

Against Atheism: The Case for God

Written for the Rational Believer

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Contents

Foreword

Acknowledgements

Introduction

1. The (Not So) Brave New World

Is a rapprochement between faith and reason possible?

Do you have to have faith in something so obvious as the natural belief in the external world?

Reason is faith cultivating itself

2. Faith and the Scientists

An apostate scientist dares to suggest his community is faith based

The great methodological misunderstandings of science

Religion and science: enemies or allies?

3. Our Medieval, Dark Age, Primitive, Superstitious, Religious (Christian), Off-with-the-Fairies Ancestors!

The widely held, inaccurate view of the history of science

Our much-maligned pre-Enlightenment ancestors

The two great scientists, Copernicus and Galileo: standing on the shoulders of their great ancient and medieval predecessors

Confident denial or conceit wrapped up as wisdom?

4. The Surprising Friend of Theism: Evolutionary Method

Evolution and the creative process

Evolution 2.0

Who made God then?

5. The Current Canon of Science

The ever-moving gospel of science

Appearance and reality

Space and time

The timelessness of reality

Time and physics

Quantum wonderland

Reconciling the Newtonian big and the quantum small

Theories of big and small worlds

In the beginning, at time zero

6. Scientists and Philosophers: The God Debate Rages on Down the Centuries

The curious case of Lee Smolin

The one-man rock band of science: Lawrence Krauss

Hume's objections to the cosmological argument

Kant's objections to the cosmological argument

Hume's objections to the design argument

Back to Krauss

7. On Being

The oneness of reality

The scale of forms

On the matter of pure evil

On the matter of pure goodness

Postscript to pure being

8. Dawkins' Delusion and Anselm's Prayer

Dawkins' delusion

Anselm's ontological argument

Objections to the ontological argument

What God is and is not

A reply on behalf of a fool

9. The Collingwood Versus Ryle Debate

The *a priori* method

Back to Collingwood vs Ryle

The straw man

Some final thoughts on the ontological argument

10. Richard Dawkins, Daniel Dennett and A.C. Grayling

Dawkins and his creedal statements

Daniel Dennett and his bizarre statements

Grayling, the philosophical atheist

The extreme intolerance of atheism

11. Alain de Botton and His Atheist Church

The Eucharist

Communal restaurants

Ideal friends

Teaching and preaching

Wisdom

Temples to tenderness

The School of Life

12. Secular Versus Religious Murder: A Silly Debate

The Crusades

The Spanish Inquisition

Wars led by atheists

Hitler

Stalin

Mass secular murder

Mao

Child sacrifice and the Bible

Conclusion

Appendix 1: The Body Count

Appendix 2: A Great Misunderstanding in the Bible: Homosexuality

Bibliography

Foreword

Briefly, two things:

Firstly, you will see that I have sometimes referred to 'he' when in fact I am addressing both male and female readers. I hope you will accept this in good faith, because it seems expedient, in the circumstances, rather than using the clumsier he/she or the ungrammatical 'they' when I am talking to 'you', whether singly or collectively. I have also tended to refer to God as 'he', which is normal practice in the Christian church.

Secondly, please bear in mind that what follows isn't written as an academic text and so I haven't necessarily felt bound to follow citation practices to the letter, although all quoted sources are listed fully in the Bibliography.

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Introduction

I would be willing to bet that the present right-thinking consensus will come to seem laughable in a generation or two – though of course it may be replaced by a new consensus that is just as invalid. The human will to believe is inexhaustible.

Thomas Nagel¹

After selling my principal business at the very end of 2010, I had enough time for the great indulgence of reading and researching to understand why, in this universe, there is anything at all.² This I call the big ‘why’ question.

Most of the scientific community errs on the side of caution when trying to answer the ‘why anything’ question, on the basis that their discipline better suits them for answering the ‘how anything’ question. Yet the secular world is increasingly being influenced by champions of atheism that are often noted biologists and cosmologists who seek to answer this ‘why’ question by proposing that over a very long time period, a series of potentially improbable random events all came together at the right time to give rise to what we see around us.

The Christian religion, which is my fundamental religious outlook, tells us this: *God did it*. In varying degrees of sophistication, theologians over several millennia have explored what this might mean. Philosophers have often been drawn to the same God-based conclusions, although there are many who decline to comment on the ‘why’ question or reject outright the notion of God as the reason behind the ‘why’. Philosophers seem to be much more relaxed in discussing the matter than scientists, who avoid the issue or condemn it as an illegitimate point of view. However, both the scientist and the philosopher will always attest that they are using their powers of *reasoning* to deliver their pronouncements and are therefore correct. Both cannot be fully right.

