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By John F. Haught, adapted by Newsela
Why is there such resistance to science by so many religious believers? It is partly because faith has always been closely tied to a particular age’s picture of the natural world.
At the beginning of the scientific age, people were shocked that the Sun and the Earth were switching places. Not only that, they felt spiritually threatened by the news.

In 1612, poet John Donne, a committed Christian, wrote these lines:

> And new philosophy calls all in doubt,  
> The element of fire is quite put out;  
> The sun is lost, and th’ earth, and no man’s wit  
> Can well direct him where to look for it  
> ’Tis all in pieces, all coherence gone;

The “new philosophy” that Donne refers to is the Copernican Revolution and science in general. Though there was no word for “science” at the time.

Donne wrote those words two years after Galileo Galilei had published *The Starry Messenger*. This bestselling book changed long-held views about the skies above.

Polish astronomer Nicolaus Copernicus had imagined a world where the Earth revolves around the Sun. But people at the time just thought he was doing a thought experiment.

For Galileo, on the other hand, the Copernican system was not a mental exercise, but a description of the way things really worked.

The Catholic Church famously called Galileo wrong and sentenced him to the rest of his life under house arrest.

The Church now regrets its mistake and insists that there is no real conflict between science and faith. However, people like Donne in the seventeenth century certainly felt that science was a threat to their spiritual life. This anxiety still occurs among many religious people when they hear about new scientific discoveries.

**A crossroads for science and theology**

Why is there such fierce resistance to science by so many religious believers?

It is partly because religion often gives us a picture of the natural world. Science can disrupt this.

For example, in biblical times, people thought of the cosmos in three levels: the heavens above, never moving; the Earth beneath; and lower still, the underworld, the land of the dead.

In the seventeenth century, most religious believers took the biblical picture of nature literally. Certain Bible passages implied that the Sun moves and the Earth stands still.
The Bible seemed to support the Ptolemaic picture of the Universe, while Copernican astronomy seemed to contradict God’s word.

Galileo believed, however, that the Bible should not be read as a source of scientific information. The Catholic Church now officially accepts this position. Galileo still believed the Bible was special, but he said that people missed the religious meanings when they treated it as a source of scientific truths.

Some historians and scientists have assumed that Galileo’s fight with his Church means that he saw a conflict between science and faith. This is not true. For him science has little or nothing to do with religion.

But the discoveries of Copernicus and Galileo did have consequences for human spirituality.

“Spirituality” is the quest for a vision of reality that will give people courage, hope, and some degree of happiness in the midst of life’s inevitable tribulations.

For centuries, people had taken comfort in Ptolemy’s view of an ordered and regular universe.

In this view, planets orbited on perfectly circular paths. The Sun and Moon were perfect spheres. This perfection seemed to offer a hint of the infinite beauty that lies beyond our shadowy and temporary world.

The new science put this all in doubt. Copernicus, Brahe, Kepler, and Galileo were making more accurate astronomical measurements. They found that the heavens were not so “perfect” after all.

Their findings caused a massive change not only in science, but also in spiritual life.

The final blow

Ancient astronomy, philosophy, and religion had all assumed that the skies past the Moon were special. The heavens above the Moon seemed unchangeable, indestructible.

Because the skies above seemed to be unchanging, they pointed hearts and minds toward a better and more permanent world than the one on Earth.

Aristotle had called the heavens a fifth kind of reality, better than the four common elements (earth, air, fire and water) that made up the world “down here.” While things on Earth change and eventually die, the heavens seemed to mirror the changeless eternity of God.

Modern astronomy gradually robbed the heavens of their perfection, and their connection to God.

Tycho Brahe, for example, shocked people by showing that comets and supernovae existed beyond the Moon. Both of these show change and newness in an area that was thought to be perfectly stable.

Now the sky above was imperfect after all. It could no longer represent the unchanging perfection of God.

Other scientists also helped to destroy the image of the heavens as perfect and unchanging. Johannes Kepler showed that planets’ orbits are not perfect circles. Rather, they travel in oval-like elliptical patterns. Galileo discovered that the Moon is covered with craters. He found Jupiter has satellites and the Sun has dark spots on it.

Careful new observations increasingly demonstrated that the heavens, like things on Earth, are ordinary after all.
Finding perfection in change

Galileo was not bothered by these imperfections. What is so great about changelessness? he asked. And what is so bad about the dirty, changing Earth that we inhabit? Look carefully at what lies beneath our feet and not just over our heads!

Isn’t life, in other words, a much richer symbol of perfection than the mistaken idea of changeless heavens could ever be?

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