

THE MYTH OF CONFLICT IN *ANGELS AND DEMONS* LARISSA JOHNSON



Larissa Johnson is completing a doctorate in History and Philosophy of Science at the University of New South Wales.

Dan Brown's *Angels and Demons* is a page-turner mystery novel, and has proved a very successful one at that. But in some ways, it is more than just a novel. As in *The Da Vinci Code*, Dan Brown is painting a picture of the disturbing lengths that the Church will go to in order to protect its authority, this time against the inevitable progress of scientific knowledge. To this end, Brown relies on the pervasive view of the eternal conflict between science and religion. However, as this article will show, this view turns out to be a myth: useful for elevating science over religion, but with little basis in history.

The plotline of *Angels and Demons*

The idea of the conflict between science and religion is pervasive in our society, particularly in popular literature. This article examines the mythical origins of the conflict metaphor and its employment by the airport novelist of the moment, Dan Brown.

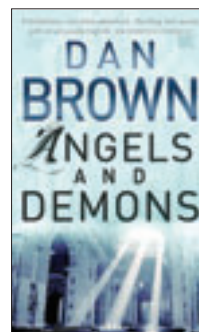
bears remarkable similarity to its more famous sequel, *The Da Vinci Code*. Harvard professor Robert Langdon is summoned by Maximilian Kohler, the head of CERN (the European Organisation for Nuclear Research), to help solve the murder of a prominent physicist. The murder appears to be the work of the brotherhood of the Illuminati, a secret society seeking revenge on the Catholic Church for their treatment of scientists such as Galileo. At the same time, a bomb of terrifying power ticks away in the Vatican, where the College of Cardinals has assembled to elect a new pope. Teaming up with the beautiful Italian scientist Vittoria Vetra, Langdon races against the clock to decipher a trail of ancient symbols to save the Vatican before it's too late.

Fact or fiction?

Given that Dan Brown is writing fiction, does it matter if he gets some of the historical facts wrong? Surely we are not expected to look for historical fact in a novel. The problem is that, as in *The Da Vinci Code*, Brown includes a note at the beginning of the book, indicating that some parts of his work are factual: "References to all works of art, tombs, tunnels, and architecture in Rome are entirely factual (as are their exact locations). They can still be seen today. The brotherhood of the Illuminati is also factual." This blanket

statement blurs the line between fact and fiction before the story has even begun. While Brown does not explicitly claim that his descriptions of people and events are factual, this is an implicit claim. By referring to historical characters and events, he is setting up a factual framework in which the fiction is to take place. Most importantly for his plot line, he appears to be trying to convince the reader that this conflict between science and religion has existed from the very beginning, and that scientists such as Galileo suffered because of the Church's dogmatism and superstition.

This claim would come as no surprise to the average reader. We live in a society that is so shaped by scientific achievements that we take it for granted that science provides the authentic way of looking at the world. Science is viewed as objective and rational, while religion is mere superstition. Indeed, these two realms are seen as so different, it is not hard to imagine that they have endured an eternal conflict. However, this is not the case. At the time of Galileo, whose trial before the Inquisition is often taken as the paradigmatic example of the conflict, theology and the study of the natural world were closely connected.



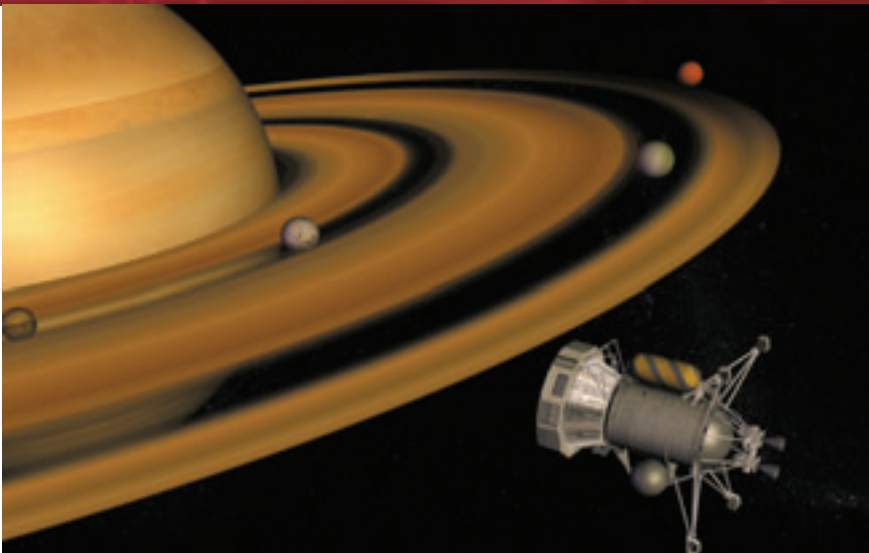


PHOTO | PHOTOS.COM

Conflict is the most pervasive metaphor for describing the relationship between science and religion.

