



Reflections on Science and Faith



David Mathews - Discussion Leader



What is this class about?

Thank you for being here this morning, everyone. This mini class is about how we, as Christians, can find our place in world full of misinformation about both science and our faith.

We will examine four brief reflections in the two class sessions to come:

- Are Science & Religion Compatible?

- What Happens when Science & Religion Meet?

- How do Christian Scientists describe their work?

- Do we ask too much of science?

A word of Prayer

Reflection 1: Are Science & Religion Compatible?

How Americans View Science & Religion

According to Pew Research, Americans are equally divided on whether science and religion are mostly in conflict (50%) or mostly compatible (47%).

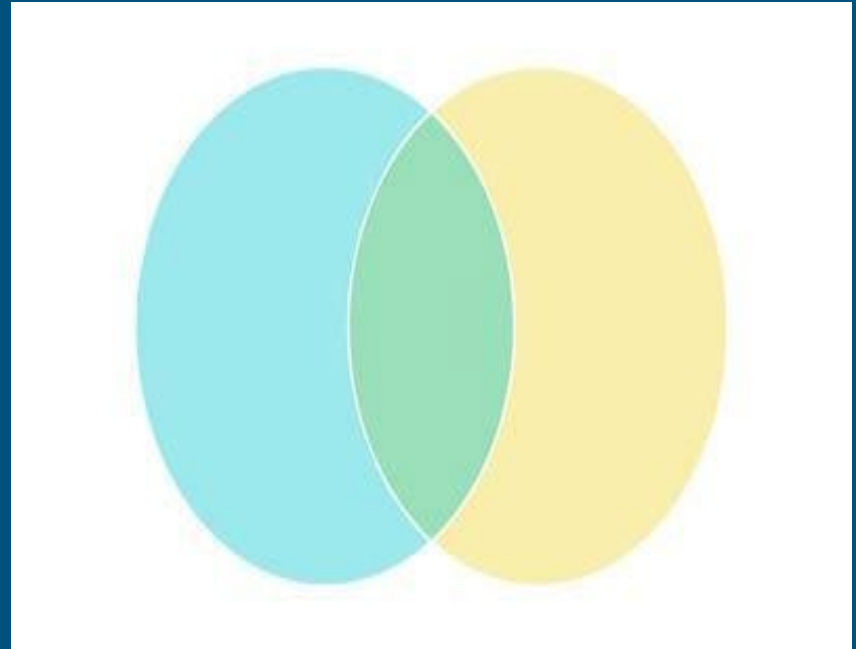
However, among highly religious Americans the numbers are very different. Those answering mostly in conflict is only 35%, and those answering mostly compatible rises to 62%.

All of which begs a question:

What do highly religious Americans understand about science and religion that non religious (and less religious) Americans don't know?

Activity #1 - Venn Diagram

For this activity you need a pencil and a partner or two. Discuss the differences and similarities between science and religion, then write one or two of your thoughts in each area of the diagram.



God's Two Books

God created nature of his free design, and thus we are compelled to study it. In addition, God has given us the ability as human beings to comprehend what he has created.

As Francis Bacon phrased it: God has, in fact, written two books, not just one. Of course we are all familiar with the first book he wrote, namely Scripture. But he has written a second book, called Creation.”

Mere Science and Christian Faith, Greg Cootsona, p. 8

Reflection 2: What Happens when Science and Religion Meet?

Ian Barbour's Four Approaches

Conflict - Science and Religion will never agree. Richard Dawkins, who was aggressively atheistic, typifies this approach.

Dialogue - The views and insights of science and religion should be compared & discussed. Most academics in the field of science and religion are here.

Independence - Science and Religion are two entirely independent ways of looking at the world and their boundaries should be respected.

Integration - Science and religion need to make a difference to each other through collaboration.

Quotations about Science & Faith

“A little science distances you from God, but a lot of science brings you nearer to Him.” - Louis Pasteur

“Science and faith can be mutually enriching and complementary once their proper domains are understood and respected.” - Francis Collins, director NIH

“The more I examine the universe and the details of its architecture, the more evidence I find that the universe in some sense must have known that we were coming.” - Freeman Dyson

Case Study: Carl Sagan

Many of us will remember Carl Sagan's role as public scientist extraordinaire. He wrote over a dozen books on the nature of science and on popular scientific topics, including the novel *Contact*.

We are going to read the excerpt from *The Demon Haunted World*, then discuss the questions which follow. Think about Barbour's 4 approaches as we read.



Reflections on Science and Faith - Session 2



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Starting with Prayer

Quick Review of Last Session

Reflection #1: Are Science and Religion Compatible?

According to Pew Research, most highly religious people in the US say yes, While less religious people say no. Highly religious Christians in America know that God speaks to us in two books - Scripture and Creation.

Reflection #2: What happens when Science & Religion meet?

Ian Barbour, physicist and professor at Carleton College says there are four possibilities: Conflict, Dialogue, Independence and Integration.

Barbour's Typology

Conflict - Science and Religion will never agree. Richard Dawkins, who was aggressively atheistic, typifies this approach.

Dialogue - The views and insights of science and religion should be compared & discussed.

Independence - Science and Religion are two entirely independent ways of looking at the world and their boundaries should be respected.

Integration - Science and religion are two necessary components of a complete world view. Science and religion are not necessarily in conflict and can, in fact, enrich each other.

Reflection 3: How Do Christian Scientists Describe their Work?

