

Men of His Word Conference

The Christian and Science

Arthur A. Eggert, Ph.D.

Theology is the study of divine revelation to establish a relationship with God.

Divine revelation comes from a book, a guru, or direct revelation.

Fundamental Assumption of Lutheran Theology: The Bible is the inerrant, verbally inspired revelation of God.

Sola Scriptura – Nothing dare be added to or subtracted from the Bible.

If the Bible does not reveal it, **I don't know** it because God does not think it necessary that I know it.

If the Bible does not reveal it, **I don't care** about it because it is unimportant for salvation.

Genesis 1 – divine creation in six days. Reaffirmed by God in Exodus 20.

Key question: How old was Adam on the day the LORD rested?

Actual age: 1 day (divine revelation)

Apparent age: 20+ years (observations & measurements)

This is the inherent difference between Lutheranism and science in its simplest terms.

What is true of Adam is also true for everything God created – It all has an actual and an apparent age on day 7 and thereafter. The birds, the trees, the soils, the rocks, the sun, the atmosphere.

Nature of Creation

God's stage set for His drama of man's sin and His grace, and it will be discarded afterwards.

The universe will be rolled up like a scroll (Isaiah 34:4) and burned with fire (2 Peter 3:7).

Scenery and backdrop do not need to be what they appear to the human viewer.

God can do better special effects than Hollywood. (Star Wars, for example)

How Little We Know

We do not know the topology of the earth immediately after creation.

We know nothing about fossils. The Bible does not mention them.

We do not know how the LORD works through and around the laws of nature.

We do not know when God created the angels and bacteria.

Science is a "human" enterprise based on "human" curiosity. It has neither divine command or promise.

Evidence comes from examining the physical world.

Fundamental Assumption of Science: All observations of natural phenomena can be explained in terms of the inherent properties of matter, energy, space, and time.

Corollaries of Fundamental Assumption of Science:

1. There is no supernatural being that can intervene in nature. (Effectively no God.)
2. The universe evolved because there is no other alternative. (Evolution is assumed.)

Purpose of Science

Scientists are very different from mathematicians.

- Mathematicians prove theorems. They create the rules and apply them.
- Scientists do **not** prove theories. They do not know the rules of nature and must find them.

Scientists are trained to be skeptics. They

- 1) build models (theories) based on observed evidence and
- 2) try to disprove theories developed by other scientists.

“All scientific theories are wrong, but some are useful.”

Everything called science is **not** of equal validity.

Everything called science is not of equal validity.

Science in the Media – It is mostly ignorance coupled with wild speculation. *Space travel, Exoplanets, Poorly studied ideas.*

“In vivo” science – It cannot isolate variables but can vary conditions. It is performed on animals and humans where the ability to gather data is limited and where subject bias and placebo effects can be issues. *Pharmacology, Nutrition, Diagnostic Medicine.*

Social science – It cannot isolate variables but can vary conditions to some extent. It is plagued by subject bias and experimental design issues. The research is often difficult to reproduce. *Macroeconomics, Sociology, Education.*

Experimental laboratory science [Hard or Exact Science] – It can isolate variables, vary conditions, gather large amounts of data, and reproduce experimental results. *Chemistry, Physics, Genetics.*

“Real world” science – It cannot isolate variables or vary conditions but can gather large amounts of data. It must be modelled using non-linear differential equations that cannot be solved in closed form and for which often all terms are not known. *Meteorology, Climatology, Vulcanology.*

Observational science – It is non-experimental, cannot isolate variables or vary conditions, can usually only observe events from one point in space and time. It is highly speculative. *Cosmology, Paleontology, Historical Geology.*

Are scientists inherently dishonest?

No more and no less dishonest than the average person.

It depends on the ease of others reproducing the work.

It depends on the quality of the information.

An Example of Hard Science

Elements are defined by the number of protons in their nucleus.

Ex: Hydrogen = 1 Oxygen = 8 Aluminum = 13 Lead = 82

Elements can have stable isotopes with differing numbers of neutrons in their nucleus.

Ex: Hydrogen = 0 or 1 Oxygen = 8, 9 or 10 Aluminum = 14

80 elements have stable isotopes.

254 total stable isotopes exist & all are found in nature.

Elements can have unstable isotopes (called “radioisotopes”).

Ex: Hydrogen-3 Oxygen-15 Aluminum-26

More than 3000 radioisotopes that do not occur in nature have been made in nuclear reactors and particle accelerators.

