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REASON AND WONDER

Why science and faith need each other

EDITED BY ERIC PRIEST

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*To my wife, Clare,
and children, Andrew, Matthew, David and Naomi,
with love*

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Contributors

He became Dean of Lichfield in 1994, Canon Theologian of Westminster Abbey in 2000 and Bishop of Durham in 2003. In 2010 he was appointed Professor of New Testament and Early Christianity at St Andrews University. Tom has published over 80 books at both scholarly and popular levels, most recently *Paul and the Faithfulness of God* (SPCK, 2013) and *Simply Good News* (SPCK, 2015). He has also broadcast frequently on radio and TV.

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Preface

Since December 2007 I have helped organize, in St Andrews, three highly popular James Gregory public lectures per year on science and religion, covering a wide range of topics in a high-level informative way that has appealed to many members of the general public. These have been generously funded by the John Templeton Foundation, and since November 2013 the main organizer has been Andrew Torrance.

Last year I was asked by the doctrine committee of the Scottish Episcopal Church to edit a booklet on science and religion and so invited nine of our previous and future James Gregory lecturers to contribute a short chapter. This was published as Grosvenor Essay number 11 in May 2015.

The present book is a greatly expanded version of the Grosvenor Essay and it includes three extra contributors. Each of the chapters stands alone as a real jewel of interesting insight, and I am very grateful to these eminent authors for giving their time and thought to contribute.

The chapters show how broad the field of science and religion has become and how deep the thinking is on the various aspects, from philosophy to astronomy, biology, human studies and theology. But the reader will notice many fascinating common themes and threads. Also, although the focus is mainly on Christian aspects, most of the points being made are common to the other Abrahamic faiths, which are after all closely related sister religions that worship the same God, but in different ways and with different insights.

All of the contributors share the belief that science and faith are not in conflict or independent but have complementary things to say, both being key to our human nature. But some of the chapters go further and suggest that they are not separate but share so many common features that they are better viewed as part of a common whole. In this more integrated approach, the notion of science as a monolithic concept is shattered after viewing the history of its development and asking ‘What is it like to be a scientist in practice?’

Preface

Instead, the sciences and humanities represent a rainbow tapestry, merging into one another and linked by a common search for understanding, using reason and imagination.

*Eric Priest
St Andrews*

Acknowledgements

I am most grateful to the John Templeton Foundation for funding the James Gregory public lectures on Science and Religion at St Andrews and to Andrew and Alan Torrance, who have helped organize them. I am also thankful to the Scottish Episcopal Church for allowing us to create the current book by building on and adding to their Grosvenor Essay entitled 'Towards an Integration of Science and Christianity'.

1

Introduction: Towards an integration of science and religion?

ERIC PRIEST

The aim of this book is to bring together a series of world experts, who show in their own disciplines how many different aspects of both science and faith involve reason and wonder, which support one another and lead towards a much more integrated attitude to the sciences and humanities than is usually realized.

I am an applied mathematician (or theoretical physicist) and also a Christian, and in both I have been on a journey of discovery, or a pilgrimage, where my ideas have continually evolved. Not being an expert in theology or philosophy, this first chapter just represents some personal thoughts. In particular, I would like to challenge two views: the first is that the sciences are coldly inhuman and purely logical, whereas the humanities involve only our emotions and imagination; the second is that science is monolithic and reductionistic, governed by a simple set of instructions called the 'scientific method'. It is important also to counter the overspecialization that inhibits the natural human yearning to integrate and make sense of diverse knowledge.

This book takes some steps towards an integration of science and faith by moving away from a paradigm in which they are regarded as separate and having nothing to say to each other. As an introductory chapter, we build the case for developing an integrated approach by commenting on the possible relationships between science and religion, including the claim by New Atheism that they are at war (p. 2). There follows a discussion of the rise and fall of atheism (pp. 5–9) and a brief account of the way the words 'science' and 'religion' have evolved in meaning over the centuries (pp. 9–14). Then a personal insight into what it is like to be a scientist in practice (pp. 14–17) leads to a development of the argument for integrating the sciences and

humanities, including religion (pp. 17–24), and for why science and faith need each other (pp. 25–30). Finally, a summary of the wide-ranging themes of this book is presented, from philosophy, through astronomy to evolution, biology, psychology and theology (pp. 30–9).

The relationship between science and religion

Ian Barbour (1997) suggested four possible relationships between science and religion, namely that they are:

- 1 in conflict
- 2 independent
- 3 in dialogue
- 4 integrated.

Conflict

The first possibility, that science and faith are at war or *in conflict*, is the one that has been stoked by the New Atheists. However, I have never personally felt a conflict between science and religion and suggest that such a conflict arises only if you misunderstand the nature of either science or religion. Thus, at one extreme you may have an *ultra-fundamentalist* view of religion with a wooden literalist interpretation of Scripture, which says you can ‘learn your science from the Bible’. But this ignores the history of Christian ideas, in which St Augustine in AD 400 famously wrote: ‘You should not interpret Scripture in a way that conflicts with reason and experience’. At the other extreme, *scientism* suggests that ‘science produces the only reliable knowledge’, but that is clearly false, since the questions that are most important to us as human beings are usually outside science, such as ‘Am I in love?’ ‘Is that work of art beautiful?’ ‘What is my purpose in life?’

