The Galileo Inquisition Fully Explained

Summary: The Catholic Church never opposed the heliocentric theory invented by Nicolaus Copernicus and held as truth by Galileo Galilei. The inquisition of Galileo was on theological grounds alone, because he blurred the lines between science and religion, by stepping outside his role as a scientist and attempting to reinterpret Scripture. His final condemnation came after writing a book that appeared to insult the pope.

THE CATHOLIC KNIGHT: Since the Galileo inquisition is a topic of so much interest in the area of science and the Catholic Church, I thought I would use this entry to fully expand on it, simply to give my readers the complete and total explanation they deserve.

When one looks back over the history between scientific discovery and the Catholic Church, we find that overwhelmingly, the Church has been a supporter of the sciences, and many of the scientific advances we take for granted today, were in fact discovered by Catholic priests. When one looks back on the span of history, there is but one blip in the curve, and that is the Galileo case, also known as the "Galileo controversy," the "Galileo affair" and the "Galileo inquisition." In fact, when critics of the Catholic Church charge that she is guilty of obstructing scientific advances, they can only sight but one case as "evidence." It is the Galileo inquisition. Even if the sensationalist charges they propose were true, it would still be a pretty good record for the Catholic Church. Think of it, out of thousands upon thousands of scientific discoveries since the Church's founding, and the hundreds upon hundreds of scientists who discovered them, only one (Galileo) was tried for heresy. That's not bad really. Fortunately, for the Catholic Church, those sensationalist charges are not true, and in fact most people are grievously under informed, if not misinformed altogether, about the facts surrounding the Galileo inquisition.

The popular media (movies, television, newspapers, magazines) doesn't help much. Most of the time the same old generalizations and glaring omissions can be found there. This can be attributed either to blatant bias toward the Catholic Church, or else just the intellectual laziness of people not wanting to do their homework. Usually it's the latter. It's just too darn easy to say the Church tried Galileo simply because he believed heliocentrism - the theory that the earth orbits the sun. I can't count the number of times I've heard it told this way. I was amazed listening to a public radio program one day when the reporter stated that Galileo was tried for heresy because he opposed the "Church dogma" that the sun orbits the earth (geocentrism), and claimed that the earth orbits the sun (heliocentrism). My jaw dropped wide open! This was a supposedly reputable news broadcast. Not only did the reporter get it wrong about why Galileo was tried for heresy, but he even made the error of claiming that geocentrism (the theory the sun, moon and planets obit the earth) was "Church dogma." "Unbelievable!" I shouted back to the radio. For the few of you who may not know, a Church "dogma" is a doctrine that is required for belief if one is to be considered a Catholic in good standing. The fact is, the Church has never held geocentrism, heliocentrism, or any other scientific theory as a "dogma" in the entire 2000 years of its existence. Church "dogma" is reserved exclusively for theological matters; dealing with God, the Bible and the Saints. It defies the very mission of the Church to start holding scientific theories as dogma. This reporter's blunder could once again be ascribed to intellectual laziness, born of a journalist more eager to finish a story than to research his "facts."

The fact is that the Catholic Church has never condemned heliocentrism. The theory itself was formulated by a Catholic priest named Nicolaus Copernicus in 1543 AD. Copernicus dedicated his publication on the matter to Pope Paul III, and the theory was well received in the Catholic Church. It was however, viciously attacked by Protestants, who called it heresy, because according to their literal interpretation of certain Scriptures, they claimed it defied the Bible. Not only did the Protestants attack Copernicus over heliocentrism, but they also leveled their attacks against the Catholic Church as well,

claiming that the Church didn't take the Bible seriously enough to put down Copernicus' heliocentric "heresy."

As the Catholic Church defended Copernicus' right to construct scientific theory and hypothesis, Protestants attempted to use heliocentrism as a wedge issue, to solidify the anti-papal claims of the Reformation, and perhaps drive more Catholics away from the Church. In short, the charge leveled against the Catholic Church was that she didn't take the Scriptures seriously because she allowed scientists and educators to teach the heliocentric theory at Catholic universities throughout Europe. This charge caused some Catholic clergy to react negatively, seeking to prove to the Protestants that the Catholic Church does take Scripture seriously.