Brother Guy Consolmagno

Brother Guy Consolmagno (born 1952) is a Jesuit priest and the Director of the Vatican Observatory. He is the author of many books, including *Brother Astronomer*, from which our excerpts are taken.

Brother Astronomer

The fact is, I do personally experience God. I have, always, from earliest childhood. . . . Be it a gift or a curse - as it sometimes seems! - that experience is something we have ultimately no control over. When it happens, we can respond to it or deny it. But if it's not there, we can't make it come by force of will.

The science fundamentalist believes, and the religious fundamentalist fears, that religion is a fairy tale suitable only for children, and that once you learn science it will leave no more room for religion. But that just doesn't happen.

Some people are tone deaf. It's not their fault, and I don't criticize them for it. But I might get bent out of shape if a tone-deaf person insisted that my love of music was a hallucination, based on lies my parents taught me.

Or more absurdly, that my love of music would go away once I'd learned the physics of sound waves.

Brother Astronomer II

Indeed, the best and most wonderful thing about being a scientist was the chance to see God's creation, up close, firsthand, to delight in His cleverness and elegance and to get to know all the better the person who'd done the creating. Just as a writer's personality and background manifests itself in his or her work, the same is true of God and God's creation.

God is a creator who sets up simple rules, and then follows those rules to make a thing of complex beauty. God's universe is "self-similar," ever complicated but based on the same simple pattern that reveals itself, over and over again, everywhere you look. God is a creator whose universe can be appreciated on an infinite number of levels - not only is a sunset beautiful, but so are the Maxwell equations that describe how the light is transmitted from the Sun to us. And God gave us the brains to be scientists precisely so we could share in His delight.

So by doing good, honest science . . . I was worshipping God.

Francis Collins

Francis Collins (b. 1950) is an American scientist best known for his work on the Human Genome Project. He discovered the link between genes and several known diseases, and served as the Director of the National Institutes of Health from 2009 to 2021.

Collins is also the author of The Language of God, A Scientist Presents Evidence for Belief

Francis Collins

“Will we turn our backs on science because it is perceived as a threat to God, abandoning all the promise of advancing our understanding of nature and applying that to the alleviation of suffering and the betterment of humankind? Alternatively, will we turn our backs on faith, concluding that science has rendered the spiritual life no longer necessary, and that traditional religious symbols can now be replaced by engravings of the double helix on our alters?”

Both of these choices are profoundly dangerous. Both deny truth. Both will diminish the nobility of humankind. Both will be devastating to our future. And both are unnecessary. The God of the Bible is also the God of the genome. He can be worshipped in the cathedral or in the laboratory. His creation is majestic, awesome, intricate and beautiful - and it cannot be at war with itself. Only we imperfect humans can start such battles. And only we can end them.”

Francis Collins II

“In this modern era of cosmology, evolution, and the human genome, is there still the possibility of a richly satisfying harmony between the scientific and spiritual worldviews? I answer with a resounding yes! In my view, there is no conflict in being a rigorous scientist and a person who believes in a God who takes a personal interest in each one of us. Science’s domain is to explore nature. God’s domain is in the spiritual world, a realm not possible to explore with the tools and language of science. It must be examined with the heart, the mind, and the soul —and the mind must find a way to embrace both realms.”

Reflection 4: Do We Ask Too Much of Science?

Climate Change

What we ask of Scientists

- Unanimous judgement about the role of human activity in our changing climate
- Simple, clear unambiguous steps to take
- Motivation to get people to change

What Scientists can deliver

- A consensus of opinion based on research
- A call for concerted action, with possible steps to take

Climate Change - A Christian View

We are called to be Stewards of the Earth (Genesis 1:26) -

Then God said, "Let us make man in our image, after our likeness. And let them have dominion over the fish of the sea and over the birds of the heavens and over the livestock and over all the earth and over every creeping thing that creeps on the earth."

the word "dominion" here is very close to stewardship, to the care expected from a king for widows and orphans.

Do we have obligations as Christians to listen to the scientific consensus? Why or why not?

The Big Bang

Einstein's Theory of General Relativity describes a universe which is expanding.

Working backwards, if the universe is expanding now it must have been smaller before, which means it must have started from nothing - a singularity.

Romans 4:17 - God who "calls into being things that were not."

Psalms 33:9 - For He spoke and it came to be.

So science seems to confirm what we read in the Bible, but we should be careful. As Christians our faith should be put in God, not in the science that confirms God's creation. (Cootsona, p. 77)

Fine Tuning

There are 15 constants - the gravitational constant, various constants about the strong and weak nuclear force, etc. - that have precise values. If any one of those constants was off by even one part in a million, or in some cases one part in a million million, the universe could not actually come to the point where we see it. Matter would not have been able to coalesce, there would have been no galaxy, stars, planets or people. Francis Collins

Can this “fine tuning” argument be a proof of God’s existence? Should we as Christians want to to?

Thank you!

This concludes our mini class on science and religion, everyone. Thank you for attending. Here is a short list of useful books on the subject if you'd like to read more:

Cootsona, Greg. Mere Science and Christian Faith, IVP Books, 2018.

Consolmagno, Guy. Brother Astronomer, Adventures of a Vatican Scientist, McGraw-Hill, 2000

Sagan, Carl. The Demon Haunted World, Random House, 1995.

Spencer, Nicholas. Magisteria, The Entangled Histories of Science & Religion, One World Publishing, 2023.