

## Galileo Goes to Jail

What do you know about Galileo? And what have you heard about his role in the history of the relationship between science and religion? The imprisonment and torture of the scientist Galileo (1564-1642) by the Church for advocating Copernicanism and replacing old religious dogma with true scientific knowledge is a widely told story. But is the popular version really true to the historical events?

What really happened with Galileo? And why might such a rumor persist despite historical evidence to the contrary? When Galileo perfected his newly-developed telescope, it gave him access to data unavailable to other scientists. Simply put, he could see things that others could not see. As a result, Galileo became convinced of Copernicus' theory of the earth's movement around the Sun. In this he was not going along with widely accepted science in the face of inflexible theology. The data supporting his views was inaccessible to others, and went against widely accepted *scientific* views of the day, even though it eventually proved to be correct.

Other scientists, lacking physical evidence and suspicious of data coming only from the one source provided by this new-fangled technology, were hesitant to overturn both accepted scientific theory *and* a traditional understanding of Scripture on such an uncertain basis. In fact, they attacked Galileo's ideas because they were unable to corroborate them. When church leaders cast doubt on his views, they were echoing the views of most scientists at the time. Moreover, they did not reject the theory out of hand, but declared it a possibility rather than an established fact. It is perhaps hardly surprising that theologians did not immediately rush to definitively overturn the consensus view based on one person's findings with a new device. The idea of heliocentrism itself was relatively uncontroversial by this point, and Pope Gregory XIII had used it to reform the calendar. The theory was not being opposed by church institutions, but it was still unproven.

In response, Galileo brashly refuted the *biblical* arguments against Copernicanism, wading into theological discussions in a manner that attacked the Pope, writing a dialog in which the Pope's words were put in the mouth of a character called Simplicio (simpleton). This alienated him from former Catholic church allies and lost him the Pope's earlier support. In a post-Reformation era where the Church's authority was regularly under attack, lay peoples' reinterpretation of Scripture was subjected to extra scrutiny. Galileo's way of interpreting the Bible went outside authorized channels and smacked of Protestantism. He got into trouble more because of politics than science. Although his publications contained neither a categorical assertion of Copernicanism nor a denial of the authority of Scripture, Galileo's way of approaching the Bible and outspoken approach led to his being charged with "suspicion of heresy." Eventually, under ecclesial pressure, he retracted his advocacy of Copernicanism.

For his views, the Church sentenced Galileo to “formal imprisonment” and “rigorous examination,” and widely publicized this as a deterrent to others. This led many to envision Galileo suffering torture and rotting in an inquisition prison. But because of Galileo’s popularity and a measure of ecclesial good will, he instead served nine years in comfort under house arrest. During this time he continued to prepare scientific writings. His imprisonment and torture never happened. They survive only as myth—even after relevant documents came to light showing that Galileo had suffered neither.

Why was it such a popular move to exaggerate what Galileo suffered? The story seemed to pit a backward and superstitious Church against new, brave scientific luminaries, and this was a useful storyline for those supporting the idea of conflict between faith and science.

It takes attentiveness to historical detail to acknowledge the complexity of the Galileo affair, and cultural debates are often conducted in more simplistic terms. Galileo’s punishment stemmed from a variety of interconnected factors: a series of disputes about novel and inaccessible scientific data, the development of a new technology, the personal offense caused by Galileo’s brash response, and his bold claims in the field of biblical interpretation, in which he lacked authority.