

# **An Analysis of Galileo's Views of Religion and Science**

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In the 1800's Draper and White proposed a view of the interactions of science and religion that has become a standard accepted perception of the relationship between the two. While science had been utilized as a variety of studies within a religious context for many years, Draper and White's 'Warfare Thesis' suggests that science has always inherently been in conflict with religion, that the advancement of one implies the other remains stationary, if not impeded by the other's advancement. While certain periods of history record struggles between those pursuing particular areas of scientific study and established religious institutions, it is inaccurate to state either that all scientific study has been in conflict with theological ideas or that any particular area of scientific study has always been in conflict with religion. Historical record, when studied objectively and within the context of cultural changes throughout time, shows a more complex interaction between science and religion, which the Warfare Thesis fails to fully explain.

Proponents of the Warfare Thesis may find many instances they claim are supporting of this thesis from the execution of Socrates to the house arrest of Galileo, pointing out that institutions in power (political or religious in nature) have used their influence to extinguish ideas that were in opposition to their own ideologies. In the example of Galileo, larger cultural and social issues are at work than a simple religion versus science phenomenon. One religious political issue was the Catholic Reformation, which had caused serious divisions in the Catholic Church and threatened to undermine its authority by asserting the Church was not the final word on Scriptural interpretation. Understandably, leaders of the Catholic Church sought to squelch the idea of individual interpretation and reassert Church authority.

Galileo's Dialogues came at a very inopportune time for the Church. Firstly, the several of Galileo's works proposed ideas of a heliocentric cosmos and notions of celestial imperfections (such as the craters of the moon and sunspots). These ideas were contrary to established Aristotelian and religious beliefs of uniform circular motion, in that Jupiter had moons of its own, and of celestial perfection, with which telescopic observations disagreed. The unnerving quality these ideas would have had to philosophers brought up in traditional understanding and to the Church, were multiplied by the political atmosphere. Copernicus' works had, perhaps inadvertently, furthered the Protestant cause in it was based on individual observation and interpretation. When Galileo became a strong Copernican supporter, resentment against Copernican ideas coupled with Galileo's own additional theories, which many Church authorities considered 'dangerous', made Galileo a prime target for anti-Reformation supporters.

Galileo became extremely frustrated at the resistance to his ideas, as exemplified in Galileo's Letter to the Grand Duchess Christina. In the introductory portion of the document, Galileo vents his anger against his critics who, in his words, "published some writings full of useless discussions and sprinkled with quotations from the Holy Scripture, taken from passages which they do not properly understand and which they inappropriately allude" (Galileo, The Galileo Affair, 87). The first portion of this letter seems to be underlined by the anger of Galileo, and how they inappropriately 'hide behind Scripture' to refute Galileo's ideas, as shown in the passage, "they have decided to try to shield their fallacies of their arguments with the cloak of simulated religiousness

and with the authority of Holy Scripture, unintelligently using the latter for the confutation of arguments...” (Galileo, The Galileo Affair, 89).

It is important to note that Galileo does not reject his faith. Moreover, he does not reject the authority of the church, as supported by his statement, “...experts in Sacred Councils. I feel reverence for these authorities and hold them supreme, so that I should consider it most reckless to want to contradict them when they are used in accordance with the purpose of the Holy Church” (Galileo, The Galileo Affair, 93). Rather, Galileo is repeatedly rejecting what he considers to be inappropriate interpretations of Scripture, not those who interpret it. Galileo sees scripture as an allegorical tale of God, not a literal account of the world, and thus rejects literal interpretations of passages such as the Joshua story of the sun stopping in its path across the sky, in his belief that true scientific study cannot be refuted by example, and that Scripture is not meant to be a physical example.

It is from these various passages in Galileo’s Letter to the Grand Duchess Christina that one may draw the opinion that Galileo would not agree with the dichotomous Warfare Theory. Those who used Scripture against Galileo in ways he considered inappropriate no doubt frustrated him. By refusing to accept his critics’ arguments on the basis they were not interpreting scripture correctly only exacerbated anti-Galilean sentiments as this sort of statement would be more expected of a Reformationist than a devout Catholic in this period of Church division. Galileo instead saw science as ways to understand the physical world, and Scripture (or religion in this case) as ways of explaining the spiritual. To Galileo, there was no conflict of interest in

advancing scientific study, but quite the opposite: what frustrated Galileo was that his opponents tried to create a 'warfare' between science and religion, though he saw both as harmonious and not necessarily mutually exclusive.

As for Draper and White's argument that scientific advancement has been impeded by religious doctrines, there is implicit evidence against an inevitable conflict in that the church was a patron for some scientific studies, including astronomy. To simply look at the attitudes towards scientific discoveries during a period of Catholic division and instability and make the argument that these attitudes have existed for all time would be a fallacy. The particular attitudes of Galileo's time were not shared by all people and were products of a particular social and cultural upheaval.

## **Bibliography**

Finocchiaro, Maurice A., The Galileo Affair. Berkeley: University of California Press, 1989. Pp 87-118.