Nearly 70 years later, in this post-Reformation turmoil, a scientist named Galileo Galilei enters the scene. Galileo's main contribution to Copernicus' heliocentric model was his observations made by telescope, which seemed to confirm Copernicus' theory by observational experiment. Still many questions remained, and the geocentrists posed some good ones that Galileo could not answer. Indeed no man would answer them for some time, because not enough had been known about the universe yet. Galileo's telescopic observations effectively elevated the heliocentric theory to scientific law in Galileo's mind, but the scientific community still had more questions. Galileo became a fierce advocate of the heliocentric model. He published his findings in 1610 and then took his telescope to the Jesuit Collegio Romano (Jesuit College in Rome) for demonstration in 1611. His findings were well received, and Galileo was made an official member of the Accademia deiLincei (literally the "Academy of the Lynxes" a.k.a. "Lincean Academy"), a prestigious pontifical school of science. During this visit he wrote to a friend...

"I have been received and shown favor by many illustrious cardinals, prelates, and princes of this city."

- Galileo Galilei, Rome 1611

Galileo was given a long audience with Pope Paul V, and the Jesuits held ceremonies in his honor for a full day, wherein scholars of all types personally verified Galileo's telescopic observations. There is more than ample evidence from the time period to demonstrate even to the most amateur historian that the Catholic Church thought there was no harm in teaching new and novel scientific theories such as heliocentrism.

Galileo's troubles did not come about until 1616, when a religious opponent of heliocentrism, by the name of Father Tommaso Caccini, denounced it as heresy. Keep in mind the political time period here. The Catholic Church was still reeling from the after-effects of the Protestant Reformation, and Protestants had been condemning Copernicus' theory of heliocentrism for nearly 70 years. The charge was that it contradicted the Bible, and Catholics didn't take the Bible seriously enough to do anything about it. Father Caccini would appear to be one of the many Catholic clergy heavily influenced by this argument at the time, and eager to prove to his flock (and to the Protestants) that Catholics do indeed take the Bible seriously, and they were willing to prove it!

Father Caccini was well known for his fanaticism, and some historians have questioned the sincerity of it, since it was usually attached to personal advancement within the Dominican order. His highly controversial sermons, which often vilified anyone whom he disagreed with, eventually resulted in discipline by the Archbishop of Bologna. Caccini was a member of the Pigeon League, whose founder opposed heliocentrism outright. There he may have collaborated with another member of the League by the name of Friar Niccolò Lorini. After Galileo's Letters on Solar Spots in 1613, the friar unleashed

a scathing sermon against Galileo based on the Book of Joshua where the Scriptures say the sun and moon stopped in the sky for a whole day (Joshua 10:12-14). His argument against heliocentrism being that it must be heresy since the Scriptures say the sun and moon stopped in the sky, implying that the earth is at the center of the universe, and the heavenly bodies must rotate around it. For some reason Galileo felt the need to respond to this critic, and that was the beginning of his undoing.

Had Galileo just ignored the matter, he would have remained safe under the protection of the Church, just as Copernicus was before him, along with all the Jesuits who were teaching heliocentrism as theory in universities all over Europe. You see at that time, scientists enjoyed the protection of the Church, from radicals like Lorini and Caccini, so long as they maintained a strict separation between science and religion in their public works. As long as scientists kept their place within science, and didn't venture into the area of religion, they were free to theorize and speculate all they wanted. The Church understood the importance of scientific development, and further yet, she understood that sometimes the advance of scientific understanding might shake the conventional wisdom of the day, even to the point of appearing to challenge faith. Mother Church understood that true science can never contradict the teachings of revelation. St. Augustine wrote that our interpretation of Scripture must be reevaluated when observations of nature seem to contradict it. Likewise, Saint Thomas Aquinas, a doctor of the Church, wrote the following:

"First, the truth of Scripture must be held inviolable. Secondly, when there are different ways of explaining Scriptural text, no particular explanation should be held so rigidly that, if convincing arguments show it to be false, anyone dare to insist that it still is the definitive sense of the text. Otherwise, unbelievers will scorn the Sacred Scripture, and the way of faith will be closed to them."

