

1. Science & the Bible: Is there a conflict?

Psalm 19

Some things about this class...

Why I am interested in this topic.

1. Has to do with my commitment to the Bible as a baseline for understanding God and His world. Over the centuries, there have been many controversies, conundrums, and conflicts over how these two realms - Science & Faith - go together. How does God's Word and God's World relate to one another? How does the study of Nature offer signposts to God's reality and character which are revealed in Scripture?
2. Has to do with my vocation as a historian. Christians and their struggles with science actually have a lot to do with Christians and their relationships to history. How did our modern understanding of science come about? How did its emergence connect with the growth of Christianity in the world?
3. I am interested in myth-busting. There is no better avenue to discover and bust myths than to do good historical analysis. Many of the so-called "slam dunk" cases that are used as evidence to show that science and Christianity are incompatible, are, upon closer review, much more complex than we realize..
4. My firm conviction that Christian intellectual life is a valid calling within the church and has a contribution to be made to the church as a whole.
5. Christians are often afraid of science (and militant atheists tell us that we should be very, very afraid of science), and those who do go into science as a vocation often feel that they have no role to play in the church.
6. Christians will often lose their faith once they encounter scientism in any form. How can I equip Christians to not be afraid of science, to defend our faith in the face of scientism, and then even to pursue a vocation in science to the glory of God!
7. Pastoral concern. Demonstrate that there is a plurality of perspectives on some of the key issues arising in science and Christianity.

My Hope for this Class

1. This Class will be interesting
2. This class will not answer all of your questions; it may give you more
3. Parts of this class will be challenging
4. Disclaimer: I am not a scientist, and on one hand, that's a problem because things would be a lot easier if I was a scientist, but it is also not really a problem. because this class isn't

about science *per se*. This class is about the history and philosophy of science and how you and I can ask the right questions, and to think Christianly about faith and science.

5. My goal for this class is to encourage you to think about Science and the Bible for yourself.
6. Plurality of perspectives are welcomed.

Here is how the class will play out (but with an add-on option).

Schedule:

April 2	Science & the Bible: Is there a conflict?
April 9	A (really) brief Story of Science & Faith
April 16	NO CLASS!!!!
April 23	Genesis and the Origins of the Universe
April 30	Challenges: Competing Views on Evolution
May 7	Challenges: What about Adam & Eve?
May 14	Challenges: Technology, Transhumanism, AI, and the End of the Humanity
May 21	Challenges: MAiD in Canada: Euthanasia - with Dr. Kevin Sclater
May 28	Jesus Christ, Science, and the Way Forward

Opening Discussion:

1. *How did you feel about science when you were in school? Love it? Fear it? Bored by it?*
2. *What are the key questions you have about the Bible and Science that you would like answered in this class?*

Four Ways of Seeing the Story of Science and the Bible

Story of Conflict

“Humanity should accept that science has eliminated the justification for believing in cosmic purpose, and that any survival of purpose is inspired only by sentiment.”

Peter Atkins, Oxford Chemistry Professor

“It is fashionable to wax apocalyptic about the threat to humanity posed by the AIDS virus, ‘mad cow’ disease and many others, but I think that a case can be made that faith is one of the world’s great evils, comparable to the smallpox virus but harder to eradicate. Faith, being belief that isn’t based on evidence, is the principal vice of any religion.”

Richard Dawkins

Where does this Conflict story come from? Is it true that Christianity (faith) and Science have always been bumping up against each other? Have they always been enemies?

Not really. In fact, you could argue that the story of struggle between Christianity and science comes on the scene in the nineteenth-century with the publication of works by these key figures:

- Thomas Henry Huxley (1825-1895) – Darwin’s bulldog
- John William Draper – 1874 *The History of the Conflict between Religion and Science*
- Andrew Dickson White – *A History of the Warfare of Science with Theology in Christendom* (1896).
- James Young Simpson (1925)
- Continued recently through the writings of Richard Dawkins, Christopher Hitchens, Sam Harris, and Daniel Dennett

Listen to White’s summary of the alleged battle between science and faith: “...[I]n all modern history, interference with science in the supposed interest of religion, no matter how conscientious such interference may have been, has resulted in the direst evils both to religion and to science – and invariably. And, on the other hand, all untrammelled scientific investigation, no matter how dangerous to religion some of its stages may have seemed, for the time, to be, has invariably resulted in the highest good of religion and of science.” Andrew Dickson White (1832-1918)

Three problems with the Conflict Narrative:

1. It treats “science” and “religion” as essentially fixed and unchanging entities whose relationship towards each other is permanently established throughout time.
2. It assumes that “warfare” is the key characteristic which defines the relationship between science and religion (and we know the problem with assuming things)..
3. It ignores the complexity of how scientific ideas were formed within the context of religion and how they were expressed.

