

## SCIENCE AND FAITH: AN OVERVIEW

Terry F. Defoe (BA, Soc.; BA, Psyc; M.Div.)  
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### INTRODUCTION

In the sixteenth century, a revolution began – a revolution very different from any other. A primary goal of that revolution was to pull back the curtain on information previously inaccessible to human understanding. According to pioneer scientist Francis Bacon [1561-1626] the untutored human mind is prone to all kinds of error. Scientific methodology seeks to identify and hopefully correct those errors. Bacon said that God speaks to humanity through the Book of his Word – the Holy Scriptures – as well as through the Book of his Works – the natural realm. Rightly understood, these two books should not contradict each other. Together, they reveal important truths about God, humanity, and nature. Bacon said that one cannot know too much about either one. (Giberson and Collins 2011, 113)

Christian biologist Gary Fugle says: *We cannot argue that God created one reliable source of information – in the Bible – and created a second, conflicting, unreliable source – in nature.* (Fugle 2015, 225) For Moses Maimonides [1135 – 1204], Jewish philosopher and astronomer, the Scriptures are trustworthy, but if they disagree with verified science, it is time to review their interpretation. (Krauss 2009, loc. 1932) Several centuries earlier, church father Augustine of Hippo [354-430 A.D.] declared that all truth is God's truth. (Lindberg 2010, 24) Lutheran astronomer, mathematician, and key figure in seventeenth century science, Johannes Kepler [1571-1630], like so many scientists of his day, was a person of faith. His motivation to do science came from his faith which, he claimed, helped him understand the ways of God. (McLeish 2014, 41)

Early editions of Darwin's *Origin of Species* quoted Bacon with approval, encouraging readers to carefully consult both God-given sources of information before coming to a conclusion about evolutionary theory. Contemporary British physicist Brian Cox quotes Belgian Roman Catholic priest and professor of physics Georges LeMaitre [1894-1966] who

said: *There are two paths to truth and I have decided to follow both of them.* (Woods 2016) Inscribed above the door of the Cavendish Library at Cambridge University (Murphy 2003, 524) are these words from the 111<sup>th</sup> Psalm – *Great are the works of the Lord, studied by all who delight in them.*

## ANCIENT SCIENCE

Although the Bible speaks of natural phenomena, it is not a science book. The “science” in the Bible provides a valuable glimpse into what was considered the best knowledge of the day – knowledge that we now understand was pre-scientific not anti-scientific. From today’s perspective, that information is often inaccurate, speculative, and at best incomplete. The Bible’s science is an ancient science, phenomenological (common-sense), gathered through limited and often fallible human senses. The motivation of those ancient authors was no doubt honorable. Through no fault of their own, they lacked the proper methods and tools that would enable them to understand these often counter-intuitive facts. Simply put, scientific methodology keeps people from fooling themselves. Over the centuries, science has shown, for instance, that the earth is incredibly ancient, not just a few thousand years old. It has shown that the earth orbits the sun, not vice versa. Science has demonstrated the world of microscopic life in a drop of pond water and shown that light emanating from stars reveals their chemical makeup.

## STEWARDSHIP

A prominent theme in the Christian faith is the call to faithful management – “stewardship” - of God’s gifts including the ability to accumulate knowledge. Another precious gift is time. Life is short. Stephen Jay Gould [1941-2002], paleontologist, tireless advocate of evolution and, ironically, friend of faith, died of cancer at 60 years of age in 2002. He said, prophetically, in 1989, *The Lord gives us so little time for a career, forty years if we start early as graduate students and remain in good health, fifty, if fortune smiles.* (Gould 1989, 206)

In the evangelical subculture, the theory of evolution takes a spot near the top of the list of controversial subjects. Evangelicals have a great deal of spiritual capital invested in the creation accounts. Some claim that a correct understanding validates the truth of the gospel, supports the doctrines of inspiration and inerrancy, and protects the authority of Holy Scripture. Christians who reject the theory of evolution argue that it is based on man’s word, while their views are based on God’s word. For these individuals there is nothing – nothing in God’s word, that is – that would indicate evolution is true. Since Charles Darwin published *On the Origin of Species* in 1859, no scientific theory has been more problematic for

conservative Christians. Darwin's theory continues to stir up strong emotions. For many evangelicals, this is a hill they are willing to die on. For a true partisan, compromise or accommodation to science is out of the question.

