What were Galileo Galilei's conflicts with the Roman Catholic Church? It was not a simple conflict between science and religion, as usually portrayed. Rather it was a conflict between Copernican science and Aristotelian science which had become Church tradition. Galileo expressed his scientific views supporting Copernicus as well as his biblical views in a 1615 letter to the Grand Duchess of Tuscany which became the basis of his first Church trial and censure. A major work published in 1632 resulted in Galileo's conviction on suspicion of heresy and a lifetime house arrest. The Galileo affair provides important lessons and applications to the Church and to science today.

Aristotle (384-322 B.C.) believed the universe is finite and spherical with a stationary earth at its center. Enclosing the whole universe is the sphere of the Prime Motion turned by the First Unmoved Mover. Inside that were transparent spheres containing fixed and unchanging stars, planets, moon and sun.[1] Aristotle was also a renowned philosopher.

Clement and Origen (185-254 A.D.), both of Alexandria, sought to reconcile Greek wisdom (Aristotle's thoughts in philosophy and sciences) with scriptural wisdom. Origen imagined separate literal, moral, and spiritual senses of Bible passages (expanded to five senses in Concordism today).[2]

Van Bebber says, "This allegorical interpretation gave birth to a new brand of Christianity. Augustine (354-430 A.D.), although not as extreme as Clement or Origen, accepted this new approach. Through Augustine the mixing of philosophy, culture, and theology became inter-twined. And, since Catholic theology recognizes the traditions of the Church as equal in authority with written scripture, changing this trend became impossible. Eventually, the roots planted in Augustine took full bloom in Thomas Aquinas" (1224-1274 A.D.).[3]

The Renaissance Period (1300-1600 A.D.), the rebirth of Greek philosophy, reinforced Aristotle's philosophy and science, already embedded in Roman Catholic theology and tradition. The most serious scientific error was acceptance of an earth-centered cosmos. But this error fit well in the man-centered theme of the Renaissance.

Nicholas Copernicus (1473-1543 A.D.) was a Renaissance man educated in the classics, law, theology, mathematics, metaphysics, languages, and astronomy. Copernicus developed a cosmology with the sun at the center, the earth rotating about a polar axis, and the earth and planets circling the sun, essentially as we know it today.[4]

Galileo Galilei (1564-1642 A.D.) received a broad Renaissance education. Until 1610, when Galileo built his first telescope at age 46, he focused mainly on physics, not astronomy. He soon made discoveries which shook the foundations of the Aristotelian cosmos. He saw mountains, valleys and other features indicating change on the moon. He observed the motion of four of Jupiter's moons, now referred to as the Galilean moons. No longer could scientists say that heavenly bodies revolve exclusively around the earth. He also observed the phases of Venus, the only explanation of which is that Venus moves around the sun and not the earth.

Response to these discoveries ranged from enthusiastic to very hostile. Never fearing a fight, Galileo actively defended his evidence which supported the Copernican cosmos. Hummel states,

“He was a passionate, powerful character who could dominate any room or discussion. His talent and wit won a variety of illustrious friends in university, court and church circles, … At the same time his biting sarcasm against those whose arguments were vulnerable to his scientific discoveries made him some formidable enemies. Galileo thrived on debate… His professional life was spent not only in

observing and calculating but also in arguing and convincing. His goal was to promote as well as develop a new scientific world view."[5]

Johnston, a Catholic defending the Church, wrote that Galileo was intent on ramming Copernicus down the throat of Christendom. Johnston claims that Galileo's position and manner had alienated many and left the Church authorities no room to maneuver. While there is some truth in Johnston's assertion, it was a minor factor in the conflict.