Science versus Religion?

“Since the beginning of history,” Langdon explained, “a deep rift has existed between science and religion. Outspoken scientists like Copernicus—”

“Were murdered,” Kohler interjected.

“Murdered by the church for revealing scientific truths. Religion has always persecuted science.” (*Angels and Demons*, p. 50)

Conflict is the most pervasive metaphor for describing the relationship between science and religion. Many would believe what the Darwinian biologist Thomas Huxley wrote in the nineteenth century: “History records that whenever science and [religious] orthodoxy have been fairly opposed, the latter has been forced to retire from the lists, bleeding and crushed, if not annihilated; scotched if not slain.”

In this view, science and religion have always been, and always will be, in bitter opposition. The most ubiquitous example of this conflict is the ‘Galileo Affair’. The standard story, which Brown presents in *Angels and Demons* through Robert Langdon (p. 51), depicts Galileo as a staunch defender of scientific truth, persecuted by the Catholic Church for trying to educate the public. While the Church is still stuck in the Dark Ages with its Ptolemaic view of earth at the centre of the universe, Galileo achieves

“incontrovertible” proof that the earth actually moves around the sun, challenging the privileged position of mankind. Sadly, the Church refuses to accept this challenge to its authority, and Galileo is tried for heresy, “nearly executed” and forced to remain under house arrest for the rest of his life.

This dramatic story is, unfortunately, extremely distorted. Since we now believe that Galileo was right about the earth orbiting the sun, it is easy to look back and view the situation as a simple clash between dogmatism and science. However, the situation at the time was nowhere near this clear-cut. The Church was not trying to suppress any kind of scientific progress that seemed to challenge biblical interpretation. Instead, the Church encouraged study of the natural world, and theologians were prepared to reinterpret certain parts of Scripture in light of demonstrated scientific discoveries. The problem was that Galileo had no real proof of his ideas, as much of his telescopic evidence applied equally to the Ptolemaic and Copernican systems. Further, he could not explain how his system worked, or how the earth could move at all—something that seemed contrary to common sense. Contrary to popular belief, Galileo was not forbidden to investigate the Copernican system—he was merely cautioned to treat it as a hypothesis since it appeared to be contrary to Scripture and no conclusive demonstration had yet been achieved.

Galileo’s problems with the Church came to a head after the publication of his *Dialogue on the Two Chief World Systems*. He had been granted permission by Pope Urban VIII, who admired his work, to write a treatise on the Copernican system. This treatise involved three characters—Salviati, Galileo’s Copernican mouthpiece; Simplicio, representing the Ptolemaic-Aristotelian view; and Sagredo, the supposedly unbiased layman. Although the *Dialogue* purported to be hypothetical, it was clear that Galileo was arguing for the Copernican system as reality. Within a few months of publication, all copies of the book were seized and Galileo was summoned to stand trial before the Inquisition.

The result of the trial was that Galileo was suspected of heresy, forced to recant his belief in the Copernican system, and sentenced to house arrest. However, the trial was not the result of an inevitable conflict between science and religion. There were many political and personal factors that brought the situation to a head. For example, Galileo’s acerbic wit and sarcasm had made him many enemies among the Aristotelian philosophers. It is likely that when they couldn’t defeat him in argument, they took the battle to the church, accusing Galileo of heresy. Further, although the Pope had supported Galileo initially, he reportedly felt betrayed by Galileo’s *Dialogue*. It was not hypothetical, as requested, and the Pope’s view was included almost as an afterthought, and in the mouth of Simplicio—the character shown to indeed be a simpleton throughout the dialogue.

It is telling that Dan Brown focuses only on the aspects where Galileo turned out to be right, in our understanding. He makes brief mention of the theory of the tides, which Galileo thought was conclusive proof of the Copernican system, but not that it turned out to be wrong. Brown also suggests that Galileo’s use of ellipses to describe the orbit of the planets contradicted the Church’s belief that circles were divine. However, elliptical orbits were thought up by Johannes Kepler, a Protestant German astronomer to whom Galileo paid very little attention. To the end of his life, Galileo firmly believed that circles were more mathematically beautiful, and hence the only possible shape for the heavens. But why let the facts get in the way of a good story?



