



Disclaimer



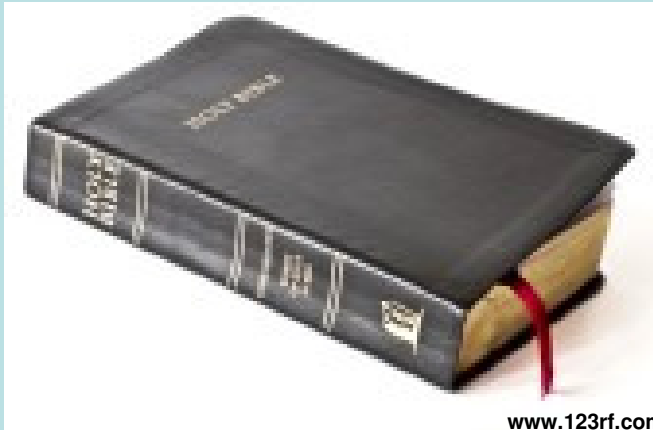
This series represents the personal views of scientists who attend Grace Chapel.

Our understanding of science continually changes with new data and so will our views.

Therefore, the views we will be presenting should not be taken as absolute truth.

Alternative views on science and faith are not only possible but expected as well as encouraged.

Interpretation: Bible and Natural World



How to interpret Scripture

- Can information from the natural world contribute to understanding the Bible?

How to interpret Nature

- Did the authors intend Bible to be used to understand the natural world?



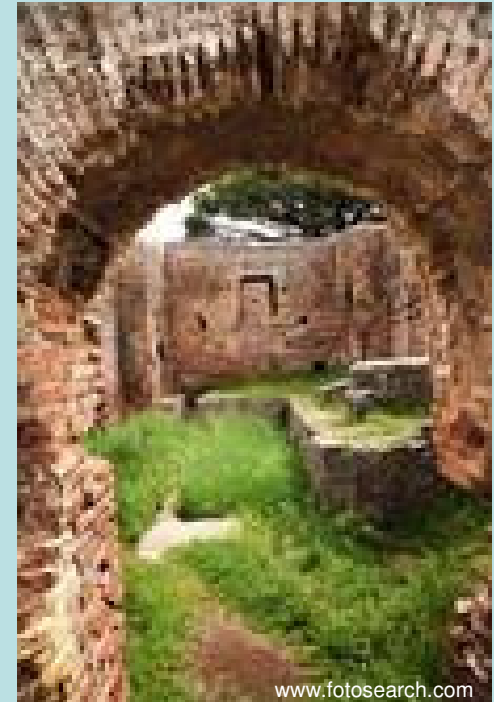
Worldview in the Early Church

- Expected soon return of the Lord:
Don't waste time and energy on
what is irrelevant.
- Strong influence of Greek
Philosophy (3rd century BC)
- Science as we know
it didn't exist
(geology, chemistry,
physics, zoology, psychology)



‘Science’ in the Early Church Period

- **Some important names:**
 - **Ptolemy** (90-168AD; geocentric model)
 - Galen (medicine)
 - Diophantus (mathematics)
- **Creative natural science not seen as useful in the Roman world.**
- **Early church contrast to pagan alternatives: Natural world not to be worshipped nor repudiated.**



Early Church & Pagan Philosophy

Narrow View

(Tatian, Chrysostom, Eusebius, Tertullian)

- No need for pagan philosophy
- Anti-intellectualism

Broad View

(Justin, Clement, Origen)

- Read all philosophers
- Choose the truth

Harmony of Bible & Nature

(Origen 186-254 AD)

