

# **History of Science:**

**A few important aspects**

## Science is an invented institution

“an *invented* cultural institution, an institution not present in all societies, and not one that may be counted upon to arise from human instinct.”

Loren Eiseley, **Francis Bacon**, in **The Horizon Book of Makers of Modern Thought**, p. 95-96

## **The scientific method arose in the 16<sup>th</sup> and 17th century in Christianized Europe**

“The type of thinking known today as scientific, with its emphasis upon experiment and mathematical formulation, arose in one culture – western Europe – and in no other.”

Peacey and Thaxton, **The Soul of Science**, p 17

“It is the Christian world which finally gave birth in a clear, articulate fashion to the experimental method of science itself.”

Loren Eisely **Darwin's Century**, p 62

## **Philosophical premises that are required for the practice of science:**

-There is order or regularity or rationality to the natural world

-Our minds are capable of discovering it

-The order in nature cannot be deduced, but can only be discovered by examination

## **Philosophical premises that are required for the practice of science:**

-There is order or regularity or rationality to the natural world

(one God or Creator)

-Our minds are capable of discovering it

(We are made in the image of God who gave us the ability to discover)

-The order in nature cannot be deduced, but can only be discovered by examination

(God created by choice, nature is contingent)



**René Descartes (1596-1650)**

“God might have arranged these things in countless different ways; which way he chose rather than the rest we must find by observation.”

**Principles of Philosophy**

“Men became scientific because they expected law in nature and they expected law in nature because they believed in a legislator.”

**C. S. Lewis**

## **Pioneers of modern science (Christian theists):**

**Copernicus (1473-1543)**

**Bacon (1561-1626)**

**Galileo (1564-1642)**

**Kepler (1571-1630)**

**Descartes (1596-1650)**

**Boyle (1627-1691)**

**Hooke (1635-1703)**

**Newton (1643-1727)**

**Faraday (1791-1867)**

**Maxwell (1831-1879)**



# Door to Cavendish Laboratory, Cambridge University

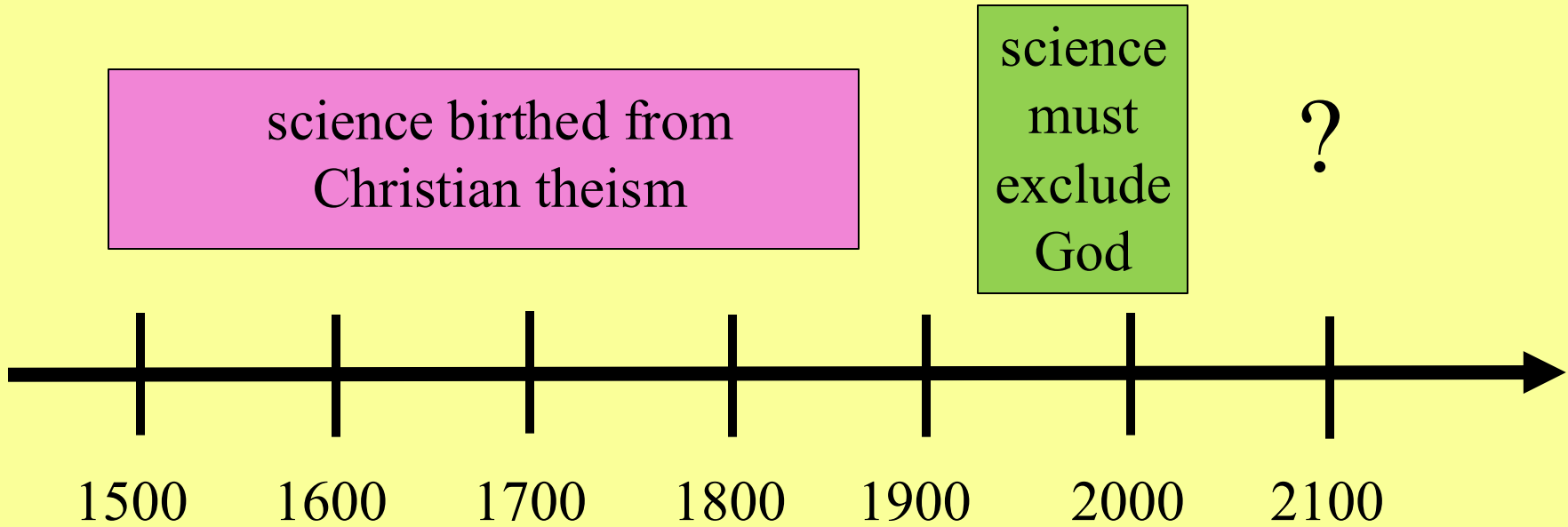


inscription  
requested by  
James Clerk  
Maxwell

**Psalms 111:2. The works of the Lord are great, sought out (studied) by all that take pleasure therein**

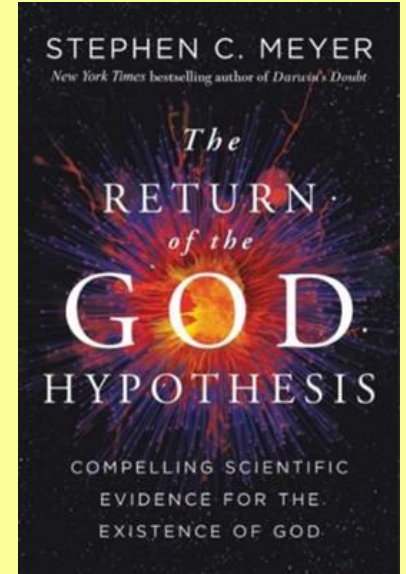
- Bacon:** “all things proceed according to the artificer’s first design”
- Galileo:** God - divine craftsman who created the world as an intricate mechanism following mathematical principles
- Kepler:** “I was merely thinking God’s thoughts after Him”
- Descartes:** the mathematical laws were legislated by God
- Boyle:** God is the “free establisher of the laws of motion”
- Hooke:** nature’s mechanisms are “the works of the Almighty”
- Newton:** the creator of the planetary system must be “very well skilled in mechanics and geometry”