## WARFARE MODEL

Many evangelicals characterize the relationship between science and faith as warfare. Two influential books, both from the nineteenth century, promoted this idea. John W. Draper [1811-1882] wrote a book titled *History of the Conflict Between Religion and Science*, published in 1874. Draper's book went through fifty printings in fifty years. A second book, titled *A History of the Warfare of Science with Theology in Christendom*, (White 1896) written by Andrew Dixon White [1832-1918], founder of Cornell University, was published in 1896. Draper said:

*The history of science is not a mere record of isolated discoveries; it is a narrative of the conflict of two contending powers, the expansive force of the human intellect on one side, and the compressing arising from traditional faith and human interests on the other... Faith is in its nature unchangeable, stationary; science is in its nature progressive; and eventually a divergence between them, impossible to conceal, must take place. (Gould 1989, 44)*

Draper claimed that science could coexist with more liberal forms of Christianity but not with its hardline, fundamentalist expressions. His criticism was aimed primarily at the Catholic Church. He sought the discovery of truth for truth's sake, not, to use his term, "stretched" to fit religion. For his part, White claimed that the triumph of science over fundamentalist religion would benefit true science as much as religion. White was especially frustrated with religion's attempts to interfere with science, a situation which,

*... has resulted in the direst evils, both to religion and to science 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, both of religion and of science (Gould 1995, 47)*

Both Draper and White promoted their warfare model in the context of the battle over evolution. No other issue has so seriously tested the traditional Christian understanding of human origins. The warfare model remains an everyday reality for many evangelicals, especially young earth and intelligent design creationists. Albert Mohler, for example, president of the Southern Baptist Theological Seminary, uses typical language when he

characterizes the current conflict as a head on collision between evolutionists and creationists. (Clark 2014) Soon after Darwin published his theory, Charles Hodge (1797-1878) claimed that it is inherently atheistic because it accounts for design in nature without the need for divine intervention. (Numbers 2006, 26) Some anti-evolutionists go so far as to argue that the theory of evolution is an alternate religion, which, if it is to be accepted, requires a radically different, and essentially destructive, interpretation of scriptures' creation accounts.

Christians uncomfortable with evolutionary science truly believe they are at war with an atheistic ideology. That perception is strengthened by attacks originating from so-called New Atheists – individuals like Richard Dawkins, Daniel Dennett, and Jerry Coyne. Research suggests that this radical group of scientists represents perhaps five percent of scientists worldwide but, because of disproportionate media coverage, the general public perceives their numbers to be greater than they really are. (Ecklund 2010, 78) There is no place for hubris on either side of this discussion. Astronomer Jennifer Wiseman provides an important sense of perspective when she says:

*Contrary to the “science vs. religion” motif routinely promoted in popular media, I have found that most scientists I work with are humble, curious, and whether they are religious believers or not, quite respectful and interested in the beliefs of their friends and colleagues (Wiseman 2016, 203)*

In the 1950's, Baptist theologian Bernard Ramm [1916-1992] characterized the response of various faith groups to the science / religion debate as either noble or ignoble. The noble approach is irenic, marked by respectful conversation. The ignoble approach, on the other hand, is polemical, attacking and demeaning opponents. Ramm claimed that those he characterized as hyper-orthodox had done great damage to the relationship of science and religion. They had, as he put it, buried the noble tradition. (Numbers 2006, 210) As professionals, both scientists and theologians rightfully defend their legitimate interests. But this does not rule out common courtesy and respect. Evolutionary creationist Francis Collins once spoke at a national gathering of Christian physicians. When his pro-evolutionary views became evident, some participants walked out. (Collins 2006, 146)

## **SCIENCE DENIAL**

Kenneth Miller, biology professor at Brown University and author of a popular university-level biology textbook, is a Roman Catholic. Whenever he has been invited to speak on this topic, the response has been immediate, and often emotional. Christians respond to

evolutionary theory in at least three ways: engage, ignore, or deny. Mainstream Christianity has chosen to engage. Most evangelicals, on the other hand, have chosen to ignore or deny. For example, despite the fact that for almost two hundred years geologists have shown that the earth is exceedingly ancient, young-earth creationists continue to insist that the earth is six to ten thousand years old. Rejection of science is primarily based on a faulty interpretation of Scripture's creation accounts, what one Christian author calls "interpretive malpractice." (Walton and Sandy 2013, 121) Science denial is compounded by a faulty understanding of the methodological limitations of science. It includes, but is not limited to, a rejection of