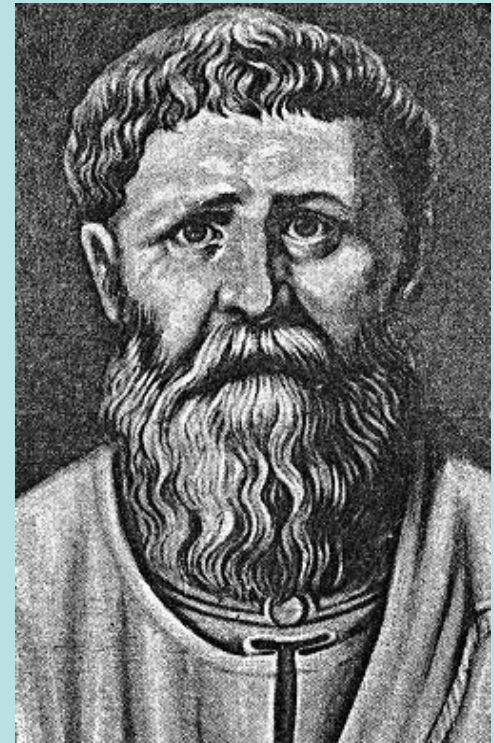
- **God as author**→ harmony
- **Two books of God:**
the Word and the World;
Natural Revelation &
Scripture
- **Early Church:** generally science is merely the
handmaiden to theology



www.123rf.com

Augustine of Hippo (A.D. 354-430)

- **Philosophy should be Christianized**
- **Reason as a divine gift & indispensable to faith**
- **Literal Meaning of Genesis**
(Literal meaning is subject to re-interpretation; allegorical interpretation may be required to maintain harmony)



-- Table Discussions --

- Do you support the idea of God as the author two books?
- Do you think we should adjust Bible interpretation if warranted by evidence from science?
- Do you think we should use the Bible to teach us about the natural world? (What was author's intent?)

13th Century Aristotelianism came to W. Europe

**Theologians were trained in both
theology and natural philosophy.**

Thomas Aquinas (1225-1274)

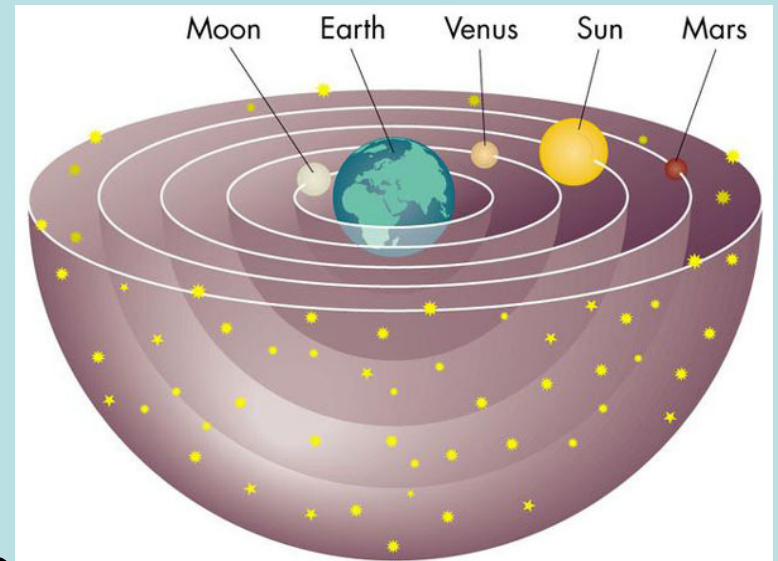
- * Rightly understood, natural philosophy
could not contradict theology or faith.



- * World of nature could be known separately from the world of
the spirit. Two Books.

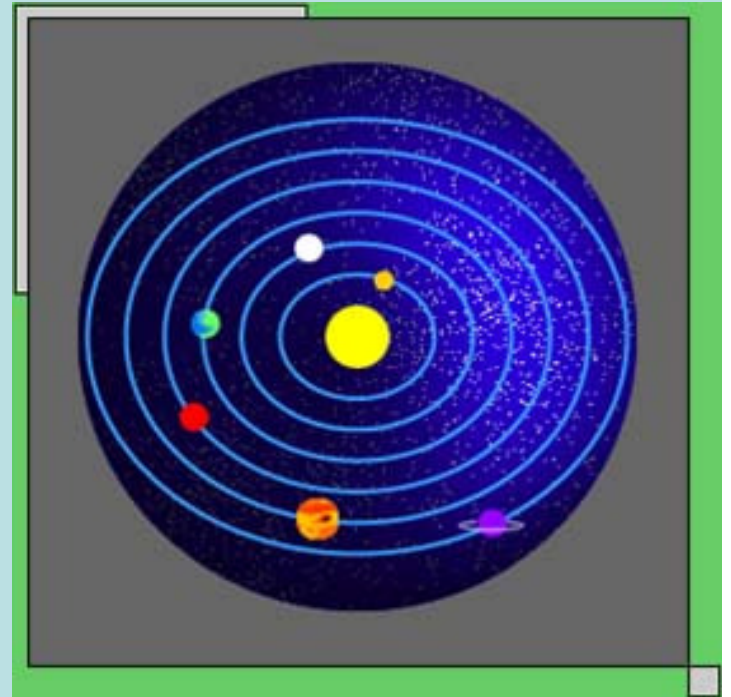
① **Astronomy** (1543-1700): **Geocentric worldview**

