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Summary of this book

In Chapter 1, we look at the wonders and the benefits of science. We describe the universe as science understands it: from the vastness of time and space to the microscopic level, and then down to the unimaginably small world of quantum physics. We will also think about what we mean by 'science' and look at some of its history. We will see that, if science in the West was born in ancient Greece, it was nurtured in a Christian cradle before it gained its independence. And we will see that some people began to think that science should rebel and reject its Christian ancestry. Along the way in Chapter 1, you will be introduced to some high-flying scientists who are also unashamedly committed to the Christian faith.

Despite its power to reveal answers to many of our questions about the natural world, science has its limits. In Chapter 2, we will put science in a wider context, considering what sorts of questions lie outside the boundaries of science. We will see that some of the most important questions humans can ask, such as moral and existential questions, cannot be answered by science. We will also touch on the question of proof and certainty.

Chapter 3 introduces some light philosophy as we look at 'scientism', which is the ideology that arises if science is thought to be the only source of knowledge. This chapter goes a little deeper into the philosophy of science (see Article #14, "What is the philosophy of science?" on page 45), which concerns itself with how we gain scientific knowledge and what the limits of that knowledge are. We've kept more technical language like 'scientism' or 'methodological naturalism' for this chapter.

In Chapter 4, we will tackle 'the conflict thesis' head on. We will consider some of its history, and we will see why there is no insurmountable conflict between science and Christian belief. The short answer to how faith and science can get along is that they concern themselves with different sorts of questions and, for the most part, their truth claims do not conflict; rather, they complement one another.

The Conclusion wraps up the book and makes some suggestions about resources for thinking more about the important issues raised here.

Interspersed throughout this book you will also find various articles. They introduce you to a number of issues relevant to the book and they feature various scientists who are or were convinced Christian believers. These articles can be read separately, but they are also referred to in the main text. Aristotle

Questions for discussion

Do you think there is a conflict between science and Christian belief? Why might people say there is a conflict? Where does the conflict lie? Could the idea of conflict be used as an excuse so as not to consider religious claims seriously?

"The heavens are telling the glory of God", says the psalmist in Psalm 19. Does pondering the wonders of the physical universe lead you to a sense of the presence or existence of God?

In his letter to the Romans, Chapter 1 verse 20, the Apostle Paul says that "ever since the creation of the world his [God's] eternal power and divine nature, invisible though they are, have been understood and seen through the things he has made". This seems to imply that the natural world should draw people to know something of God. What do you think Paul meant?

How would you explain to someone why some types of writing (genres) need to be read in a different way to other types of writing? (For example, a maths text book, a novel, and one of the Gospels.)

The Bible is not science: St Augustine's warning about confusing science and faith

Imost 1600 years ago, **A**St Augustine of Hippo, the famous north African bishop and theologian, warned Christians about the danger of confusing science and biblical truth. Science as we know it today did not exist in Augustine's time, but his warning is still relevant. He was concerned that Christians might look foolish if they misread the Bible by thinking that it could be used to make 'scientific' statements. In a commentary on the book of Genesis, he strongly warned Christians not to misuse the Bible by making supposedly biblical statements contradicting the knowledge of what we would call 'science' today. Here is what he said:

Usually, even a non-Christian knows something about the earth, the heavens, and the other elements of this world, about the motion and orbit of the stars and even their size and relative positions, about the predictable eclipses of the sun and moon, the cycles of the years and the seasons, about the kinds of animals, shrubs, stones, and so forth, and this knowledge he holds to as being certain from reason and experience.

Now, it is a disgraceful and dangerous thing for a non-Christian to hear a Christian, presumably giving the meaning of Holy Scripture, talking nonsense on these topics; and we should take all means to prevent such an embarrassing situation, in which people show up vast ignorance in a Christian and laugh it to scorn. The shame is not so much that an ignorant individual is derided, but that people outside the household of the faith think our sacred writers held such opinions, and, to the great loss of those for whose salvation we toil, the writers of our Scripture are criticized and rejected as unlearned men.

"Usually, even a non-Christian knows something about the earth, the heavens, and the other elements of this world."

.....

If they find a Christian mistaken in a field which they themselves know well and hear him maintaining his foolish opinions about our books, how are they going to believe those books in matters concerning the resurrection of the dead, the hope

of eternal life, and



the kingdom of heaven, when they think their pages are full of falsehoods on facts which they themselves have learnt from experience and the light of reason?