from **The Soul of Science, Percy and Thaxton**



science birthed from  
Christian theism

science  
must  
exclude  
God



1500

1600

1700

1800

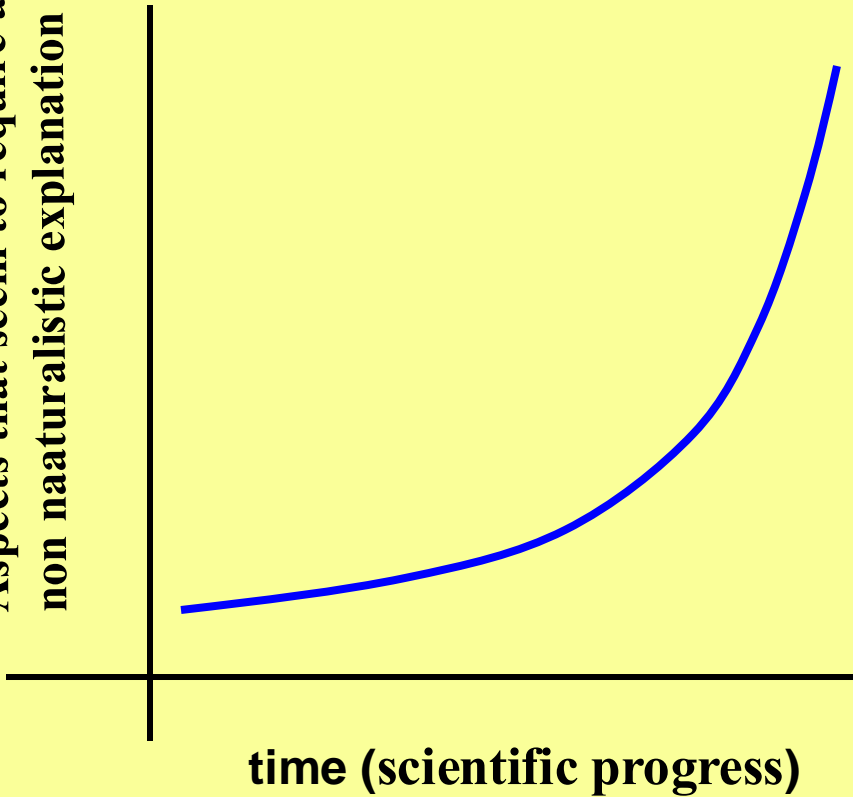
1900

2000

2100

## My View: Trend with scientific progress

Aspects that seem to require a  
non naturalistic explanation



expansion of the universe  
CMB  
fine-tuning in physics  
molecular codes of life  
molecular machines  
software of cell  
brain functions mapped  
genomes sequenced  
exoplanets discovered  
etc

**As science advances it discovers  
more informational discontinuities**

# OPERATION VS ORIGIN



**Natural laws explain how it functions but do not explain where it comes from.**

**An informational discontinuity**

<b>Copernicus</b>	<b>(1473-1543)</b>
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**These pioneers of science were mostly addressing the **operation** of our world, not the **origins questions****

## Origins questions (informational singularities?)

The origin of the universe from nothing

The origin of the fine tuning of the universe

The origin of the natural laws

The origin of life

The origin of the genetic code

The origin of molecular machines

The origin of software algorithms encoded into  
molecules

The origin of multicellularity

The origin of animal body plans

The origin of sexual reproduction

The origin of consciousness

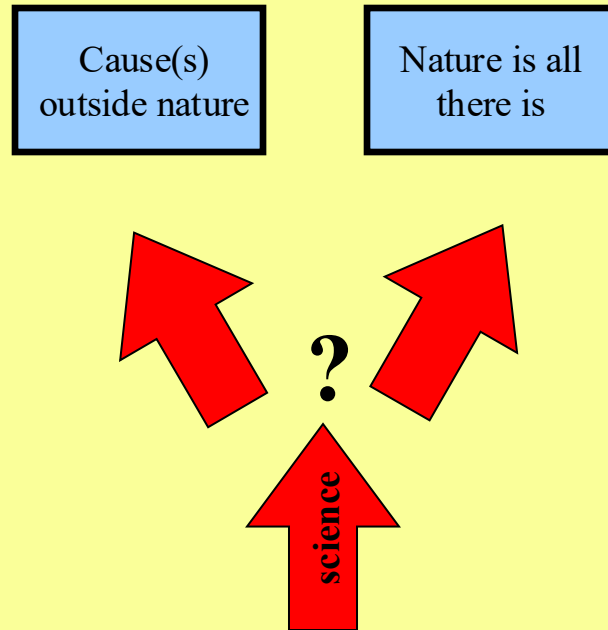
**The pioneers of science did not know enough to  
address many of these origins questions**



**One could argue that, while their theistic perspective was an important factor leading to the birth of science, their theistic perspective might have been detrimental to science had they advanced to the point of addressing the origins questions.**

**If Newton knew what we know today about physics and biology, would his theism compromise his science as he considered origins questions?**

**What would the inventors of science think about the charge that their theism compromises the scientific method they invented?**



Does the fact that science was invented from within Christian theism impact your opinion as to whether science can function (or will be better served) if both possibilities are allowed?