- **Based on teachings of Aristotle and Ptolemy**
- **Common sense of the day, lack of evidence to the contrary**
young earth, global flood, 7-day creation.
- **Interpretations of Scripture were consistent with this view**
- **Calendar problems & need for better ocean navigation**
- **Invention of telescope, provided data**



Change to Heliocentric Worldview

- Copernicus published in 1543
- Galileo (1564-1642): **opposition from astronomers and church**
 - God's two books; appealed to Augustine on interpretation of Scripture. “**How to go to heaven, how the heavens go**”
- Re-interpretation of Scripture & universal worldview
- 150 years before widely accepted



Baconian Compromise (1605)

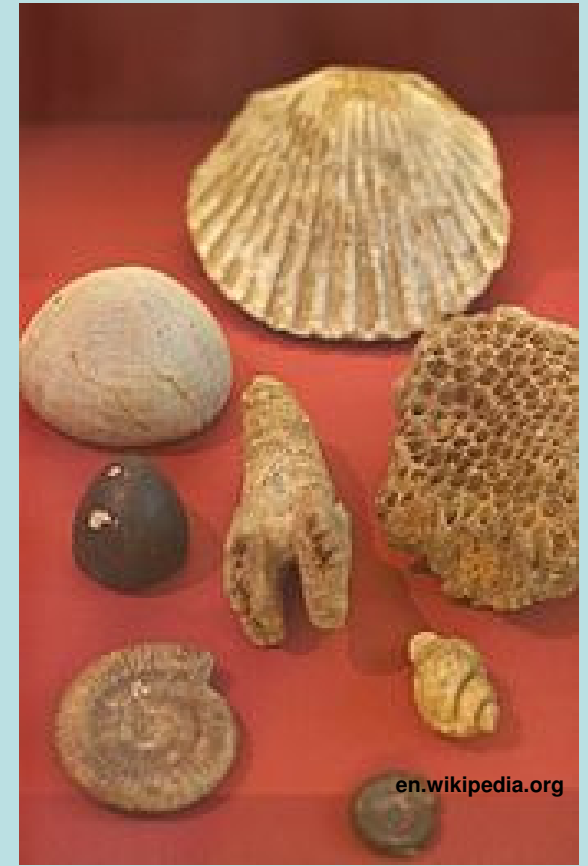
Francis Bacon (1561-1626)

- **Two books in harmony - 200 years**
 - Rejected the deductive logic of Aristotle, and stressed the importance of experiment and inductive reasoning
 - Natural world worthy of study, a key to Scripture
 - Still need Scriptures: reason alone will not lead to Christian faith
 - Relative autonomy for science; the glory of God is revealed in the mechanisms of natural processes.



② Geology

- **Early stratigraphy 17th Century**
- **William Smith (1769-1839)**
- **Many Early Geologists were Theologians**
 - Rev. William Buckland (1784-1856)
 - Rev. Adam Sedgwick (1785-1873)
 - John Pye Smith (1774-1851)
 - Reconciling geological time w Scripture, *On the relation between the holy Scriptures and some parts of geological science* (1839)