Reckless and incompetent expounders of Holy Scripture bring untold trouble and sorrow on their wiser brethren when they are caught in one of their mischievous false opinions and are taken to task by those who are not bound by the authority of our sacred books. For then, to defend their utterly foolish and obviously untrue statements, they will try to call upon Holy Scripture for proof and even recite from memory many passages which they think support their position,

> although "they understand neither what they say nor the things about which they make assertion"¹.

.....

St Augustine of Hippo



The Big Bang beginnings

Johannes Kepler: Thinking God's thoughts after him

ohannes Kepler (1571–1630) – astronomer, mathematician and theologian – was a contemporary of Galileo, and one of the giants of the scientific revolution. He is best known for his three laws of planetary motion which overturned the idea that the planets must travel in circular orbits. He described mathematically how the planets could be moving around the sun in an elliptical fashion. Kepler



Johannes Kepler

was set to become a Lutheran priest in his native Germany, but he turned to science for deeply theological reasons. Later, he is reputed to have described his scientific investigations as revealing the glory of the Creator in this way:

I was merely thinking God's thoughts after him. Since we astronomers are priests of the highest God in regard to the book of nature, it benefits us to be thoughtful, not of the glory of our minds, but rather, above all else, of the glory of God.7

Monsignor **Georges Lemaître: Priest and father of** the Big Bang

eorges Lemaître (1894–1966) Jwas a Belgian priest and scientist, and he was a forerunner in describing the nature of the universe as we now understand it. In 1927, after observations and theoretical calculations showing that the universe was expanding,

Lemaître proposed that this expansion could be extrapolated backwards in time to an initial point. He called it the hypothesis of a primeval atom, which later became known as the Big Bang theory after astronomer Fred Hoyle used the term to describe Lemaître's competing view to his own preferred one, which was the steady state 'eternal' view of the cosmos.

While Lemaître was in no doubt about the harmony between science and his Christian belief, he did not believe that his scientific theory should be used for religious purposes. "As far as I can see, such a theory remains entirely outside any metaphysical or religious question," he said.8

Although Lemaître was the first to publish the research calculating the rate of expansion of the universe, he was relatively unknown at the time, and the law came to be known as Hubble's Law, named after Edwin Hubble who, two years after Lemaître, published his own calculations.

Charles Darwin affirms God's two books

n the Origin of Species Uby Charles Darwin was published in 1859 and popularised the evolutionary theory of natural selection. Its publication prompted one of the most famous examples of a socalled conflict between science and faith. However, it's interesting that Darwin did not seem to think there was such a conflict and, in fact, he specifically referred to God at the start and end of Origin. Opposite the title page of the first editions of the book, Darwin placed the words of Francis Bacon affirming the necessity of studying both of God's books:

Let no man out of a weak conceit of sobriety, or an ill-applied moderation, think or maintain, that a man can search too far or be too well studied in the book of God's word, or in the book of God's works; divinity or philosophy;

ON

THE ORIGIN OF SPECIES

BY MEANS OF NATURAL SELECTION,

PRESERVATION OF FAVOURED RACES IN THE STRUGGLE

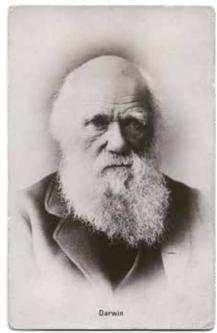
but rather let men endeavour an endless progress or proficience in both.9

Its publication prompted one of the most famous examples of a so-called conflict between science and faith.

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..... Meanwhile, on the last page of On the Origin of Species, Darwin wrote the following (although the words in brackets do not appear in the first edition of the work):

There is grandeur in this view of life, with its several powers, having been originally breathed [by the Creator] into a few forms or into one; and that, whilst this planet has gone cycling on according to the fixed law of gravity, from so simple a beginning endless forms most beautiful and most wonderful have been, and are being evolved.



.....

Charles Darwin

These quotations from Darwin's classic work make it clear that the author of On the Origin of Species was not averse to setting evolution in a theistic framework. Although Darwin was not a traditional Christian, and was probably an agnostic by the end of his life, it is simply not true, now or when Darwin popularised the theory, to suggest that evolution was or is necessarily atheistic.