- Saint Thomas Aquinas, 13th Century

The pope understood this, as well as most cardinals, archbishops, and Jesuit priests. Unfortunately, this was not as well understood among the general clergy, and in the post-Reformation turmoil, much of this wisdom was ignored by the general public. Certainly, Protestants would have nothing to do with it either, and insisted on the absolute literal interpretation of Scripture in most cases. (Some of them still do - mostly Evangelicals.) Had Galileo published his works in a Protestant country at that time, he would have most probably been burned at the stake. In Catholic Europe however, Galileo enjoyed the protection of the Vatican and the Jesuits, that is until he stepped out of his role as a scientist, and started preaching his discoveries as a matter of religion.

Galileo responded to Lorini's sermon against him in what has come to be known as the Letter to Castelli. In this letter, Galileo attempted to explain that the heliocentric theory does not contradict Scripture. He did this by proposing alternative ways of reinterpreting the Scriptures in what was a well-reasoned response. Caccini saw the letter as an opportunity to discredit Galileo completely by charging him with heresy. Since Galileo had crossed the science/theology line, he no longer fell under the protection of the Church's academic license. As a matter of legality, Galileo was now preaching on Scripture, and therefore postulating religious theories. Such matters were the business of the clergy alone, and at that time in European history, there was no separation between Church and State. Heresy was more than just grounds for excommunication. After an excommunication was issued, the state would step in and administer civil punishment, mainly because the state viewed heresy on the same level as high treason. This is why heretics were often punished with imprisonment if they were lucky. More extreme cases were met with execution. The princes and lords running the Catholic portions of Europe were trying to protect their regions from Protestant uprisings, and so they believed their actions to be justified. (To be fair, the same sort of thing was going on over on the Protestant side of Europe too.) Galileo, once under the protection of the Church's academic license, now found himself in the

middle of a theological war between Catholics and Protestants, all because he decided to take it upon himself to reinterpret Scripture for a few monks and priests of the Dominican order. His opponents wasted no time charging him with heresy, and in 1616 the Office of Inquisition issued a report that the notion of a stationary sun was heretical, and prohibited Galileo from teaching that the earth revolved around a stationary sun as a matter of absolute truth.

Now a couple of things need to be clarified here. First and foremost, statements from the Office of Inquisition are NOT infallible. It is possible for the "Holy Office" (as it was sometimes called) to be in error. However, on the issue of this particular decree, it was actually right, though perhaps in spite of itself. When the Holy Office declared the notion of a stationary sun was heretical, it was most probably throwing a bone to the geocentrists pushing for Galileo's excommunication. However, modern science has since discovered that the sun is not stationary at all. Rather, as the earth obits the sun, so the sun orbits the galaxy, and the galaxy moves through space away from the center of the universe. So the sun is not stationary at all - far from it - but that would not be known for another 300 years. The heliocentric theory of that time asserted that the sun itself was the center of the universe, and did not move at all, but stayed perfectly still as the planets (including the earth) orbited around it. Secondly, the admonition against Galileo WAS NOT an excommunication, but rather a censure, and the Holy Office did this to protect Galileo from radical zealots like Lorini and Caccini. It did not prevent Galileo from discussing heliocentrism hypothetically, and no such admonition was given to the Jesuits, who largely supported Galileo's findings and were free to teach them all they wanted. In effect, this was the Vatican's way of giving Galileo a firm slap on the hand. The Holy Office was effectively telling him never to play the role of theologian again, and to keep his place as a scientist. It appeared that Galileo got the message, and for the next several years he continued to teach the heliocentric model as a scientific THEORY and simultaneously stayed clear of all controversy.