¹ Nagel, *Mind and Cosmos*, 128.

² Most of my life I have had this nagging need to address this question. What motivated me to begin my research for this book was reading Professor David Conway’s *The Rediscovery of Wisdom* in the 2000s, which converted Professor Anthony Flew. Before the New Atheists arrived on the scene, Flew (*There is a God*) was the most sophisticated of atheism’s advocates.

The moralising high priests of religion have been almost completely replaced by the moralising high priests of science. And, when it comes to answering the ‘why’ question, the latter, using dubious methods and speculation to arrive at their conclusions, have shown themselves to be a poor replacement for the hectoring preacher. While I approached the reading of their works in good faith and in as scholarly manner as I could, respecting their academic titles from world-renowned institutions, I found a staggering level of pretension on display. On the whole, their views are held without humility – in fact, I found I was not exploring a view point with them, but being told what to think in a deeply patronising manner. Their atheist ‘religion’ is an unthinking religion, and of the very worst kind.

Yes, reader, it *is* a religion, as I hope you will discover in later chapters of this book. The scientist I challenge is the naturalist, reductionist, materialist scientist. I appreciate there are many other scientists who do not hold this view or conduct their science in this tradition. But for the sake of brevity, when I use the word ‘scientist’, it is invariably to discuss the views of such a naturalist, reductionist, materialist scientist and his atheist world view. I apologise in advance for any offence given to other scientists who do not share this view.

Some theologians are happy to use their powers of reason to achieve some coherence between their faith and their understanding of the world around them, while others seem entirely comfortable with their beliefs and see no need to question the foundation of their faith.

Some theologians and scientists will acknowledge that faith comes first and reason second. Because of my reading, I have come to see that I can only understand things through the lens of my faith in God – what I call the fundamental ground for being. This faith is absolutely presupposed, before I start to exercise my powers of reason on anything. Faith and reason overlap at the point where I hold a position of faith that then allows me to believe anything.

The title of my book, *Against Atheism*, therefore argues against the atheist position that claims to have no faith. You, the reader, can judge whether I am ‘off with the fairies’, a phrase atheists are prone to using about people of religious faith, or actually onto something. Like St Augustine, who asserted ‘Believe in order that you may understand.’³ Or, like another great philosopher-theologian, St Anselm: ‘I do

³ Sermon 43:7–9.

not seek to understand in order that I may believe, but I believe in order to understand.’⁴

I also believe I can demonstrate that by using powers of plain, old-fashioned reasoning, you are actually more coherent in holding a religious (Christian) world view than an atheistic one. So, this book is a book for the rational believer. It is about rational belief. Or maybe it is better put by saying: this book is for the person who loves to use reason as a key guide in life, who does not consider thinking about theistic matters to be a more sophisticated version of thinking about witchcraft.

What also became apparent to me when I was doing my research is that Christianity needs to understand itself better as the originator of much scientific discovery and inquiry. It needs to be confident about asserting this and own this space. For example, it needs to remind those Christian brothers and sisters who hold a literal, seven-day-creation belief that the early church fathers did not hold this view *literally*. Indeed, the celebrated St Augustine (354–430) had what would be considered to be a very modern ‘Big Bang’ view of the creation event – that is, it happened all in one go.⁵ Let science own its own space – the space that proceeds from the creation event – without crossing over into theological territory. This will make theology better, and science better.

One of the finest New Testament scholars of the last century, W. D. Davies, makes the following point:

We cannot doubt that modern Christendom, if it is to survive the crisis of science, must, like post-exilic Judaism, having rightly re-emphasized the transcendence of God and human sinfulness, and without sacrificing either truth, go on also to trace in the created universe the marks of the Wisdom of God, and thus claim the perilous new world of modern science as its now.⁶

Post-exilic Judaism had a fight on its hands against an avalanche of Hellenistic and Platonic philosophy. To survive, it needed to embrace its own Wisdom tradition and replace its flawed image of a personalised man-in-the-sky God (just as we must do

⁴ Anselm, *Proslogion*, ch. 1.

