically, there came to be an exaggerated emphasis on the powers of the human mind and a kind of intellectual pride. Also, many men adopted determinism. Since the universe was seen to follow unalterable and predetermined laws, it was thought by many that man could not alter his destiny either, thus denying free will.

This intellectual pride led to the theology of Deism: the belief that God had created the universe but exercised no providence over it nor cared about individual human beings. Since the universe seemed to operate according to rigid laws, God was thought to be unnecessary to its day to day operation. Although most men still acknowledged God as Creator, many intellectual leaders saw no further need of God after the creation, and certainly no need of Him in their daily lives.

The majority of people prior to the time of Galileo believed in geocentrism: that the earth was the center of the universe and that all heavenly bodies revolved around the earth. This theory seemed to accord with Scripture, which in one place, for example, speaks of Joshua making the sun stand still. Also, since the Son of God became incarnate on earth, it seemed fitting that the earth be the center of the universe. However, in 1543 Copernicus, a Polish monk, had published Revolutions of the Celestial Orbs, which had advanced the theory of heliocentrism: that the sun was the center of the solar system and that the earth revolved around the sun. The book was dedicated to Pope Paul III and received a respectful hearing in the Vatican. Martin Luther, on the other hand, violently condemned it. Protestants based their religion on a literal interpretation of the Scriptures. Therefore, if a scientific theory contradicted the literal meaning of a passage in Scripture, they would either have to condemn the theory or abandon their belief in Scripture. Since they had nothing but Scripture, they were forced to condemn the theory.

Enter Galileo. He held the chair of mathematics at the University of Pisa and later at Padua, where he was nicknamed "the Wrangler" because he was always starting arguments. He acquired and improved a telescope, discovering the moons of Jupiter, the motions of which were an argument against geocentrism. He published a booklet called Starry Messenger and began to push for heliocentrism.

In 1611 Galileo went to Rome to advance his theories, where he had a cordial audience with Pope Paul V. Cardinal Robert Bellarmine, a Jesuit scholar, was intrigued with Galileo's theories, but concerned with the disruption a too hasty publication of them could produce in the minds of ordinary Catholics. He was especially concerned because Galileo had a tendency to mock his opponents and overstate his case.

The Church officials were willing that heliocentrism be taught as a hypothesis (not a fact) and discussed in scientific circles, so long as the faith of the ordinary people was safeguarded. But Galileo began to teach his theory loudly and widely, insisting that it was proven fact. It was not yet proven; not enough data existed to prove it. Finally, on February 19, 1616 two propositions advanced by Galileo were submitted by the Court of the Inquisition to the Holy Office in the Vatican for advice regarding their orthodoxy: 1. "the sun is the center of the world and hence immovable of local motion" 2. "the Earth is not the center of the world, nor immovable but moves according to the whole of itself." On February 24 the theologians in the Holy Office stated that they found the first proposition "foolish and absurd philosophically and formally heretical..." and the second "to receive the same censure