Story of Co-operation

And yet, it is well worth asking: why did an explosion of scientific knowledge occur between 1500 and 1900? Scientist and historian, Sir Alfred North Whitehead points out that this occurred because of the medieval insistence that God is a God of reason and has subjected His creation to a single code of law - general principles which are knowable. As Christians, we are invited to discover these principles, for in doing so, we grow in our apprehension of the glory of God.

Here are some of the key figures:

- Andreas Vesalius (1514-1564): “Father of modern anatomy”
- Galileo Galilei (1564-1642): “Father of modern astronomy”
- William Harvey (1578-1630): “Father of modern medicine”
- Blaise Pascal (1623-1662): “Father of the computer”
- Robert Boyle (1627-1691): “Father of modern chemistry”
- Antony van Leeuwenhoek (1632-1723): “Father of microbiology”
- Isaac Newton (1642-1727): “Father of modern mechanical physics”
- Michael Faraday (1791-1867): “Father of electromagnetism”
- Louis Pasteur (1822-1895): “Father of vaccination”
- Lord Kelvin (1824-1907): “Father of temperature measurement”¹

¹ Christian History, Issue 76 (Vol. XXI, No. 4).

Many scientists today continue to believe in God²

1916 – Do you believe in a God who answered prayer and in personal immortality?

- 41.8% - yes
- 41.5% - no
- 16.7% - agnostic

1996 – same question

- 39.6% - yes
- 45.5% - no
- 14.9% - agnostic

Story of Complexity

Not one of these above models tells the whole story and one of the inevitable conclusions which come from learning history is the realization that things are never simple and neat. In this case, we will discover that the relationship between Christianity and science is more complex (and surprising) than perhaps thought – with a lot of twists and turns along the way.

And so, we need to recognize:

- Not all aspects of religion and in particular, Christianity, led to the rise of science
- Not all relationships between the church and science has been harmonious. There have been many times and instances where faith and science have experienced conflict

Distance or Dialogue?

Distance?

Are these two “worlds” incompatible? Should they keep their distance from each other?

“Science and religion cannot be reconciled.” Peter Adkins, Oxford Chemist

The two spheres are to be kept separate from each other. This view is often referred to by the acronym **NOMA - non-overlapping magisteria**. Just stay in your lane, and all will be well.

Unfortunately, this view doesn't work so well for three main reasons:

1. **Some discoveries of science inevitably raise religious questions.** Here are some examples:
 - a. When astronomers study how vast the universe is, we begin to wonder how significant humans are in such a large universe (or universes).
 - b. When biologists study disease, it raises ethical questions of suffering and whether it would be *right* to alleviate it and how it would be *best* done.
 - c. When scientists speak of curing disease through the use of embryonic stem cells, it raises ethical questions about life. When does life begin? Is there

² Edward Larson and Larry Witham, “Scientists are Still Keeping the Faith,” *Nature* (April 3, 1997).

something special about human life? *Should* embryonic human life be sacrificed for grown up human life? If so, why?

- d. When scientists speak of global warming and ecological devastation, it raises questions of why. Why should we care for the planet? For the survival of the species? Which species? What is the stewardship role of humans in this world.
 - e. When physicists discover new and powerful energy sources (nuclear fusion), the question is raised in terms of how these new energy sources can be used.
 - f. When science gains the technological capability to do something incredible (the technological imperative), what are the criteria used to determine whether it should or should not be done? This brings us into the realm of ethics.
2. **The claim that science and Christianity have nothing to do with each other conceals another belief**, namely, “that science deals with reality, and religion with Santa Claus, the Tooth Fairy, and God.”³

“The world needs to wake up from the long nightmare of religion...Anything we scientists can do to weaken the hold of religion should be done, and may in fact be our greatest contribution to civilization.” Nobel Laureate Steven Weinberg

“I am utterly fed up with the respect we have been brainwashed into bestowing upon religion.”
Richard Dawkins

3. **The most important reason, however, is that Christians cannot separate science from Christianity because the Bible proclaims that God is sovereign over every part of life.**

“There is not a square inch in the whole domain of our human existence over which Christ, who is Sovereign over all, does not cry, Mine!”