⁵ Augustine writes concerning Genesis in *On Genesis: A Refutation of the Manichees*, *The Unfinished Literal Commentary on Genesis*, and *The Literal Meaning of Genesis*. The final three books of his *Confessions* also focus on Genesis. He predates Einstein by 1600 years when he allows his mind to play with the idea of time and physicality as aspects of the same thing, forever linked. He was no ‘off with the fairies’ theologian.

⁶ Davies, *Paul and Rabbinic Judaism*, p. 176.

today!) with a transcendent God (or even an infinite God which not only transcends all space–time, but is also in all of space–time). Correct theology must claim the world back from these same pretensions, as well as from self-righteous, preaching atheists.

The book is dedicated to my three children: George, Charlotte and Henry, and my godson, Luke Jopling. All of them have enquiring minds. My hope is that this book may help them understand the world around them a little better than they do now. Ever a contrarian, I also write, in this secular world, for those of my wider family and friends who are faithless: that hardened bunch of atheist/agnostic/sceptics who don't understand faith, in the hope that one day they might.

In the meantime, I would like to note that all the books cited in the Bibliography have been inspirational to me, especially those I find myself in disagreement with. I make no apologies for quoting from them extensively; they say what they say better than I can. I am eternally grateful for their inspiration, and I stand on their shoulders. All quotes from the Bible are from the New King James Version (NKJV), unless otherwise stated. I also thank my family for their support in letting me get this out of my system and onto paper.

One caveat: this book is not written for those who 'just know' there is or is not a God. It is written for someone who needs to question their beliefs, via reason, so that they can make a coherent assertion about their views. On the surface, this book is devoid of what might be called spirituality. There are many well-informed people who write from a spiritual perspective and are far better than I am at exploring the spiritual disposition. If anything, I hope that this book may give confidence to a certain type of person, the rational believer, to explore their own spirituality.

If this book helps you as a rational believer to think more deeply about God, who is the most perfect being, then I have achieved something. My next book in the 'Against Atheism' series will look at the case for Christianity by examining some of the key evidential challenges it faces. The Christian belief is that God decided to place his essence in Jesus Christ some 2000 years ago – to pay us a personal visit, if you like. The evidence for or against this belief will determine whether you can subscribe to the Christian faith as traditionally presented to us. And again, while book will not address any *spiritual* becoming which might ensue, or provide the spiritual food you may be looking for, it may give you solid and *rational* grounds for pursuing those endeavours with greater confidence.

Chapter 1

The (Not So) Brave New World

In his articles written for lay people, the contemporary philosopher A. C. Grayling propounds the anti-God view with great vigour:

The absolute certainty, the unreflective credence given to ancient texts that relate to historically remote conditions, the zealotry and bigotry that flow from their certainty, are profoundly dangerous: at their extreme they result in mass murder, but long before then they issue in censorship, coercion to conform, the control of women, the closing of hearts and minds.¹

Religious belief of all kinds shares the same intellectual respectability, evidential base, and rationality as belief in the existence of fairies.²

I think they are failing in their responsibility to themselves as intelligent beings. By not being sufficiently reasonable. If you really press them, just ask them, aren't you glad that the people who built the aeroplane you fly in used reason? Aren't you glad that the pilots were trained according to reason? Aren't you glad that your doctor or train driver thinks about what they do and uses reason? And they will say yes. Then you say, 'Well, OK, if that's the case then how about applying it to your own life as well?'³

How reasonable, then, we must be. Reason is the way forward, faith in matters not provable should be banished from our minds.

With regards to Grayling's first statement, concerning absolute certainty and unreflective credence, most religious people would agree with him. However, they would not readily accept or take kindly Grayling's second statement that their belief in a deity is akin to belief in the existence of fairies. They would also agree with Grayling's third statement concerning the reliance we place on those who are trained, with reason, to the highest standards in order to provide goods or services for us, things that manifestly improve our lives.

¹ Grayling, 'Believers Are Away with the Fairies.'

² Ibid.

³ A. C. Grayling, quoted in Dekka Aitkenhead, 'AC Grayling: 'How can you be a militant atheist? It's like sleeping furiously'', *The Guardian*, April 4, 2011, <http://www.theguardian.com/books/2011/apr/03/grayling-good-book-atheism-philosophy>.

