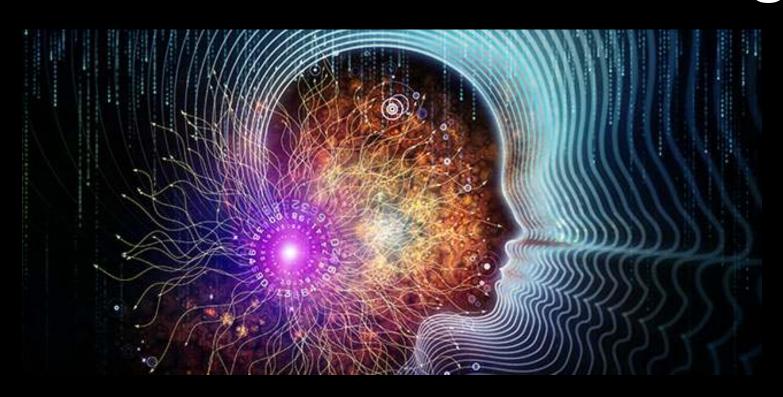


# The Limits of Natural Science and Theology



By Fr. Michael Chaberek O.P., S.T.D.

### Part I

The Three Levels of Human Knowledge

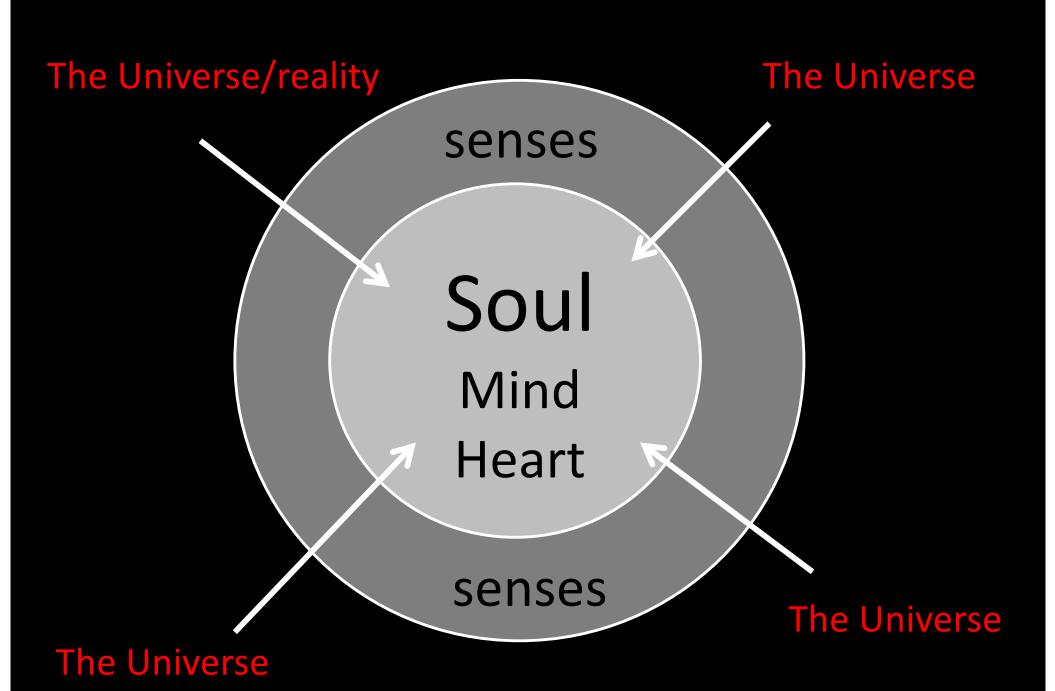
Part II

Some tensions between

Science and Faith in the past

Part III

The limits of Science and Theology



# Visible reality → Senses → Knowledge

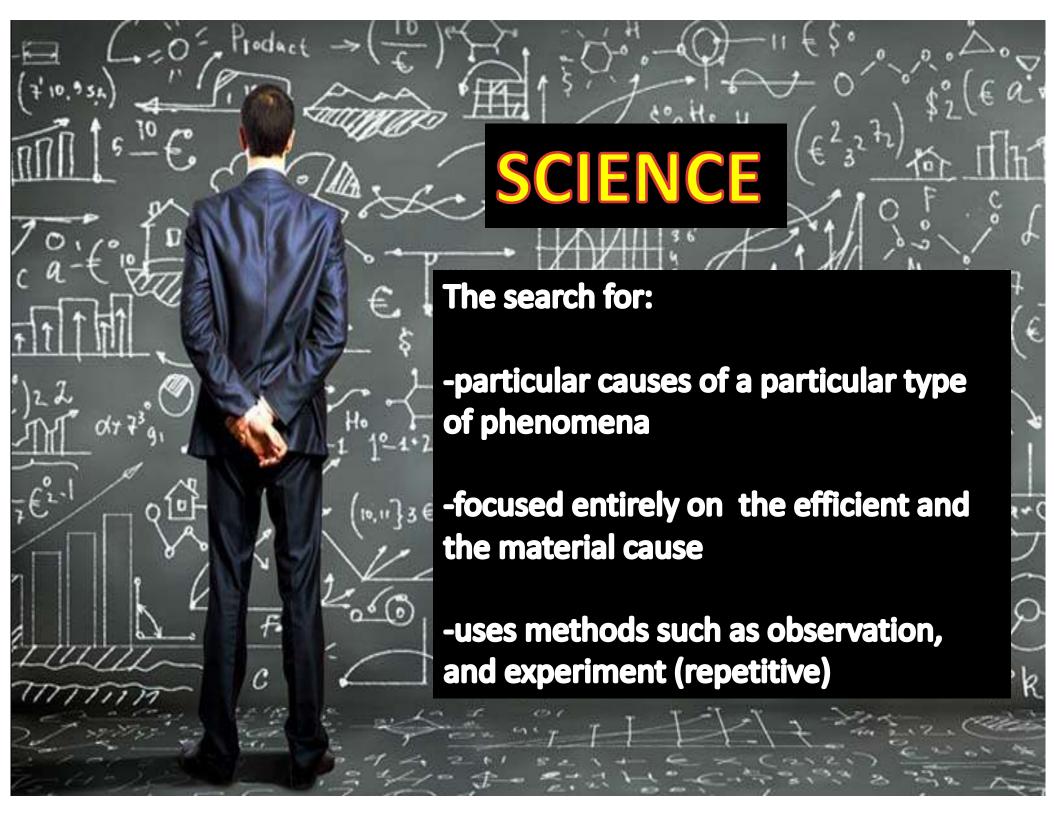


Invisible reality → ??? → Knowledge

NATURALISM – Science (natural science) can know everything; all human knowledge comes from science or natural experience.

MATERIALISM – All phenomena can be explained by reference to material causes (changes in material beings)

CHRISTIANITY – some part of human knowledge comes from science which studies the material universe, but some comes from the supernatural revelation



# PHILOSOPHY



**Search for:** 

-ARCHE - one unifying principle of all reality

-speaks about the <u>entire being</u>: visible and invisible, material and non-material, real and ideal

-uses <u>natural reason</u> alone (no revelation)



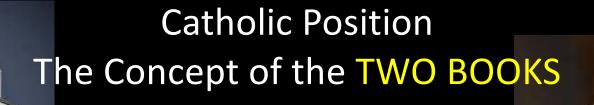
**Search for:** 

- -an ultimate explanation of all reality and its fulfilment
- -speaks about the <u>historical supernatural events</u>
- -uses <u>natural reason</u> and <u>supernatural revelation</u>

# **Definitions**

- Theology supernatural knowlegde about God or the universe
- Philosophy natural knowledge about God or the universe
- Science natural knowledge about the universe

#### HUMAN KNOWLEDGE **THEOLOGY GOD AND** t<sub>6</sub> THE MATERIAL **PHILOSOPHY** THE SPIRITUAL WORLD WORLD **NATURAL** SCIENCE t - truth



HOLYBIBLE

"Since truth cannot contradict truth, we define that every statement contrary to the enlightened truth of the faith is totally false and we strictly forbid teaching otherwise to be permitted".