A clear philosophical argument against scientism has been presented by Trigg (2015), who shows why science needs metaphysics. According to him, science does not have all the answers. It cannot explain why mathematics, a product of human minds, can unlock the secrets of the physical universe, nor why it can deal with abstract reasoning beyond the physical world. Indeed, scientists at the frontiers of physics happily contemplate universes beyond human reach. Thus, the foundations of science lie beyond science, and reasoning

beyond the observable is needed to discover what is not yet known, so that metaphysics helps us conceive of realities apparently beyond our grasp.

Independent or in dialogue

In ancient Greece, the Stoics thought that God is everywhere, whereas the Epicureans believed that, if the gods existed, they took no interest in the world, but occasionally interfered. The latter led on to Stephen Jay Gould's (1989) idea of *non-overlapping magisteria* (see Fig. 1.1), which is similar to Barbour's relationship (2), in which there is no connection between science (the material world) and matters of religion (including ethics and morals) and so there is no possibility of conflict. However, this line of thinking naturally leads to a *deist god*, who is remote and uncaring and who is completely different from the Christian God. The next step, as science increases and you see no relevance for religion, is naturally to do away with religion altogether.

But the Christian God is very different from a remote deist god. The Christian God created the universe and all its laws with the potential to create life, and humans with a longing to study and understand the nature of God's handiwork. This God, however, is also intimately involved with the world, continually sustaining and supporting it. Thus, he or she is the continuous source of *all* our creative acts, whether they be in the sciences or the arts or our daily interactions with other people that are central to what it means to be human. Also, what Jesus shows is that God is *alongside* us in our suffering. This does not explain suffering, but it does mean that we are not alone, and is why I personally am much more attracted to Christianity than other religions.

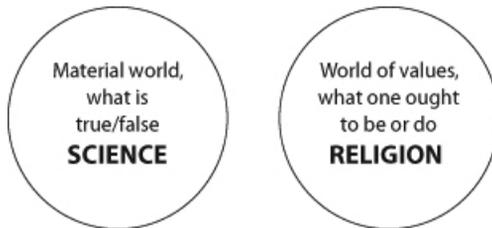


Figure 1.1 A diagram suggesting that science and religion are independent

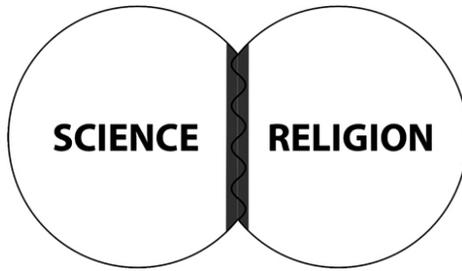


Figure 1.2 An alternative view of science and religion in dialogue

The third view, which I used to favour, is that science and religion intersect along a fuzzy boundary, where different questions are asked about the same reality and where they are in a respectful and listening dialogue rather than a state of war (see Fig. 1.2). The idea here is to recognize that some questions are scientific (often the *how* questions) and some are non-scientific (often the *why* questions) and that answers to both can be valuable (see pp. 14–15).

Integrated

A final model for the relationship between science and religion, and which we are moving towards in this book, is that they are integrated. There are several aspects to such a view, which are developed in this chapter. First of all, the history of science shows that the division into science and religion came about only in the late nineteenth century (see pp. 9–14). Second, science is not monolithic with a single approach but consists of a range of different fields that continuously merge into one another (see Fig. 1.3). Third, the idea that all scientists adopt the so-called ‘scientific method’ is a myth, since there are many approaches being employed in the different sciences (see pp. 20–2).

Aspects of such an integrated model are developed on pages 17–24 and 25–30. It has common features: with McLeish (2014), who proposes a ‘theology of science’ and a ‘science of theology’; with Trigg (2015), who argues persuasively that science does not have all the answers but needs metaphysics; and with Bancewicz (2015), who shows how science enhances faith.



Figure 1.3 An integrated view of the sciences and humanities as a mixture of subjects (greys) that merge continuously into one another*

The rise and fall of atheism

Modern atheism is a complex mixture with several strands (e.g. Plantinga et al., 2010). As science has developed and explained more natural phenomena, so a role for a *God of the gaps* has declined. So-called *scientific atheism* has grown, in which God is not needed for scientific explanation. In contrast, *humanistic atheism* was stimulated by the Enlightenment with its primacy of human reason and independence. Such atheism was articulated by Feuerbach (1804–72), with his view that our ideas of God are projections of our own minds, and reached a climax with Nietzsche’s (1844–1900) proclamation of the *death of God*.

Modernism has, moreover, spawned at least two more types of atheism. One is *apathetic atheism*, with an indifference to the great questions of life, and a second is *protest atheism*, which is a cry against a God who seems indifferent to human suffering (e.g. Dostoevsky (1821–81) and Camus (1913–60)).

* The sciences and humanities have common aspects (creativity, beauty, wonder, reason and community) and are immersed in an underlying reality with meaning and purpose. In a more comprehensive, coloured version of the figure, the greys would be replaced by the colours of the rainbow and other disciplines would be added.