The primary problem, as introduced earlier, was that Aristotle's science was going out of style; but the church was still attached to him. It could not make a distinction between Aristotle and Christian teachings; and in that era, there was no distinguishment or separation of science from philosophy. For the Church, if Aristotle was wrong, Christianity was wrong.[6]

Another background factor in Galileo's conflict with the Church was the influence of the Reformation. Because Martin Luther (1483-1546 A.D.) and the Protestant reformation (1517 A.D.) questioned Church authority, the Roman Church lost significant power and influence. It reacted with a list of literature forbidden to Catholics. Included were any writings challenging traditional Scripture interpretation.[7]

Letter to Madame Christina

In 1615 Galileo wrote a letter outlining his views to Madame Christina of Lorraine, the Grand Duchess of Tuscany, "Concerning the Use of Biblical Quotations in Matters of Science."[8] The tribunal used this letter against him in his first trial in 1616. They directed Galileo to relinquish Copernicanism and to abstain altogether from teaching or defending this opinion and doctrine, and even from discussing it. [9]

Excerpts from the letter to Madame Christina help to reveal Galileo's view of Scripture and that of his predecessors. He writes, "I think in the first place that it is very pious to say and prudent to affirm that the Holy Bible can never speak untruth—whenever its true meaning is understood."[10]

He cited Copernicus in the same vein: "He [Copernicus] did not ignore the Bible, but he knew very well that if his doctrine were proved, then it could not contradict the Scripture when they were rightly understood".[11] He quotes Augustine relating true reason to Scriptural truth.

"And in St. Augustine [in the seventh letter to Marcellinus] we read: 'If anyone shall set the authority of Holy Writ against clear and manifest reason, he who does this knows not what he has undertaken; for he opposes to the truth not the meaning of the Bible, which is beyond his comprehension, but rather his own interpretation; not what is in the Bible, but what he has found in himself and imagines to be there'"[12]

The Church had no problem with these solid orthodox views. Galileo was a man of faith as well as science.

Two examples from Galileo's letter help to illustrate his interpretation of Scripture dealing with science. Some say he should have left Scripture alone and just stuck to science, but he was in a "no-win situation" whatever he did, for the Roman Catholic Church's Aristotelian views were being challenged.

Job 9:6 says, "Who moveth the earth from its place…" Galileo cites the Commentary on Job (1584) by

Didacus a Stunica which concluded that the mobility of the earth is not contrary to Scripture.[13] Today, creationists would term this passage “observer true.” In Galileo's day, they used the equivalent phrase or expression "speaking according to appearances." That is, for us who live on the earth it does not appear to move under our feet. But Galileo's opponents would not accept this explanation.[14]

A second passage and Galileo's commentary illustrate that he felt Scripture dealing with science should not be interpreted literally. Job 26:7 states, "He stretcheth out the north over the void, and hangeth the earth above nothing." Galileo says, "St. Thomas Aquinas notes that the Bible calls 'void' or 'nothing' that space which we know to be not empty, but filled with air.

Nevertheless the Bible he says, in order to accommodate itself to the beliefs of the common people (who think there is nothing in that space), calls it 'void' or 'nothing'."[15] As a side note, today we know that this verse is literally and scientifically true as written. No accommodation needs to be made for the common or uneducated person. Space is a void except for a thin layer of air surrounding our earth.

A New Book and a Second Trial

In 1632, Galileo completed his Dialogue Concerning the Two Chief World Systems—Ptolemaic & Copernican. This publication, a twelve year effort, presented all the arguments for and against the two great world systems--the Copernican (sun centered) and the Aristotelian or Ptolemaic (earth centered). Galileo also warned the Church of a trap they were walking into:

"Take note, theologians, that in your desire to make matters of faith out of propositions relating to the fixity of sun and earth you run the risk of eventually having to condemn as heretics those who would declare the earth to stand still and the sun to change position--eventually, I say, at such a time as it might be physically or logically proved that the earth moves and the sun stands still."[16]