— Abraham Kuyper

Dialogue?

1. ***We need to recognize that neither science nor religion can claim to give a total account of reality.***
2. ***Both science and religion are concerned with making sense of things.***
3. ***There are limits to what science can explain.***

³ See John Lennox, *Seven Days that Divide the World* (Grand Rapids, Zondervan Publishing House, 2011), 28.

What are the Limits to Science?

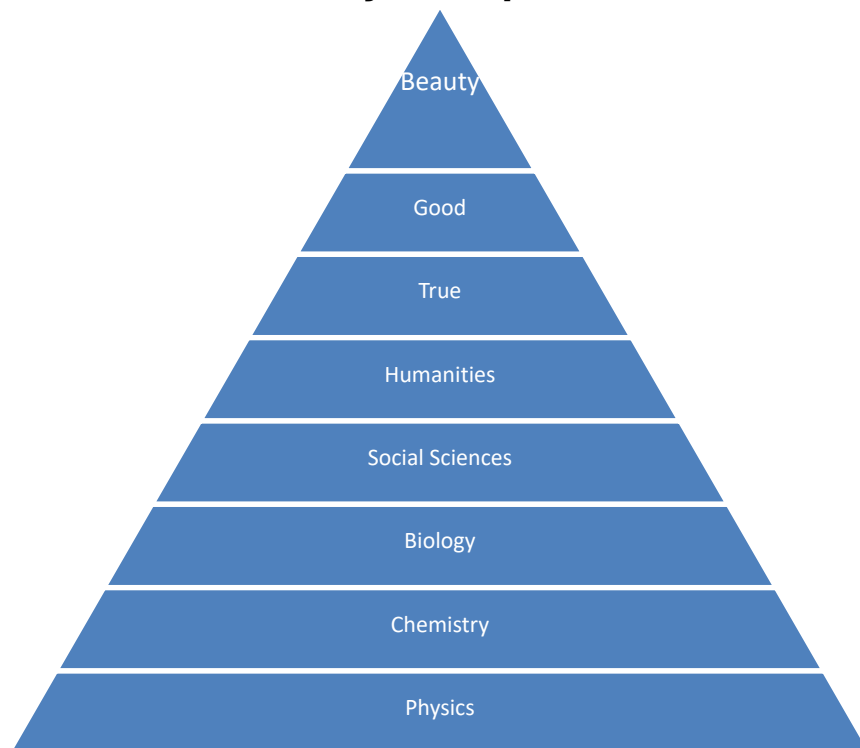
Science can explain lots of things...but not everything

- If we hold that only science can deliver truth, a lot of departments in university may have something to say about this! What about philosophy, literature, languages, art, music, information, etc. These lie outside the explanatory power of science.

Belief in God actually goes *beyond science* to explain what science cannot

- a. There are many layers of explanation.
- b. There is a hierarchy to explain things.

Hierarchy of Explanation



Questions Beyond the Scope of Science Include...

- What is Beautiful?
- What is Good?
- What is True?
 - *History*
 - *Religion*
 - *Science can't explain itself.*
 - *Why should the world make sense at all?*

"The most incomprehensible thing about the universe is that it is comprehensible."
Albert Einstein

Story of Aunt Matilda's Cake⁴

My dear Aunt Matilda has baked a beautiful cake. What's more, she has kindly displayed her cake to all the Nobel Prize winning scientists of her day whom she has invited to her home that particular day.

Aunt Matilda then asked all these scientists to analyze the cake. So, they get to work. The chemists break down the composition of the cake into its primary elements. The physicists break things down to its elementary particles. The nutrition scientists will tell us about the number of calories in the cake and whether this will benefit them health-wise. The biochemists looked at the structure of the proteins, fats, etc. in the cake. Writing down their findings, these scientists each take turn and present their findings to Aunt Matilda.

When this is done, let me ask you, "Can we say that the cake is completely explained?" We certainly know how the cake is made up and how each element relates to each other, but what if I asked, "*Why* was the cake made?"