- evolutionary biology
- scientific expertise in general, including epidemiology in the midst of a pandemic
- climate change
- GMO foods
- vaccinations
- the age of the earth and the cosmos

Many scientists, for their part, assume that all Christians reject large parts of science. And, in addition, many scientists are put off by the disinformation continually being disseminated by young-earth creationists. The 2020 Covid-19 pandemic has shown that science denial can have serious negative consequences. And that is especially true when elected officials reject or politicize scientific expertise.

## **ILLITERACY**

Surprisingly, considering his atheism, Stephen Jay Gould was concerned about biblical illiteracy in the academic community, in addition to the scientific illiteracy so prevalent in the wider society. Gould was disappointed to discover that when he quoted the Bible or Shakespeare in his university classes, most students were unable to recognize the source. (Gould 1989, 206) Illiteracy in any form provides fertile ground for error. Astronomer Guy Consolmagno is a Jesuit priest. As director of the Vatican Observatory in Rome, he was interviewed by the Canadian Broadcasting Corporation. In that interview, he pointed out that many creationists have only a grade-school knowledge of science. And many scientists, on the other hand, have only a grade-school knowledge of faith. (Consolmagno 2013) Many Christians therefore are not adequately prepared to evaluate scientific claims and, in addition, many scientists lack basic information about faith-related issues. Scientific discoveries require evangelicals to revisit several major doctrines. Is the earth, in fact, billions of years old? Can the scriptural accounts of Adam and Eve be reconciled with

scientific discovery? Were living organisms created miraculously? Did they develop over a long period of time by means of descent with modification?

Today, most mainline Christians have come to terms with science. Many evangelicals and conservative Christians, on the other hand, have not. Should these folks be faced with a choice of either science or faith, they choose the latter. Evangelicals routinely conflate evolution with atheism. Their science denial is ideological, not at all based on evidence and facts. Christians ought to be able to handle all expressions of truth including those that make them uncomfortable.

Niles Eldredge once said that it's not possible to understand the internal combustion engine standing on a street corner watching cars whiz by. (Eldredge 1995, 7) For Christians, the ability to comprehend reality is a gift from God – a gift which is to be used for the good of humanity and the glory of God. God is surely pleased to know that humanity is discovering truths about his creation. This curiosity and ability to comprehend must be exercised in a disciplined manner, however. Louis Pasteur [1822-1895], famous chemist and bacteriologist, said that “... *fortune favors the prepared mind.*” (Gould 1989, 142)

## CONCLUSION

Thomas Henry (T.H.) Huxley [1825-1895] encouraged individuals to examine their ideas in the light of truth in order to determine their validity. (Ruse 2012, 172) Ralph Waldo Emerson [1803-1882] said that faith which shuns science dishonors God. (Conway Morris 2010, 148) It is my contention that it is possible to leave young-earth creationism for biblical reasons. I would, however, add the following caveat. No one should discard a critically important part of their belief system unless they are fully convinced that such a change is necessary and, in fact, beneficial. An evangelical pastor who has adopted an evolutionary perspective says,

*I am deeply invested in presenting the gospel in an intellectually credible fashion to nonbelievers in our culture. For this reason, I think it is incredibly significant that, from Galileo's inquisition to the Scopes trial to the present evolution debates, whenever the church has assumed a rigid opposition to the consensus of the scientific community, it has eventually harmed the credibility of the church in the eyes of the broader culture. (Boyd 2016, loc 4918)*

Young people in various faith communities need to be assured that science is, in fact, a worthy vocation. In the early days of the scientific revolution, as we have noted, most scientists were believers. Even today, a substantial minority, around 40%, fit into this

category. Surprisingly, that number has remained steady for more than a century. (Leuba 1916, 340) A scientific vocation is a form of worship. Andrew Briggs says, *What we scientists are doing is studying how God makes the world work; there is an added pleasure in studying the world if you know the Creator.* (Briggs 2014, 40)

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