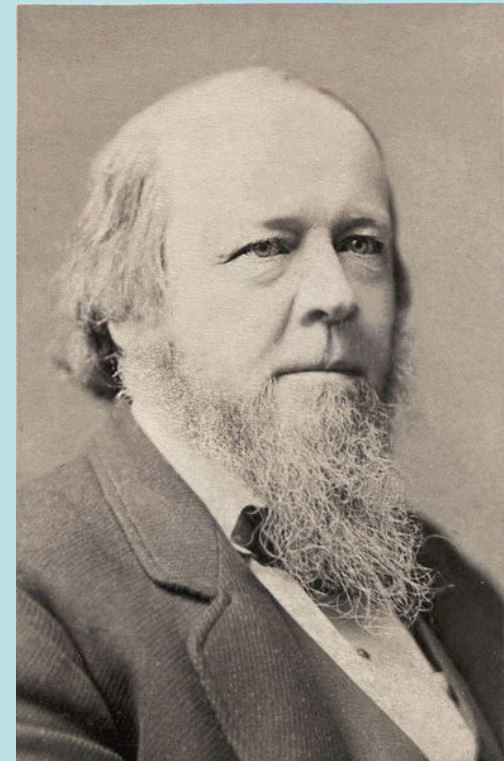


Early Geology in New England

Benjamin Silliman

(1779-1864, Yale)

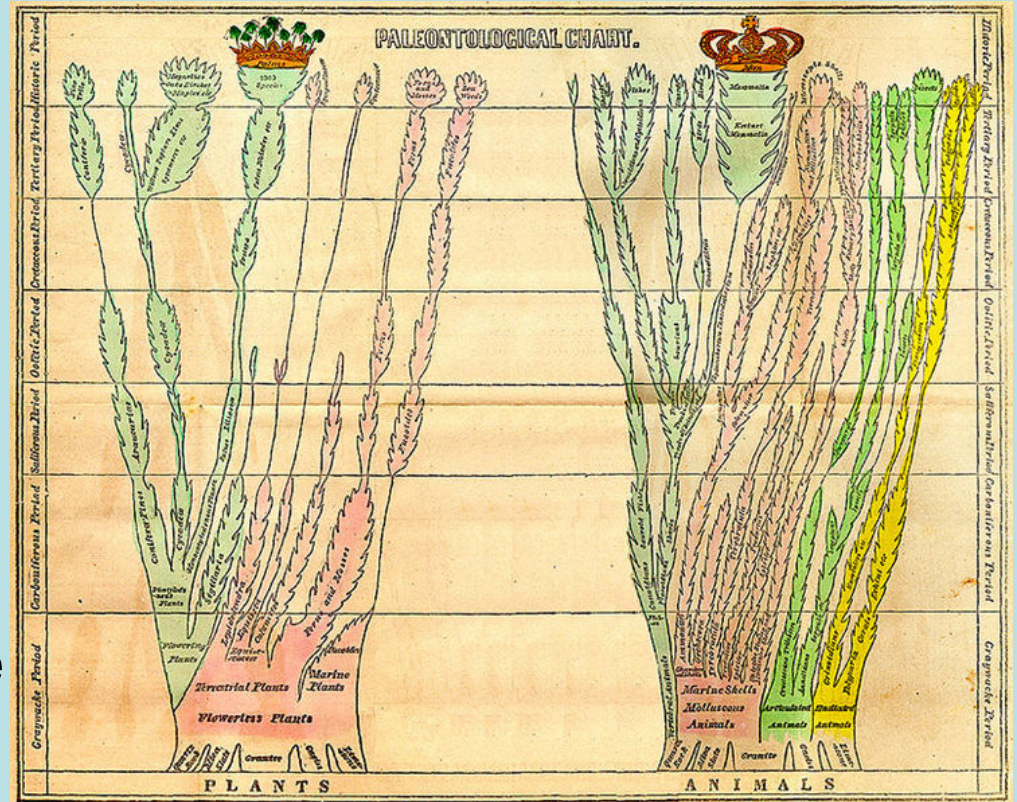
- Trained @ UPenn medicine & chemistry; Edinburgh
- Minerals & meteors
- Silliman's Journal -- American Journal of Science; President, Am. Assoc. for Advancement of Science
- Popular with general public as a lecturer with a love of science and obvious love for God.



www.picturehistory.com

Rev. Edward Hitchcock (1793-1864)

- Prof. at Amherst College
- 1st MA state geologist
- Old-earth harmony with Bible
- Text books:
 - 1840 Elementary Geology
 - 1851 The Religion of Geology
 - “the facts of science, rightly understood, should not contradict the statements of revelation, correctly interpreted.”
- Paleontological chart 1840