We look over at Aunt Matilda and see that she is smiling. She knows why it was made. She knows the answer. She made the cake for a purpose. But all the scientists in the world will not be able to answer this question (which is no insult to them at all – it's just not within their spheres of inquiry).

The only way we shall ever get to an answer is how? If Aunt Matilda reveals it to us. Now, when she does reveal it to us (she had made it for Fred, her second cousin twice removed), that doesn't shut my reason off, does it? I just see if her explanation makes sense.

This example raises profound questions. Does someone stand in relation to the universe as Aunt Matilda does with the cake? If so, has He revealed anything? Well, from the Christian perspective, we believe that He has. The Christian God is a revealing God.

⁴ Classic example given by John Lennox

Science cannot even answer the questions we hear from our children, “How did everything begin? What are we all here for? What is the point of living?”

“Science is powerless to answer questions such as ‘Why did the universe come into being?’ ‘What is the meaning of human existence?’ ‘What happens after we die?’”

Francis Collins, Director of the Human Genome Project

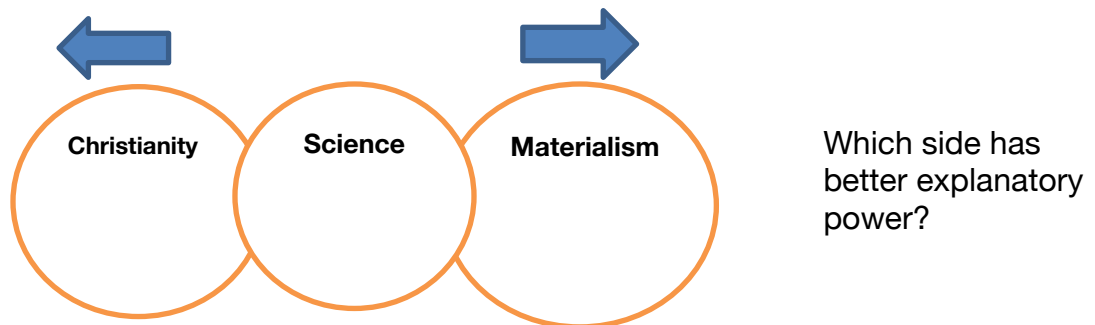
Conflicts and Challenges between Science and Christianity

Where does the Conflict lie?

Perhaps it lies NOT between Science and the Bible, but is connected to something called “Scientific Materialism”. We define “scientific materialism” as holding to two fundamental ideas:

1. **That the fundamental reality in the universe is material - stuff.**
2. **That the scientific method is the only reliable path to knowledge...and truth.**

The key question therefore is:



Where does the challenge lie?

We need to find a way forward because we cannot separate science from Christianity because well, both the Word and the World have the same author and point us to the same author – namely God.

The Way Forward

Here’s what I’m suggesting as we move forward in our discussions about Faith and Science:

We need to take both God’s Word and God’s World seriously

We need to learn to think clearly about what we believe about the Gospel and the world which God has created

How does Christianity explain science better than materialism?

We need to avoid slandering each other along the way

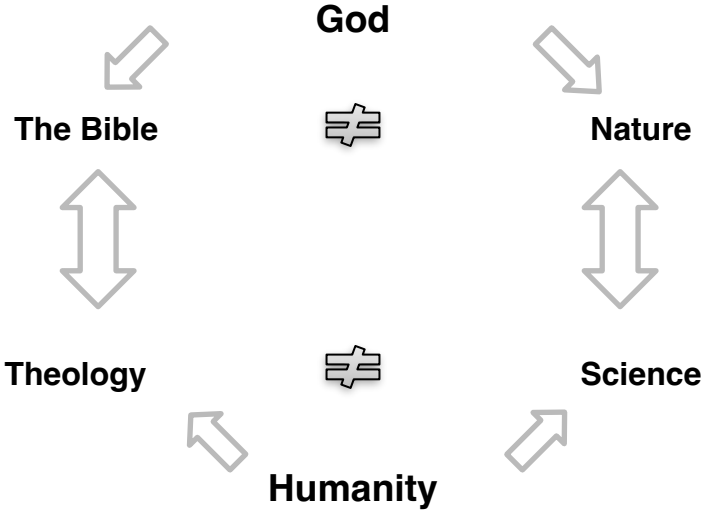
We need to avoid setting up unnecessary stumbling blocks to the gospel