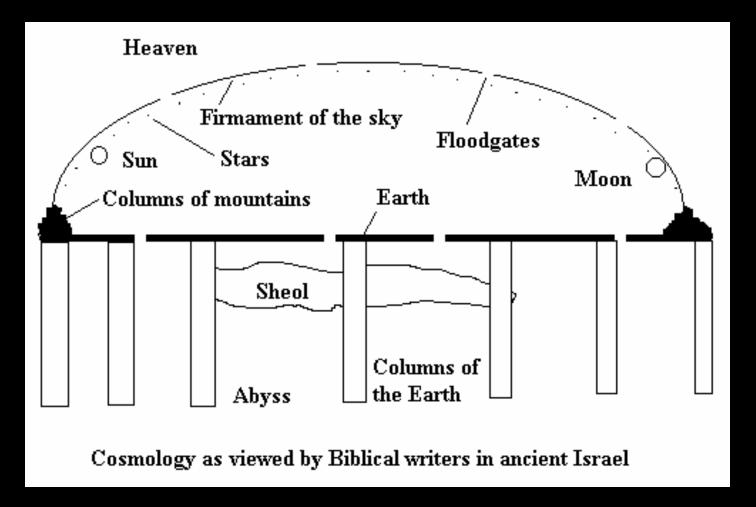
- -Fifth Lateran Council, Session 8, Dec 19, 1513,
- -Leo XIII, Providentissimus Deus 1893,
- -John Paul II, 1996

# Part II How Science Challenged Common Opinions in the Past?



# The shape of the Earth





Isaiah 40:22 It is he who sits above the circle of the earth, and its inhabitants are like grasshoppers; who stretches out the heavens like a curtain, and spreads them like a tent to live in.

Circle is not the same as Sphere or a Globe

The Bible is compatible with both a flat Earth and a spherical Earth

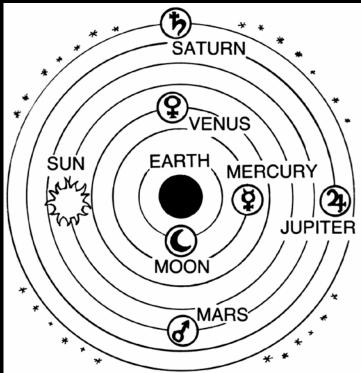
### The Solar System (geocentrism vs. heliocentrism)



Ptolemy 2 c. AD



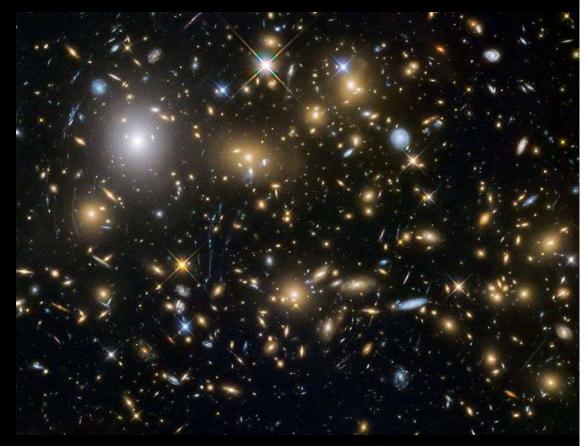
Copernicus 16 c. AD





#### Celestial spheres (fixed stars) vs. Galaxies

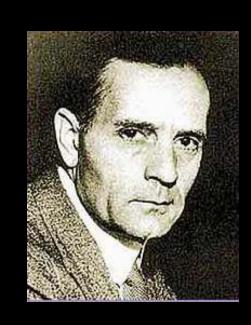




Proverbs 8:27-29 When he established the heavens, I was there, when he drew a circle on the face of the deep, when he made firm the skies above, when he established the fountains of the deep, when he assigned to the sea its limit, so that the waters might not transgress his command, when he marked out the foundations of the earth,