Grayling stereotypes a religious person as an extremist rather than a fellow human being who uses the faculties of reason – just as he does. Such stereotyping suits the rhetorical moment, but it does not explain why the overwhelming majority of religious people would agree with statements one and three but still hold some belief in a deity as a matter of faith.

So why does such a chasm exist between those who have a religious faith and at the same time hold the tenets of reason dearly and sincerely, and those who argue that it is impossible to maintain a religious viewpoint in accordance with those same tenets of reason?

I submit that faith and reason are inextricably linked: Faith is held on reasonable grounds. Blind faith, in contrast, is not held on reasonable grounds – it is the blind ‘faith in the fairies’ proposed by Grayling. Attacking blind faith is like attacking a straw-man view (e.g. belief in the tooth fairy, Santa Claus) of what it means to hold a belief based on faith alone. What propagators of this line of attack fail to realise is that they demonstrate a blind faith in their own belief systems. This is explored in more detail in Chapter 9, when we look at those deeply religious men: the atheists.

I contend that faith and reason are not in conflict with each other at all. Reason has been, and always will be, the handmaiden of faith and you cannot have reason without faith.

Is a rapprochement between faith and reason possible?

According to the conventional story told in our schools today, in the Western world man was ‘asleep’ until the arrival of the Greeks two and a half thousand years ago when what we call ‘Western thought’ appeared. An example is Plato’s use of the word ‘faith’ to describe our belief in the realities of the world around us, the objects we see. If anyone denies that these realities exist we can’t prove him wrong, but we ‘know’ him to be wrong with great conviction. Thus Plato uses the word ‘faith’ the same way St Paul does: it is a belief held despite the absence of any proof that could be provided by reason alone.

It is startling that when you ask philosophers to *prove* that there is something as mundane as a cup of tea in front of them, they can’t, as they can only describe things via the lens of their mind. They might say, ‘well, I can touch it, so I know it is there.’ That the perception of touch is a mental construct embedded deeply in the mind is lost on most people, but nevertheless the thought of touch comes before the

thing you touch. They might also say, ‘well, I can see it, I know it is there.’ Once again, the seeing is done via the lens of the mind. We are all trapped in the prism of our mind, through which we filter information. We can suppose an external world, we can have faith in an external world, we can *believe*, but we can’t prove it in a formal sense. Like Plato and St Paul, we take it on faith, or the absence of proof, that there is a mind-independent world.

By ‘formal sense’, I mean understanding something deductively or inductively. We can acquire knowledge *deductively* when we put forth a hypothesis such as: ‘Socrates is a man, all men are mortal, therefore Socrates is mortal,’ and know that if the premise is true the conclusion that follows from it will also be true. With *induction*, we can put forth a hypothesis such as: ‘water has a boiling point, when it turns to steam’, and we can test it again and again and conclude something contingent about the boiling point of water.

Returning to that cup of tea, every descriptive word you use to say that you can touch it and therefore prove it requires a prior idea or thought of your mind to describe the feeling of touching the cup. To even describe it as a cup presupposes the thought of a cup. In the same way, I resolutely hold the belief that there is a world around me and it exists objectively, but I can’t prove it independently of my mind, so I take it as a matter of faith; I presuppose it, if you like. If you can prove otherwise, you will be the first to have solved this perplexing 2,500-year-old puzzle.

Do you have to have faith in something so obvious as the natural belief in the external world?

Philosophical literature records many attempts to ground the external world in reason alone. The last major attempt was by the analytic philosophers G. E. Moore, Bertrand Russell, Gilbert Ryle and A. J. Ayer in the late nineteenth/early twentieth centuries. Overturning the prevailing philosophy of idealism, they sought to install reason as the champion of all knowledge. It is argued that in doing so, they dealt a deadly blow to the kind of faith described by Martin Luther:

Luther in his Sermons defined faith: It is the nature of faith that it presumes on the grace of God ... Faith does not require information, knowledge, or certainty, but a free surrender and a joyful bet on his unfelt, untried, and unknown goodness.⁴

However, while the analytic method adopted by these philosophers proved to be useful in extracting information from our surroundings and furthering our understanding of the world, it still failed to prove the outside world exists.