“Usually, even a non-Christian knows something about the earth...and this knowledge he holds to as being certain from reason and experience. Now, it is a disgraceful and dangerous thing for an infidel to hear a Christian, presumably giving the meaning of Holy Scripture, talking nonsense on these topics; and we should take all means to prevent such an embarrassing situation, in which people show up vast ignorance in a Christian and laugh it to scorn. The shame is not so much that an ignorant individual is derided, but that people outside the household of the faith think our sacred writers held such opinions, and, to the great loss of those for whose salvation we toil, the writers of our Scripture are criticized and rejected as unlearned men.” _____, The Literal Meaning of Genesis

We need to encourage Christians to pursue science, not fear it

We need to locate where, as Christians we might go wrong in our own understandings of the relationships between Science and Christianity

Understanding Science and Christianity⁵



⁵ This is where we can go wrong – in the areas of science interpreting nature and theology interpreting the Bible.

A word for Christians⁶

Ultimately, the Christian's response to God's world should not be debate but an overflowing of praise and worship of the Creator.

Where do Christians agree?

1. *God created, sustains, and governs this universe*

"I believe in God, the Father almighty, creator of heaven and earth."

Apostles' Creed

"In the beginning was the Word, and the Word was with God, and the Word was God. He was in the beginning with God. All things were made through him, and without him was not any thing made that was made.

John 1:1-3

2. *The universe bears witness to God – Romans 1:18-20*
3. *The God who created this world also reveals Himself to humanity (General and Special Revelation)*
 - Hebrews 1:1-3
4. *The God who created this world is also our Redeemer*
5. *The Bible is authoritative and sufficient for salvation*
6. *God is sovereign over all realms of human endeavour and has given human beings special gifts and abilities to explore truth*

Where do Christians disagree?

1. *Christians agree Who created everything, but not always with **How** He made everything*
2. *Specifically, Christians disagree over what is the best way to understand passages that talk about acts of creation?*
3. *Christians disagree over what God's Word tells us about the history of creation?*

⁶ See Deborah B. Haarsma & Loren D. Haarsma, *Origins: Christian Perspectives on Creation, Evolution, and Intelligent Design revised edition* (Grand Rapids: Word Alive Press, 2011), 25-56.

Listening to both the Word and the World

It is better to ask these two questions:

- Is it ever appropriate for Christians to allow what we learn from the study of creation to affect how we interpret Scripture?
- Is it ever appropriate for Christians to allow what we learn from the study of Scripture to affect how we interpret creation?

An illustration from the weather

Imagine living in a culture where there is a debate about the weather. The Bible clearly teaches that God governs the weather. In Deuteronomy, the Psalms, and Jeremiah refer specifically to storehouses of rain and snow (Deut. 28:12,24; Ps. 135:7; Jer. 10:13).

But what causes the rain? Water evaporates from the ground level, rises to where the air is cooler, and condenses into water droplets that form clouds. We then have learned that cold fronts and warm fronts and low pressure systems bring rain.

Now imagine that debates begin to arise in our schools over what should be taught about the weather. Scientists begin writing journals emphasizing that no divine being controls the weather and therefore all the textbooks need to indicate that only natural causes are to be found behind rain. Christians are outraged and write in their journals against the scientists who project their godless theories about evaporation and condensation onto society. Further, at churches, people are told that if they believe in evaporation, they've abandoned all belief in the Bible. They even petition the school boards to include the "Storehouse Theory" of weather into school curriculum.

Now, if we saw this kind of debate going on, would you see this as simply a conflict between faith and science? Would you be willing to agree completely with one side over the other? No, most people would say that, in this case, both science and Christianity are correct and one truth doesn't cancel out the other. Really an issue of Primary and Secondary Causes OR Agency and Mechanism. ⁷

Discussion:

1. *What have been your experiences discussing with other Christians issues about science, creation, evolution, and Intelligent Design?*
2. *Have you ever heard two or more Christians disagreeing with each other about origins of the world, of the universe, of humanity? What were their positions? Were their disagreements cordial or contentious?*
3. *What are some other issues that Christians can agree on certain basic principles but disagree on particulars? [End times, free will and sovereignty, election, politics]*

⁷ Haarsma, 13-14