## Static universe vs. Expanding universe





Edwin Hubble, 1929

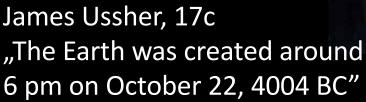


Georges Lemaître, 1927

#### The Age of the Universe

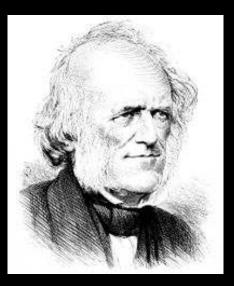
6-10 thausand years vs. "deep time" (13.7 bln)







James Hutton, 18c



Charles Lyell

The Principles of Geology

1830-1833



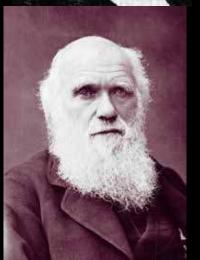
# The Challenge of Darwin

Erasmus Darwin *Zoonomia*, 1794



"[H]ow can we suppose that the august Being who brought all these countless worlds into form by the simple establishment of a natural principle flowing from his mind, was to interfere personally and specially on every occasion when a new shell-fish or reptile was to be ushered into existence on one of these worlds? Surely this idea is too ridiculous to be for a moment entertained"

Robert Chambers, 1844, Vestiges of the Natural History of Creation



Charles Darwin, The Origin of Species, 1859

# Popular solution:

God used Evolution

Evolution + Creation = "Theistic Evolution"

"God used evolution as an instrumental cause of the production of new species"

# The Challenge of Darwin

#### How theistic evolution modifies Christianity

#### Creation:

- Direct act of God

- -Ended once and for all with the creation of man
- Not a process, but a "simple emanation of being"

#### Theistic Evolution:

- God's act mediated through "laws given to matter"
- -Keep on going continuously (creatio continua)
- Is a process in which God participates as the main cause

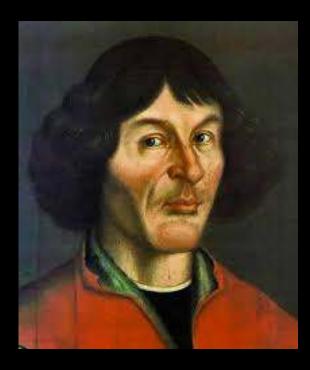
# Is biological macroevolution one of the scientific theories that modified our understanding of the Universe?

- The shape of the Earth
- The Solar System (geocentrism vs. heliocentrism)
- 6-10 thausand years vs. "deep time"
- Celestial spheres (fixed stars) vs. Galaxies
- Static universe vs. Expanding universe
- Special creation vs. Biological macroevolution
- Fine tuning vs. multiverse

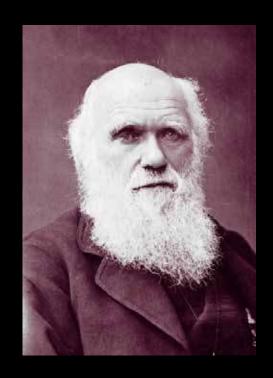
# Part III: Conclusion

The limits of Science, the limits of Theology

# **NO ANALOGY**



On the Revolutions of the Heavenly Bodies (1543)



On the Origin of Species (1859)

Genesis = Origin

# Two types of questions:

How the universe works?
 SCIENCE

 Where the universe (and its essential elements) came from?

**RELIGION** 

#### The limits of science, the limits of theology

- Bible is not a science textbook, it does not explain how the universe operates (the laws of nature), how it is built or how old it is. Theology explains the origins and the ultimate destination of nature, but not how it operates.
- Science is not a "Book of Genesis": It does not explain where the universe comes from, how different species and the human being began to exist. Science explains the operations of nature, but not the origin of nature.