What do you think of when you hear the word “Creation”?

Huge solar flares lead to dramatic “Northern Lights”

Birthplace of stars

Spiral Galaxies

Galaxy Cluster

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ROSAT Optical/X-ray Survey
Candidate RXJ1416.4+2302

Dr. Deborah Haarsma
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**What do you think of when you hear the word “Creation”?**

As an astronomer and physicist, I think of the Earth in all its beauty, the vast expanse of the universe, and the tiny particles and physical laws which are its building blocks.

“God’s good creation includes not only earth and its creatures, but also an array of cultural gifts, such as marriage, family, art, language, commerce, and … government.” *Cornelius Plantinga Jr., Engaging God’s World*, p.32

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**How should a Christian respond to science?**

- **Two extremes:**
  - *uncritically accept* everything scientists say (and ignore Scripture where it seems to conflict)
  - *uncritically reject* any scientific finding which seems at first to conflict with theology
- **Reformed approach:**
  - critically examine a range of views
  - look deeper, find a new approach

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**How are Science and Religion Related?**

Four Models:

1. **Warfare:** Science and religion are in conflict, both historically and fundamentally
2. **Unrelated:** Science and religion are entirely independent and explore separate realms
3. **Interacting:** Science and religion are fundamentally related, and can correct and enhance each other
4. **Foundational:** Religion can provide the philosophical framework needed to do science

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**1. Warfare**

Science and religion are in conflict, both historically and fundamentally

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**1.A. Historically at War?**

“Hardly a generation since [Galileo] has not seen some ecclesiastic suppressing evidence, or torturing expressions, or inventing theories to blacken the memory of Galileo,” — Andrew White, *A History of the Warfare of Science with Theology in Christendom*, 1896, republished 1960

- Yes, conflicts between science and religion have occurred at times
- But conflicts have been rare
- Many conflicts are not fundamentally science vs. religion, but simply
  - cultural or personality conflicts
  - poor arguments or incorrect assumptions

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**1.A. Examples of faulty arguments**

- Fallacy of assuming either science OR Christianity must be wrong
  - Christianity requires the Earth to be stationary __ error is here
  - Science proves the Earth moves __ is science wrong?
  - Therefore, Christianity is false __ unacceptable

- The “god of the gaps” fallacy:
  - God must be the cause of events that science can’t explain.
  - When science advances, God is no longer needed.
  - God sustains all of the universe, both the parts science can explain and the parts it cannot.
1. B. Fundamentally at War?

“A scientist’s explanation is in terms of a purposeless, knowable, and understandable fully reduced simplicity. Religion, on the other hand, seeks to explain in terms of a purposeful, unknowable, and incomprehensible irreducible complexity. Science and religion cannot be reconciled.”

– P.W. Atkins, DCM reader p.43

1. B. Responses to Naturalism

- The success of science does not prove that Naturalism is correct.
- Naturalism is based on assumptions that cannot be proven logically or scientifically.
- There are many valid levels of explanation besides the purely scientific. The “nothing but” fallacy:
  Example: “Human beings are nothing but biochemical machines”
  Example: “A Shakespearean sonnet is nothing but ink on paper”

2. Unrelated - responses

- Yes, science is limited. It primarily addresses questions about the regular functioning of the material world (what, how, when).
- Science cannot answer questions of purpose, personhood, God, or why the universe exists.
- But Gould is missing a few things:
  - Christianity is more than moral values, it makes universal truth claims
  - some key questions require both scientific and spiritual approaches to answer
  - science and religion can have a positive interaction with each other
  - no part of reality, even science, is “free” of religion

2. Unrelated

Science and religion are entirely independent and explore separate realms.

“No such conflict should exist because each subject has a legitimate magisterium, or domain of teaching authority... The net of science covers the empirical universe: what is it made of (fact) and why does it work this way (theory). The net of religion extends over questions of moral meaning and value.”


Display of God’s Power

- mass similar to the Sun
- size smaller than Grand Rapids
- spinning 30 times per second

Amazing!

Pulsar in the Crab Nebula

NASA/CXC/ASU/J. Hester et al. 2002
3. Interacting
Science and religion are fundamentally related, and can correct or enhance each other.

“Science can purify religion from error and superstition; religion can purify science from idolatry and false absolutes. Each can draw the other into a wider world, a world in which both can flourish,” – Pope John Paul II, *John Paul II on Science and Religion*

3. Belgic Confession (1566)
Article 2: The Means by Which We Know God

We know him by two means:
First, by the creation, preservation, and government of the universe, since that universe is before our eyes like a beautiful book in which all creatures, great and small, are as letters to make us ponder the invisible things of God: his eternal power and his divinity...
Second, he makes himself known to us more openly by his holy and divine Word, as much as we need in this life, for his glory and for the salvation of his own.

3. Two Books: Nature & Scripture

- **God** (Author of Scripture) and **Nature** (Author of Science) are both no conflict.
- **Science** and **Human Interpretation** lead to **Potential Conflict**.
- **Biblical Studies** and **Human Interpretation** lead to **Conflict**.

3. A tool for resolving conflicts between science & theology

**Hope:**
- Nature and Scripture are both from God and cannot conflict (all truth is God’s truth)

**Strategy:**
- don’t throw out one and keep the other (don’t ignore any of God’s revelation)
- keep pursuing both until the underlying unity becomes clear

4. Foundational

Christianity provides a philosophical framework and foundation for doing science.

“We have ... [taken the] mandate for the scientific enterprise from the biblical view of our world and its dependence on God. Contrary to widely propagated belief, we have found nothing but encouragement to build up experimentally based knowledge into a theoretically integrated explanatory framework [do science]. ‘Of irreconcilable contradiction’ we have found no trace.”


4. Foundational

- To do science, you must make certain worldview assumptions.
- These worldview assumptions cannot be deduced from science itself, but arise from culture and religion. (Fang, DCM Reader p.55-60)
- Worldviews which are very different can sometimes share a subset of assumptions necessary to do science.
How does science make a difference in the walk of faith?

- Challenges us to examine Biblical interpretations more carefully when they appear to conflict with God’s revelation in Nature
- Helps us see the attributes of God displayed in Nature: glory, beauty, power, creativity, faithfulness, intelligence, immensity, intricacy, extravagance ... (Dillard)
  - Scripture teaches us these attributes, but Nature shows their amazing extent.
  - Science and technology reveal parts of Nature that we cannot detect with our unaided senses.

4. Foundational - Implications

- A Christian does not have to set aside faith to do science (“methodological naturalism”)
- A scientist does not have to be a Christian to do science, but must hold this subset of worldview assumptions
- Christianity is not a separate realm from science, but rather is the fundamental foundation for how and why we do science.
Display of God’s Immensity

While watching the video, think about this:

As high as the heavens are above the earth, so great is his love for those who fear him; as far as the east is from the west, so far has he removed our transgressions from us. Psalm 103:11-12