



# The Scientific Revolution: Its Classical and Christian History

with Dr. Ted Davis

## Lesson 19: Galileo and the Garden of Eden

### Outline:

#### Galileo and the Garden of Eden

- Galileo's letter to Christina is very important to this conversation.
- Galileo is a way of understanding how we think today about science in relation to the Bible.
- Some examples of Biblical texts relevant to the motion of the earth.
  - Then spake Joshua to the LORD in the day when the LORD delivered up the Amorites before the children of Israel, and he said in the sight of Israel, Sun, stand thou still upon Gibeon and thou, Moon, the valley of Ajalon.
  - And the sun stood still, and the moon stayed, until the people had avenged themselves upon their enemies. Is not this written in the book of Jasher? So the sun stood still in the midst of heaven, and hasted not to go down about a whole day. – Joshua 10:12-13
  - The sun also rises, and the sun goes down, and hastens to his place where he arose. Ecclesiastes 1:5
  - The Lord reigns, he is clothed with majesty; the Lord is clothed with strength, where with he has girded himself: the world also is established, that it cannot be moved. Psalm 93:1
  - Who laid the foundations of the earth, that it should not be removed forever. Psalm 104:5
- When Galileo drafted his letter to Christina he relied heavily on the Augustinian notion of accommodation. Augustine had cautioned Christians not to take literally those portions of the Bible that dealt with astronomy. The popular language had not meant to be scientifically correct.
- The dominant (since early Christianity) view of science is that science is a handmaiden to theology (queen of the sciences).
  - In this model it is never appropriate for students of nature to tell students of scripture how to interpret their divinely inspired book.
  - Galileo thought the Bible did not teach astronomy, even if theology is queen.
  - **Galileo assumed that the purpose of the Bible was religious and not scientific.**



- For Galileo, God has endowed us with senses, reason, and intellect in order for us to use them including to understand nature. God does not expect us to deny what we've learned about nature.
- **Galileo believed that reason and experience (in combination with mathematics) was capable of giving an authoritative reading of the book of nature.**
- Galileo stressed differences between theology and science: The intention of the Holy Ghost is to teach us how one goes to heaven, not how heaven goes.
- Given the fact that the Holy Spirit is dictating the Bible to us, the Bible can never speak untruth, whenever its true meaning is understood. The language is not always as precise as it needs to be. The Bible may say things which are quite different from what its bare words signify.
  - “These propositions uttered by the Holy Ghost were set down in that manner by the sacred scribes in order **to accommodate them** to the capacities of the common people, who are rude and unlearned.”
- “Philosophy is written in this grand book [of nature] – I mean the Universe...It is written in the language of mathematics...without which it is humanly impossible to understand a single word of it.”
- Galileo's model of the two books: God is over the Book of Nature (unambiguous) and the Book of Scripture (ambiguous).
  - The reason is linguistic (unambiguous versus ambiguous).
- For matters of nature, we should begin with observations of mathematics. The true meaning of the Bible must be concordant with demonstrated truths.
- The Church looks into Galileo's work, to hold that the Sun lies in the center of the universe and the Earth moves around it “a very dangerous thing... [likely] to harm the Holy Faith by rendering the Holy Scripture false.”
- The Council of Trent ruled that if the ancient church writers had ever been unanimous on an interpretation of a given biblical text that would be the interpretation for matters of faith and morals. If it wasn't a matter of faith and morals, you could consider a different interpretation. Galileo didn't think that astronomy was relevant to the faith.
- Galileo never found the irrefutable evidence of the Earth's motion.
- Galileo's views gained new relevance in the early 19<sup>th</sup> century with the notion of the Earth having a long pre-human history.
  - “There is no reasons to suppose, that it was the purpose of revelation to furnish a standard of geological, any more than of astronomical science.” (Playfair)
  - Fleming denied “that the first principles of geology were revealed to Moses, and communicated in the book of Genesis.”
  - Hugh Miller was a prolific writer. He took from Galileo: The Bible had been written to an audience ignorant of science in language fitted to the ideas to that time. Readers today might find the Bible to be optically true.



- Benjamin Silliman, “the relation of geology to sacred history, is now as little understood by many theologians, and biblical critics, as astronomy was in the time of Galileo.” Theologians must study geology, or be satisfied to receive its demonstrated truths from those who have learned them in the most effectual way. Then they will be convinced that geology is not an enemy but an ally of revealed religion.
- Silliman’s study lead him to interpret the six days of Creation as long periods of geological time (Day-Age Theory). He believed those ages culminated in the separate creation of human beings. **He was probably the first American author to call this progressive creation.**
- Silliman thought that the Bible and geology are telling the same broad story, but it different ways. He took a similar approach as Galileo.
- Silliman’s protégé, Edward Hitchcock of Amherst College, used Galileo to help pave the way for the acceptance of the ancient earth. He said, “We ought only to expect that the facts of science, rightly understood, should not contradict the statements of revelation, correctly interpreted.” This is taken almost word for word from Galileo’s letter to Christina.
- After Darwin things tended to fall apart, though not entirely. Most American scientists came to accept evolution by the end of the 1870s, this doesn’t mean that the concept reading two books in close harmony simply disappeared.
  - The varieties of Old Earth Creationism, espoused by Silliman and Hitchcock were standard fare for about a century (even into the 1920s).
  - Since the 1960s many conservative Protestants have rejected the two books approach in favor of Young Earth Creationism.
  - Other approaches have been favored by Christians who accept evolution starting with botanist Asa Gray. Gray says, “The most that is now intelligently claimed is, that the teachings of the two [geology and the Bible], properly understood, are not incompatible.”
  - Gray developed a complementarian view of theology and science. The Bible teaches truths of a wholly different order than the truths of science. Gray said, “I take it that religion is based on the idea of a Divine Mind revealing himself to intelligent creatures for moral ends.”
  - “The Holy Spirit used the biology-of-the-day as an incidental vessel to reveal inerrant spiritual truths in Genesis 1.” Denis Lamoureux. The language of Genesis is simply conveying common conceptions of the natural world from antiquity. Ancient science cannot be mapped onto modern science.
  - Rejection of evolution is a more commonplace stance among evangelicals and other conservative Protestants. Many lay Christians embraced Young Earth Creationism, which had almost been abandoned by Protestant leaders.
- Most creationists think that geocentrists are barking up the wrong tree.
  - Creationists also have problems with Galileo.



- Danny Faulkner, astronomer: “Many evolutionists claim that disbelief in evolution is like disbelief that the Earth goes round the Sun. The obvious flaw is that the latter is repeatable and observable while the former is not.”
- Implicit is the premise that the historical sciences including evolution are less legitimate than the experimental sciences.
- Theologian, Whitcomb, Galileo’s model, “the double revelation theory... fails to give due recognition to the tremendous limitations which inhibit the scientific method when applied to the study of origins.”
- Terry Mortenson, Answers in Genesis: “The Bible is the propositional verbal revelation of God, but the creation is the more-difficult-to-interpret, non-verbal revelation about God. Therefore, it is methodologically mistaken to use fallen men’s interpretations of the cursed creation to reinterpret God’s plain inerrant Word to make it fit sinful men’s fallible theories about the unobserved past.”
  - This view is opposite from that of Galileo.
- How then do the creationist’s keep Galileo out of the Garden of Eden?
  - Creationists do not believe that historical sciences are worthy of the name science. The book of nature must never take precedence over the book of scripture when it comes to understanding the origin of things.