Radioisotopes do **not** decay by zero order kinetics. $[A] = [A]_0(1 - kt)$

Radioisotopes decay by first order kinetics. $[A] = [A]_0 e^{-kt}$ (Common kinetics in nature)

The time for one-half of any radioisotope to decay is called its “half-life.”

After 15 half-lives, radioisotopes are basically undetectable.

Ex: After 15,000,000 years, all Aluminum-26 would have decayed to Magnesium-26.

Half-lives range from 10^{-24} seconds to 2×10^{24} years. (55 orders of magnitude)

Half-lives are determined by using radiation counters.

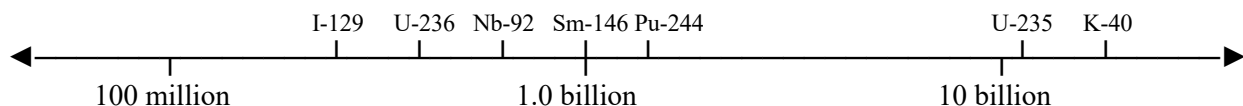
All radioisotopes can be graphed based on their half-lives on semi-logarithmic graph paper.

Because all isotopes of an element have the same chemistry,

where an element is present in nature, all its existent isotopes are present.

A mass spectrometer is a device that charges atoms and bends the charged beam of particles in a magnetic field, thereby showing which isotopes are present.

If we purify and test samples of all elements into a mass spectrometer, we learn which radioisotopes are present in nature.



All the stable isotopes do exist in nature.

All the radioisotopes consistent with the earth being at least 2 billion years old do exist in nature.

None of the radioisotopes consistent with the earth being less than 2 billion years old exist in nature.

We are back to the question of how old Adam was on the day God rested.

Scientists measure the world the way God created it.

God wants us to take by faith what He tells us in Scripture, not based on science.

Books You Will Find Helpful

Creation – In the Beginning and Afterward details God’s creative work from eternity, i.e., before Genesis 1, to his creation of a new heaven and earth on the last day. It systematically shows how God’s creative activities dovetail with his plan of salvation. Relying on the Scriptures and the writings of the Lutheran fathers, it shows God is in complete control of the universe, and we need not feel compelled to try to explain what he has not revealed. Author: Arthur Eggert, Publ: ITPLP, Avail: Lulu, Amazon & NPH

Clearing a Path for the Gospel is an apologetics book to aid pastors and teachers in making clear and effective arguments. It supplies the depth of understanding necessary to make a sound response to objections to biblical teachings in numerous areas. It uses scriptural arguments to remove obstacles to permit people to give the gospel a hearing. Authors: Arthur Eggert & Geoffrey Kieta, Publ: ITPLP, Avail: Lulu, Amazon, NPH & CPH

Knowing Your God – How Awesome is the LORD! presents the LORD in terms of His attributes. It is written in a narrative form to help people understand the utter majesty of God. It documents its statements with hundreds of scriptural references, most of which appear conveniently in footnotes at the bottom of the pages. Author: Arthur Eggert, Publ: ITPLP, Avail: Lulu

The Foolishness of God. Author: Siegbert Becker, Publ: NPH, Avail: NPH & Amazon

Simply Lutheran is a book to help laypeople understand the gestalt of Lutheran theology. It is penned in a narrative form supported by hundreds of scriptural references, most of which appear conveniently in footnotes at the bottom of the pages. It is written in laypeople’s terminology and has been highly rated by both pastors and laypeople. Author: Arthur Eggert, Publ: NPH, Avail: NPH & Amazon

The Narrow Lutheran Middle. Author: Daniel Deutschlander, Publisher: NPH, Avail: NPH & Amazon

The Theology of the Cross. Author: Daniel Deutschlander, Publ: NPH, Avail: NPH & Amazon

Will the Real Jesus Please Stand Up? Author: Matthew Richard, Publ: CPH, Avail: CPH & Amazon

Christian, Lutheran, Confessional is a concise history of the development of the Christian church from the time of the apostles to the present. It discusses the issues that shaped the church throughout history and some of the key actors in the church’s development. In the period after the Reformation, it emphasizes the challenges to the Lutheran church and the development of Confessional Lutheranism. Author: Arthur Eggert, Publ: ITPLP, Avail: Lulu, Amazon & NPH

The Lutheran Family Altar is a manual to help singles and families start and sustain home devotions. It presents the scriptural motivation for such devotions, a list of the available resources, and ways to start and ways to organize such devotions. Author: Arthur Eggert, Publ: ITPLP, Avail: Lulu