

Understanding Creation: Harmony in Science & Scripture

D. W. Tedder

Chemical & Biomolecular Engineering
Georgia Institute of Technology

Main Points

- What is harmony?
- Why is harmony important?
- What are the issues?
 - Creation of the universe
 - Creation of life
 - Recent Events
- Conclusions

What is Harmony Anyhow?

- **Definition:**

Harmony means accord or agreement in feeling, manner or action.

So for harmony to exist, both science and scripture must be true. To throw out either one precludes harmony.

Do Science and Scripture Agree on Anything?

A Medieval Philosophy:

Study to advance science for the glory of God and the betterment of mankind.

Hypothesis:

When rightly understood, science and scripture are in general agreement.

Why is Harmony in Science & Scripture Important?

- The benefits and validity of science are numerous and apparent in everyday life.
- Trust in science is widespread.
- So a common belief is:
 - If scripture doesn't agree with science, then scripture cannot be trusted.
 - If scripture cannot be trusted, then God cannot be trusted.
- Harmony seeks to change this common belief.

Science and Scripture Have Different Objectives

- Science seeks to describe events in strictly naturalistic terms
 - Doesn't invoke the supernatural. (No miracles)
 - Based on current set of observations which change over time. (Moving target)
- Scripture seeks to describe events resulting in God's plan of salvation.
 - Doesn't provide all details, just ones essential to salvation.
 - Frequently invokes supernatural.

There are Many Science & Scripture Issues

- Was the universe created?
- When did the universe begin?
- When did life begin?
- When did humans begin?
- Was there a flood?
- When was the earth divided?

Harmony Requires Resolution of Two Issues

But resolution of these two key issues goes a long way toward establishing harmony in science & scripture:

- What is meant by a “day” in Gen 1?
- Did humans exist before Adam and Eve? (Was there a pre-Adamic race?)

What is a “Day” in Genesis 1?

- Genesis 1 is in a poetic format. Not intended as a scientific document.
 - 1 LIGHT appears 4 LIGHTS appear
 - 2 WATER divided 5 WATERS bring life
 - 3 LAND appears 6 LAND is populated
- Genesis 1 generally agrees with scientific observations if “day” is interpreted as a period of time with variable length.
- Note: We are still in Genesis day 7.

What is a “Day” in Genesis 1?

- “Yom” can indicate a single day or a period of time. (e.g., In my day...)
- Gen 2:4, “day” indicates generations of heavens and earth.
- 1 Th 5:2, “day of the Lord”
- 2 Pet 3:8 “a thousand years as one day”
- Years and weeks in Daniel’s prophecy.

Resolution of Time Essential to Harmony

- Scientific evidence suggests the universe began 10 to 20 billion years ago.
- Ussher* estimates the following events:
 - 4004 BCE The Fall (Gen 3)
 - 2348 BCE The Flood (Gen 6)
 - 2234 BCE The Dispersion of the Races (Gen 11)
 - 1921 BCE The call of Abraham (Gen 12)

There is no reason to believe that the fall occurred exactly 7-24 hr days after creation.

*There is no generally accepted system of Bible chronology. These are lower bounds.

The Big Bang Requires a Big Banger

- Big Bang Theory of Creation widely accepted. (10 to 20 billion years ago, perhaps 14.5 billion).
- Time and 9 to 11 spatial dimensions (“heavens?”) began at creation.
- Everything began as a single point of infinite space-time density.
- The universe continues to expand today.

The Big Bang Requires a Big Banger

- Expansion since Big Bang continues to cool universe.
- Elements, suns, planets, etc. formed by condensation processes.
- Big Bang theory strongly supports Gen 1.
- Earth formed by condensation about 4.5 billion years ago.

The Big Bang Requires a Big Banger

- Big Bang not chaotic, but highly controlled.
- Expansion determined by highly precise physical constants.
- Quantum/string theory suggests 9-11 spatial dimensions.
- Big Bang Theory confirmed by numerous measurements in physics and astronomy.

Geological Record Suggests Life Rapidly Came Into Existence

- Cambrian Explosion, 540-490 million years ago.
- Virtually all phyla came into existence in a 50 million year period or less.

Science Asserts Existence of Pre-Adamic Race

- Humans apparently on earth for millions of years.
- Cave art 40,000 years old.
- Jericho as early as 8,000 BCE.
- Mitochondrial DNA of Neanderthals different from that of modern man.
- Mitochondrial Eve?

Major Events Recorded in Nile Valley Archeological Sites

EVENT	YRS (BCE)
• Earliest known habitation	
– In Nile Valley	35,000
– In Nubia	50,000
• First human burials	13,000
• First warfare	13,000
• Agriculture first practiced	6,000
• Civilization develops	5,000

Scripture Does Not Preclude Existence of Pre-Adamic Race

- Possibly explains Cain's fear of men after killing Abel and the origin of his wife.
- All Pre-Adamic descendants likely drowned in Noah's flood.
- Because of flood, Eve is still the mother of all living (Gen 3:20)
- Sin came into the world thru the 1st Adam; salvation thru the 2nd Adam(1 Cor 15:22,45-47, Rom 5:17, Acts 17:26)
- Death means spiritual separation from God.

Scripture Does Not Preclude Existence of Pre-Adamic Race

- Simple interpretation of Gen 1 & 2 suggests two creation events.
- Adam is the first:
 - Man in 1 Cor 15:45 who became a “living soul”
 - Son of God (Luke 3:37)
 - Man in Jesus’ genealogy
- God exists outside of time
 - Salvation occurs before and after Jesus
 - Sin occurs before and after Adam

Why Repeat Human Creation Description in Genesis 2?

- Genesis 1 may describe creation of pre-Adamic race, but....
 - The events of Adam and Eve's creations are of particular spiritual importance.
 - Scripture focuses on spiritual events leading to birth of Jesus, a descendent of Adam & Eve.
 - In Romans, Jesus is the 2nd Adam.
- No contradiction with science by asserting multiple creation events in scripture.

Science and Scripture Agree that a Flood Occurred

- Exact time is in dispute.
- Geological record suggests multiple floods.
- Extent of flood (global versus regional) uncertain, based on scientific record.

Science and Scripture Both Assert Movement of Earth's Plates

- Plate tectonics asserts movement occurred at a very low rate over long period of time. In distant past either one or two land masses originally existed, based on the geological record.
- Scripture asserts some rapid movement occurred after tower of Babel in life of Peleg (239 yrs, Gen 10:25 & 11:19)

Considerable Harmony Exists Between Science & Scripture

- Both assert that
 - Creation events occurred.
 - The order in which creation events occurred is about the same in both.
 - Both assert life came into existence quickly and in distinct time periods.
- Both agree that a great flood occurred in the past.
- Both agree that the earth's plates move.
- Both agree in earth orbit and an expanding universe (Isa 40:22) “circle of the earth” ...”He stretches out the heavens like a canopy...spreads them like a tent...”

Harmony in Science & Scripture Should Encourage Faith

- All of nature and creation reveals the truth of who God is and what He has done. Science reveals the details of God's logic and His glory.
- Science confirms many points made by scripture which are both unique and impossible to understand without the aid of science.
- The harmony between science and scripture is an excellent reason to believe that scripture accurately describes God's plan of salvation.