The Roman Catholic hierarchy and their Aristotlean-Ptolemaic advisors did not heed this advice. The Roman Curia promptly banned and confiscated Galileo's monumental work; and it became the basis for his second trial, censure, and lifetime house arrest by the Holy Office of the Inquisition in 1633. The Roman Catholic Church convicted him of breaking his agreement of 1616 and of teaching the Copernican theory as a truth and not a hypothesis. They suspected him of holding heretical opinions condemned by the Church, which they ordered him to abjure [abandon a false opinion]. Seven of the ten Cardinals presiding signed his condemnation.[17]

The Holy Tribunal in Galileo's condemnation states: “The proposition that the sun is the center of the world and does not move from its place is absurd and false philosophically and formally heretical, because it is expressly contrary to the Holy Scripture.

The proposition that the earth is not the center of the world and immovable, but that it moves, and also with a diurnal motion, is equally absurd and false philosophically, and theologically considered, at least erroneous in faith.”[18]

Historical Aftermath of the Galileo Affair

As new observations poured in, evidence grew supporting a Copernican view. The Roman Catholic Church leadership looked like fools, opening a wedge between science and religion that has increasingly widened to today.

As Johnston put it, "To the popular mind, the Galileo affair is prima facie evidence that the free pursuit of truth became possible only after science 'Liberated' itself from the theological shackles of the Middle Ages. …the Galileo case is one of the historic bludgeons that are used to beat on the Church—the other two being the Crusades and the Spanish Inquisition."[19]

Applications and Lessons Today

Application to Science

Today, Science views Galileo's conflict with Church hierarchy as a great triumph of science over religion. Today Science is king, Nature is the Creator, and God (if He exists) is irrelevant. Galileo would not have viewed it thus, for his faith in the truth of God's Word remained strong. He recognized that God is King and Creator, not Nature.

Misapplication by Theistic Evolutionists and Progressive Creationists

Theistic evolutionists and Progressive Creationists often use a “Two Book” concept to reconcile or compromise the Bible with Science. They claim both the “Book of Nature” and the “Book of Scripture” are true or applicable in their own realm. But today, Science is always put first. Thus, religion must bow to scientific findings. The “Book of Scripture” must yield to and accommodate the “Book of Nature”. Theologians must reinterpret or compromise Scripture to accommodate whatever today's Science says is true. When new scientific theories come along, Biblical interpretations must change accordingly.

The Two-Book concept was encouraged by Galileo's view that scientific descriptions in the Bible were not important, for the common man could not understand them. Galileo used the same terminology.

For example, Galileo said, “The Book of Nature is written in (clearly-understood) mathematics.”[20] Galileo cited Cardinal Baronius (1598) for the statement, “The Bible was written to show us how to go to heaven, not how the heavens go.”[21]

Lessons to Religious Authority

The Roman Curia, the religious authorities, imposed Aristotle's view upon the Bible, allowing Greek philosophy to influence its theology. They steadfastly maintained their traditions and erroneous interpretations of Scripture[22] above increasing scientific observations to the contrary. Galileo's published works remained on the Roman Church's Index of Prohibited Books until 1835. Not until 1981 did the Roman Catholic Church officially forgive Galileo.[23]

Van Bebber aptly states, “The Bible is the only infallible, inspired revelation of God. Motivated by a love for the Creator and His word, the believer must carefully weigh his every thought against the standard of the Bible. Those ideas which oppose sound Biblical teachings must be abandoned.

Had this been achieved during the days of Galileo, a peaceful and reasonable solution would have helped to strip the Catholic Church of traditional, non-Christian philosophies which proved to hinder its effectiveness.”[24]

Lesson to All

A final lesson and warning applies to the Church, Science, and the modern Creationist movement today. Beware of holding steadfastly to a particular interpretation of Scripture and/or a scientific model, which may be in error. For instance, there are various scientific challenges to the Young-Earth Creationist position. We should hold many of our scientific views and their corresponding Biblical interpretations loosely. For we will never have all the right answers this side of heaven.

What is the lesson that Christians should learn from Galileo? [Read]

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