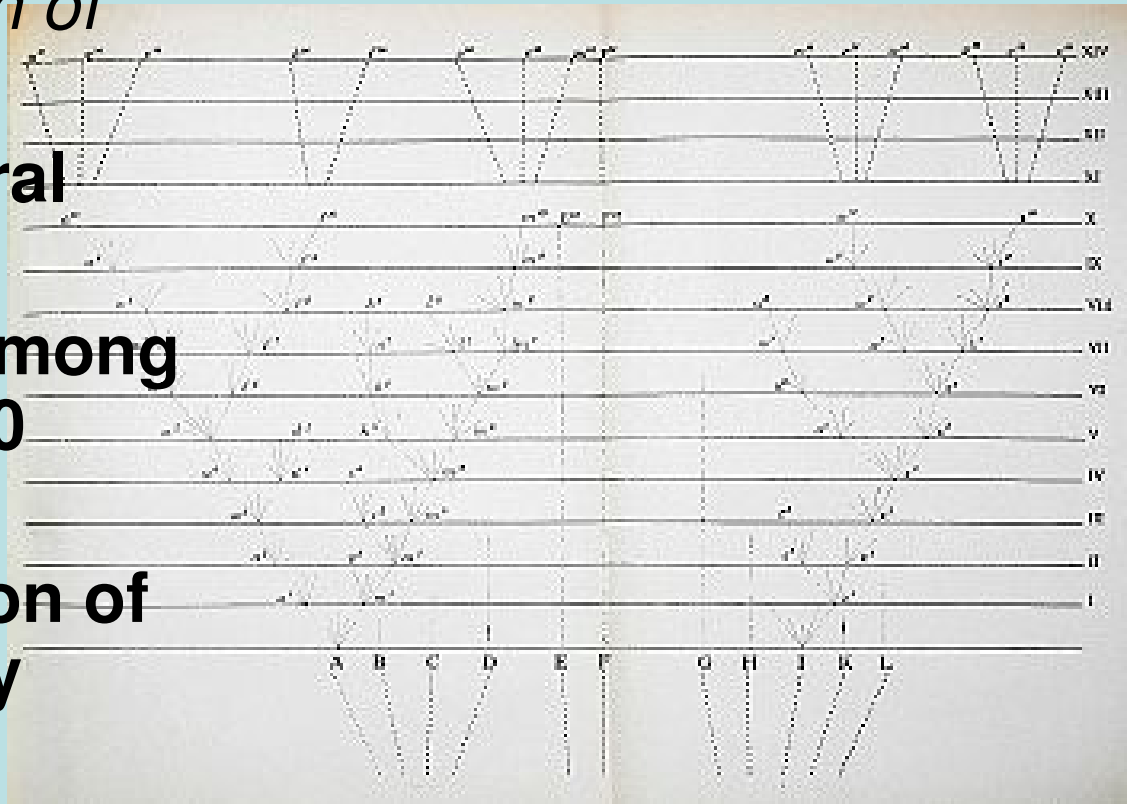
By 1850s Christians in geology agreed:

- Long time needed to form the various geologic layers
- Earth must be extremely old; death in animals before Fall
- Geology did not support a global flood.
- Theologians need input from science for interpretation.
 - Seminaries just beginning specialized, advanced training.
- **Early New England Geologists:**
 - Ignored Bacon's warning not to mingle the 'two books' unwisely.
 - Strong Concordists – close specific parallels between Genesis & conclusions of geology.
 - Various harmony theories: **Gap theory**, (In the beginning)
 - » [1910 Schofield Bible notes]
 - **Day-Age theory** (day = period of time)

③

Biology

- Ideas about common descent began mid-18th century.
- Darwin's *The Origin of Species* (1859)
- Mechanism: Natural Selection
- Widely accepted among scientists within 20 years.
- 'Professional'ization of science & theology