ILLUSTRATION | CLIPART.COM

Some of the mistakes Dan Brown makes are so basic that little more than an introductory history of science text is required to refute them.

Theology and natural philosophy

Ironically, the *Angels and Demons* characters Langdon and Kohler claim that the Church did not want a unification of science and religion: “The union would have nullified the Church’s claim as the *sole* vessel through which man could understand God.”

At this time, science and religion had long been viewed as complementary ways of understanding the world: the one dealing with the book of God’s works and the other dealing with the book of God’s word.

The major players in science in the seventeenth century, such as Galileo, René Descartes, Robert Boyle and Isaac Newton, were committed Christians. It might be imagined that these scientists had to keep their religious beliefs separate from their rational pursuit of knowledge, but this was not the case. The natural philosophical systems developed by these people were deeply influenced by their particular religious beliefs. Descartes, for example, explicitly states that he developed his system of the world from the attributes of God, such as immutability and free will. Boyle’s beliefs on the state of human knowledge after the Fall influenced his views on how much natural knowledge the human mind was capable of attaining in this life. Newton viewed gravity as evidence of the continuing providence of God in a mechanical universe.

The myth of conflict

If there was no conflict between science and religion at this time, why is the view used by Dan Brown so widely believed? The mechanical philosophers who came after Galileo tended to view the world as a machine. Though these philosophers, such as Descartes, Boyle and Newton, firmly believed that God was necessary to sustain the universe, the absentee deity of the Enlightenment was not far away. In this view, God had created the universe and then left, leaving things to run like clockwork. It was useful for people trying to counter

the authority of the established church. Religious beliefs began to be separated from the study of the natural world.

Up until the nineteenth century, science was not an established vocation. It was generally carried out by gentlemen as a hobby. Men such as Thomas Huxley, known as ‘Darwin’s Bulldog’, wanted to see scientists replace churchmen as intellectual leaders. To achieve this, Huxley portrayed the relation of science and religion as an eternal battle, in which science would always triumph. For people such as Huxley, science became a replacement for religion, a viewpoint still held by many today. As Langdon arrives at CERN in *Angels and Demons*, his guide explains: “Physics is the religion around here. Use the Lord’s name in vain all you like, just don’t slander any quarks or mesons”.

Later in the nineteenth century two major works were published on this conflict theme: John Draper’s *History of the Conflict between Religion and Science* (1883) and Andrew Dickson White’s *A History of the Warfare of Science with Theology in Christendom* (1896). These works, inspired by the authors’ negative experiences with religion, fuelled the conflict myth. Although extensive historical research, particularly since the 1930s, has shown the conflict thesis to be misleading, the idea remains in the popular mind.

Rhetoric, fact and fiction

“All questions were once spiritual. Since the beginning of time, spirituality and religion have been called on to fill in the gaps that science did not understand... Soon all Gods will be proven to be false idols. Science has now provided answers to almost every question man can ask. There are only a few questions left, and they are the esoteric ones. Where do we come from? What are we doing here? What is the meaning of life and the universe?” (Maximilian Kohler, *Angels and Demons*, p. 43.)

The myth of the conflict between science and religion is not simply a misunderstanding of history. Instead, it has become a rhetorical tool, put to good use for a political purpose. Although there is no inherent conflict between science and religion, the conflict myth allows an artificial barrier to be drawn between the two. Portraying the church as dogmatic and anti-science helps ensure that science remains authoritative in our culture instead of religion.

Books such as Dan Brown’s *Angels and Demons*, while fictitious, help to perpetuate this myth. Although his historical allusions are faulty, Brown blurs the line between history and invention, and encourages the reader to accept much of what he describes as fact. If readers are compelled by such books to study the history for themselves, this can only be a good thing. Indeed, some of the mistakes Brown makes in *Angels and Demons* are so basic that it would take little more than an introductory history of science text to refute them. Unfortunately, the popularity of these books makes it likely that the conflict myth will continue. ©

FURTHER READING

- Kirsten Birkett (ed.), *The Myths of Science*, Matthias Media, Sydney, 2003.
 Kirsten Birkett, *Unnatural Enemies: An introduction to science and Christianity*, Matthias Media, Sydney, 1997.
 Dan Brown, *Angels and Demons*, Corgi Books, 2001.
 Jerome J. Langford, *Galileo, Science and the Church*, University of Michigan Press, Ann Arbor, 1992.
 Dava Sobel, *Galileo’s Daughter*, Walker & Co., New York, 1999.