

6.7

Can science and religion agree?



A Can science and religion agree?

Why science and religion cannot agree

Scientists who are atheists can never agree with religion as they totally reject any aspect of religious belief. Religious believers who insist that their scripture and tradition contain the literal truth are unlikely to agree with science, unless they develop their own scientific theories. For example, fundamentalist Christians have developed their own scientific theories of creation and evolution that support the Genesis account of creation, called scientific creationism. Religious believers who reject agreement between science and religion argue that it is dangerous to change religious truths to fit scientific laws as this leads to the rejection of other teachings in the Bible.

Why science and religion can agree

Many scientists and religious believers have no problem in accepting both scientific theories and the belief that God created and continues to sustain the universe. Many believers feel that the conflict between science and religion is over unimportant points. If the Bible's creation stories are not taken literally, then science can be regarded as revealing the laws by which God created the universe. Islam has always taught that science proves the truth of the Qur'an, and Islam encourages scientific research.

Buddhism, Hinduism and Sikhism all agree that scientific findings do not conflict with the teachings of their religion. In fact, they believe that science has tended to support their oldest teachings and they agree that both science and religion put forward some of the same truths.

Objectives

Investigate whether or not science and religion can agree.

links

Make sure that you understand why the Big Bang and evolution theories are challenges to religious belief by reading pages 14–15.

Research activities

John Polkinghorne (1930–)

John Polkinghorne is a scientist who believes that science and religion can agree.

- 1 Use the internet to research Polkinghorne's views.
- 2 Write an explanation of why Polkinghorne believes that science and religion can agree.

Study tip

When answering a question about whether or not science and religion can agree, make sure that you show that you have thought about different points of view.

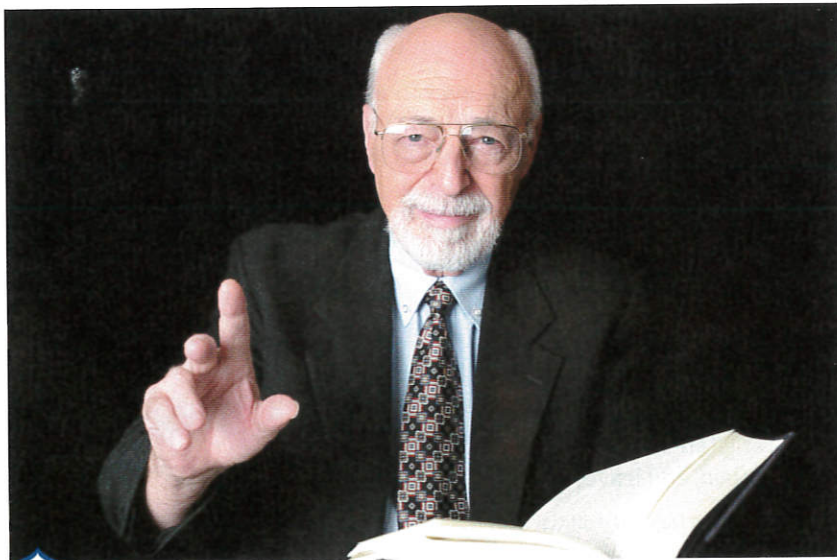
For the two to come together, scientists must be willing to accept that God or an Ultimate Reality is behind the scientific laws, which are continually changing in the light of new discoveries. Religious believers must be willing to adapt their interpretation of the scriptures and their religious teachings to keep up with scientific discoveries.

One recent development has been the theory of Intelligent Design. This explains the features of the universe and of living things in a scientific way, but avoids suggesting that the Big Bang and evolution are random processes. The theory makes it easier for religion and science to agree as it does not say that the designer is God.

Conclusion

Many religious believers argue that it is possible to accept the Big Bang and evolutionary theories without rejecting their faith. They believe that evolution is the process through which God's creation took place. In fact, they say, their faith can be supported by scientific theories as they show how God acts in the world in which we live. There are occasions when science cannot explain problems and so some people turn to religion for explanations.

Religious beliefs cannot be proved in a scientific experiment, but science can give people a sense of wonder at the natural world that supports their faith. Whether someone accepts both science and religion depends on how they interpret the scriptures and teachings of their religion.



B Does it all depend on what you believe?

Summary

You should now be able to discuss whether or not science and religion can agree.

Extension activity

Using the internet and/or a library, find out more about the theory of Intelligent Design.

links

Look back to pages 26–27 to remind yourself about faith.