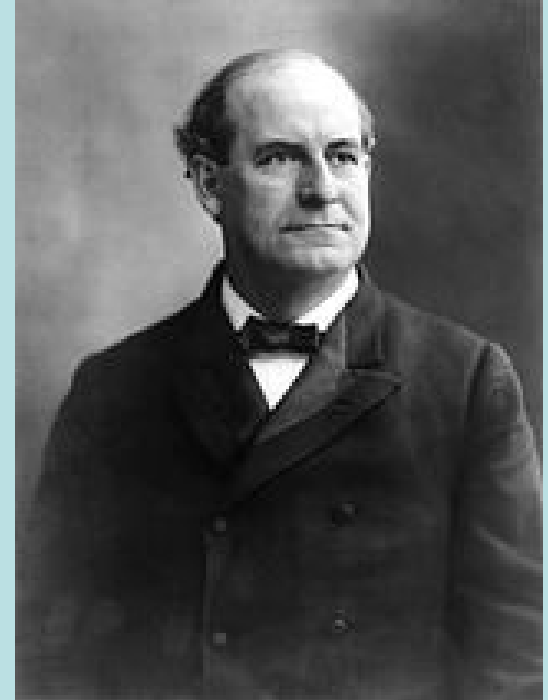
Origin of Species, Public domain

Turn of the Century

- **William North Rice** (1845-1928, Dana's former student)
 - 1891 to American Society of Naturalists: "The curriculum of an orthodox theological seminary is hardly regarded as complete today without a course of lectures in the consistency of Evolution with theistic philosophy."
- **Bernard Ramm** (1954)
 - "Theistic evolution had become so popular by the end of the 19th century, that some writers voiced their opinion that the controversy was over with."
 - 1925. Most Fundamentalists accepted long geological ages, and agreed with W.J.Bryan that life on earth long antedated Adam and Eve. (except for the Seventh-day Adventist George McCready Price)

Early 20th Century

- **The Fundamentals booklets 1910-1915**
 - Conciliatory towards evolution until WWI
- **William Jennings Bryan**
 - Concerned that young people leaving traditional faith @ college.
 - Darwinism – just a theory; ‘guesses’; (not educated in sciences)
 - Anti-evolution crusade
 - Scopes Trial. Hard to find scientist against evolution. Jennings conceded: world more than 6,000 years old and creation longer than 6 x 24 hour days.



Library of congress
ID cph.3a00786

Early 20th Century Creationists

- 7th Day Adventists - first 50 years of 20th Century 'Diluvianists.'
 - George McCready Price (1870–1963).
 - Neglect of geologic data.
 - Scripture as sole authority.
- Flood 'Geology' (No death before Fall, most fossil-bearing rocks from global Flood)
 - Seventh-day Adventist
 - 1923, George McCready Price: *The New Geology*
 - Only trained in elementary natural sciences
 - he could "barely tell one fossil from another"

Later 20th Century Creationists

- Henry M. Morris. Civil, Hydraulic Engineer. No field geology.
 - 1961. *The Genesis Flood* by Whitcomb and Morris.
 - 1963. Formed Creation Research Society (CRS)
 - Institute for Creation Research (ICR) 1972.
 - ‘Flood Geology’ renamed ‘Creation Science’.
 - Scientific creationism. Claimed reverse censorship.
- 1979. Ken Ham formed Creation Science Foundation. (Creation Science Ministries, Answers in Genesis)
- 2007 opening. Creation Museum. \$27 million; 60,000 sq. ft.

Perspectives on God's Two Books

Kingdom of God

OEC-ID

EC

Bible only

YEC

6x24-hour days
creation

Earth is young

No death before Fall.

Ken Ham - AIG

Creation Museum

Old Earth Creationism &
Intelligent Design

Hugh
Ross

God Created!
Big Bang
Common descent
Science shows
God's glory and awe

Francis Collins
Tim Keller
Billy Graham
Gordon College
GCTS ASA
N.T. Wright

Bible + science

Liberal and Mainline Churches

Atheists

- Total Random
- No direction
- We are alone
- Science explains

Science only

Philosophical
Naturalism

Embrace Science as God's Creative Work

- **Roger Wiens: Principal Investigator for the ChemCam remote sensing package on the Curiosity rover on Mars.**

Space & Atmospheric Sciences
Group at the Los Alamos National
Laboratory. Formerly @ Caltech.

- **Mark Noll vimeo** (2.15 minutes).
<http://vimeo.com/44007714>



www.msl-chemcam.com