The next chapter in Galileo's inquisition didn't come about until 1632, and this was the result of an unfortunate chain of events. It all began in 1623 when a fellow astronomer, and friend of Galileo (Cardinal Barberini), was elected Pope Urban VIII. Though a geocentrist himself, he opposed the admonition of Galileo in 1616 and personally encouraged Galileo to return to the subject and write a treatise defending his heliocentric findings. Pope Urban VIII hoped to rehabilitate Galileo's reputation in the academic field, and give him the opportunity of scientific vindication. The pontiff personally asked Galileo to give arguments for and against heliocentrism in the book, and to be careful not to advocate heliocentrism as an absolute truth or theological fact. (In other words, he asked Galileo to stick to the realm of scientific theory and not cross the lines again into theology by pushing heliocentricity as absolute truth.) He also requested that his own views of geocentrism be included in Galileo's book.

Unfortunately, only the latter of those requests was fulfilled by Galileo, and the way in which he did it became the central reason behind Galileo's second inquisition. The book, entitled "Dialogue Concerning the Two Chief World Systems" was a literary masterpiece for it's time. It was published in 1632. In it, Galileo structured the text as a debate between a heliocentrist and a geocentrist. The latter he named Simplicius (meaning "simpleton"), and casted him as a fool who frequently trapped himself by his own arguments. Most historians agree that Galileo did not do this out of malice. He was also an entertaining author who dazzled his readers with his literary wit and style. It is quite probable that Galileo was trying to write a book that would keep his readers entertained while he simultaneously educated them. But this method, combined with the fact that he pushed heliocentrism as absolute truth again, became Galileo's undoing. The pope (Galileo's friend) was a geocentrist, and the irreverent writing style of the book made him look like an idiot. This came at a time when the Catholic Church was still reeling from the Protestant Reformation. It is unknown if the pope ever read the book, and in

all probability his advisers discouraged it. The pope's defenders immediately went into action, and once Galileo was caught in that political machine, the poor fellow never stood a chance. He was tried on suspicion of heresy. His book was banned, and Galileo was found guilty and ordered to be imprisoned. It is suspected that the pope was the one responsible for having his sentence commuted to house arrest. He remained under house arrest (in his own villa) for the remainder of his life. This may seem harsh to us living in the 21st century, but keep in mind that with a heresy verdict on his head, Galileo's life was in danger. He could have been captured and killed by any number of princes and lords who viewed heresy tantamount to treason. Had he fled to Protestant territories, his fate would have been the same, since Protestants viewed heliocentricity as heresy too. House arrest was by far the most humane and charitable way of protecting a man with a price on his head. As long as he was under the guard of a Church deputy, his safety could be assured, and the Vatican could plausibly claim he was being punished for his "crime."

Contrary to popular urban legend, the Galileo inquisition was a political one, not a scientific one. Galileo was tried and condemned for what was perceived to be an attack on the pope, along with an attempt to preach scientific theory as theological truth. The Catholic Church never officially condemned Copernicus' theory of heliocentricity. It did condemn one of Galileo's statements that the sun is the center of the universe. On that point, the Catholic Church was actually right. Scientific discovery would later prove that the universe is much bigger than the solar system, and that the sun is actually orbiting the galaxy, and our galaxy itself moves away from the center of the universe. The Galileo inquisition should be understood as a tragedy in the realm of politics - not science. For years, both Protestants and Secularists have used the Galileo inquisition to mock the Catholic Church as an opponent of heliocentrism. Such mockers fail to understand the history of the theory itself. Heliocentricity was actually invented by a Catholic priest named Nicolaus Copernicus more than half a century BEFORE the Galileo inquisition. The Catholic Church always allowed the teaching of heliocentricity as a scientific theory before, during and after the Galileo inquisition. Finally, the Galileo inquisition was a political tragedy centered around Galileo himself, mainly because the poor fellow didn't exercise the good sense to distance himself from theology and inadvertently made out the pope to look like a fool in a time when the Catholic Church was highly defensive.