Activities

- 1 Explain why some religious believers argue that science and religion can never agree.
- 2 Explain why some religious believers think that there is no conflict between religion and science.

6.4

The Cosmological Revolution

Changing views of the world

In the Middle Ages, religious and scientific views of the world agreed with each other because scientific explanations of how things were included God. However, in the 16th century, new scientific developments led to a change in the way in which people understood God's place in the universe. This changing world-view is known as the Cosmological Revolution.

The Medieval world-view

In the Middle Ages, it was believed that we lived in an earth-centred universe, that is, a universe in which the earth was thought to be at the centre of everything. Science was based on the Bible's account of creation in Genesis. God had placed the earth at the centre of his creation, and he controlled the universe. The Christian Church taught that what mattered was not life on earth but being admitted to heaven after death, so there was little interest in finding out more about the world in which people lived.

The Church taught that God created the universe and, on the sixth day, placed human life at the centre of his creation. Nothing happened unless God commanded it. Everything on the flat earth decayed and was always changing. Everything above the moon in God's realm did not change, never decayed and moved in perfect circles around the earth. Everything happened for a purpose. The Church explained this purpose in religious terms. All knowledge was subject to the Church's control. The authority of the Bible was regarded as final and it was interpreted to support an earth-centred universe.

The Cosmological Revolution

Towards the end of the Middle Ages, the attitude to learning changed. Ideas were no longer accepted simply because that was the way it had always been. The Church's control on ideas was breaking down. There was a new interest in learning, including the study of astronomy and science. This led to new scientific findings that began to cause a division between religious and scientific teaching.

Case study

Galilei Galileo (1564–1642)

Galileo's observations of the universe through a telescope supported the findings of Copernicus. For Galileo, the heavenly bodies in the universe were not made of a substance that was superior to the earth. He observed sunspots, and these proved that the heavens were not unchanging. He proved that the movement of the planets was natural and not the result of God. However, Galileo was not seeking to disprove the existence of God.

Objectives

Investigate the Cosmological Revolution.

links

Look back to pages 10–11 to remind yourself of the Cosmological argument.

links

An outline of the Genesis 1 account of creation can be found on page 120. Make sure that you know what is taught about God's role in creation in Genesis 1.

Extension activity

Using the internet and/or a library, find out how Aristotle's world-view influenced medieval thinking about the world.

Research activity

- 1 Using the internet and/or a library, find out why we no longer accept that the earth is flat. Make brief notes on the evidence that has been put forward.



A Galileo used a telescope to observe the universe

Nicholas Copernicus (1473–1543)

Copernicus was an astronomer. He was employed by the Church to produce an accurate calendar. Through his mathematical observations of the planets, Copernicus concluded that the earth went around the sun along with the other planets. Only the moon revolved around the earth. Copernicus said that the sun was at the centre of (what was then believed to be) the universe and he believed the heavenly bodies travelled in perfect circular orbits around it. The change to this belief in the universe with the sun as its focal point was the beginning of the Cosmological Revolution.



B How Copernicus saw the universe of his time

Case study

Research activity

2 The Cosmological Revolution

In groups, research the contribution that one of the following scientists made to the Cosmological Revolution. Share your findings with the rest of the class using presentation software.

- Nicholas Copernicus
- Tycho Brahe
- Johannes Kepler
- Galilei Galileo
- Isaac Newton

The challenge of the Cosmological Revolution

The findings of scientists were a challenge to the way people thought in the Middle Ages and to their religious beliefs. For example:

- If the sun was the centre of the universe, then God had not put humans at the centre of everything but on a tiny planet circling the sun. This challenged the idea that God had a special relationship with humanity.
- The Christian faith no longer had control over science. Scientists no longer referred to God to explain the way the physical world worked. Science and religion began to separate as scientists no longer had to make their findings match Christian teaching.
- Religion became the explanation for those things that were still not understood by science.
- God was no longer regarded as immanent and the controller of everything. Parts of God's creation were like a machine that ran itself. God might have created the world and moved on.

Activities

- 1 Explain why many Christians in the 16th century could not accept the idea that the sun was the focal point of the universe.
- 2 Explain the Cosmological Revolution.
- 3 Explain why the Cosmological Revolution resulted in a division between religion and science.

Summary

You should now be able to discuss the problems of the Cosmological Revolution for religious belief.