Among the most famous of all the attempts to refute the belief that you cannot prove the existence of a world external to oneself was G. E. Moore's lecture, 'Proof of An External World.'⁵

Moore began by quoting Immanuel Kant:

It still remains a scandal to philosophy ... that the existence of things outside of us ... must be accepted merely on faith, and that, if anyone thinks good to doubt their existence, we are unable to counter his doubts by any satisfactory proof.⁶

Moore argued that Kant is in error and that he can give proof of the external world. First, the proof of an objective reality must mean the proof of "the existence of things outside of us", or to offer more clarity, "the existence of the things outside of us."⁷ He then did his best to prove the existence of the external world. In binary and precise prose, he laid out his case. Then, in what would have been a magnificent piece of theatre, he said the following:

I can prove now, for instance, that two human hands exist. How? By holding up my two hands, and saying, as I make a certain gesture with the right hand, 'Here is one hand', and adding, as I make a certain gesture with the left 'here is another'. And if, by doing this, I have proved ipso facto the existence of external things, you will see that I can also do it now in numbers of other ways: there is no need to multiply examples.⁸

Moore then asked: is this a rigorous proof? Most logicians would agree that such a proof needs to satisfy three conditions:

1. Was the conclusion expected from the premises?

⁴ Pelikan, *Reformation of Church and Dogma*, p. 165.

⁵ Moore, 'Proof of an External World', p. 3. Read 22 November 1939 at the Aristotle Society.

⁶ Immanuel Kant, preface to *Critique of Pure Reason*, 2nd edn, quoted in Moore, 'Proof of an External World', p. 3.

⁷ Moore, 'Proof of an External World', p. 4.

⁸ Ibid., p. 25.

2. Do we know each premise was true?
3. Does the conclusion follow the premises?

Moore posited that he knew what he was asserting when he said ‘here is one hand’ and ‘here is another’: it would be absurd to say that he only believed it!

How then can I prove that there have been external objects in the past? Here is one proof. I can say: ‘I held up two hands above this desk not very long ago; therefore two hands existed at some time in the past Q.E.D.’⁹

He then concluded that while his case failed in the strictest interpretation, it did not matter!

Of course, what they really want is not merely a proof of these two propositions, but something like a general statement as to how any propositions of this sort may be proved. This, of course, I haven’t given; and I do not believe it can be given; if this is what is meant by proof of the existence of external things, I do not believe that any proof of the existence of external things is possible.¹⁰

Despite being such a rigorous thinker, Moore seems to be saying he is allowed to make these pronouncements as he is a philosopher, and he just believes it is so. His reason sits in the diplomatic bag of immunity accorded to the philosophical and scientific few who alone have these privileges – but not to those who explicitly and, in many ways humbly, accept their lot and acknowledge the substrata of faith that *reason* tells us we rest within.

A. J. Ayer picked up this oversight by Moore and demonstrated that he could prove that he held up his hands by acknowledging that he perceived this action and *remembered* it. Although this is brilliant wit on Ayer’s part, we still cannot prove the existence of the external world by the fact that we remember, via the lens of our mind, some event that happened in the past. If anything, we prove that we hold that the external world exists by faith alone.

With regards to proving the existence of the external world, Moore went on to note: ‘In order to do it, I should need to prove for one thing, as Descartes pointed out, that I am not now dreaming.’¹¹ Consider the example of someone who does not know if they are dreaming or not. As they would be able to describe situations when they had definitely been dreaming, they could therefore describe situations when

⁹ Ibid., p. 28.

¹⁰ Ibid., p. 29.

¹¹ Ibid., p. 30.

they were not. In making this distinction, they prove the ability of man to distinguish between the real world and the dream world.¹²

Ayer thinks this is an ‘ingenious argument’¹³ as it solves the Cartesian problem of distinguishing between what is real and what it not, what is mind-dependent and what is not. He concedes that it is possible to hold a view which says that all your current sensory experiences are one big dream, but the fact that you can tell them apart from past experiences indicates there is a distinct difference between the two. Ayer points out that this could also apply to your memory senses as well. However, this view still relies on the mind sifting through what is real and what is a dream and therefore as a line of argument it is also doomed.

Moore would appear to be saying that you don’t necessarily need to dismiss a proof if you cannot prove its premise as it would be difficult to reason anything. So, why not just humbly accept that we mere mortals have to take the existence of the external world on faith, in the absence of proof alone? It is perplexing to me why so many are reluctant to do this. I think his reason now gives way to a blind prejudice that prevents him from humbly accepting the limitations of his reason and acknowledging that his reason rests on a solid bedrock of faith, and faith alone.

To rationalists like Moore and Ayer, holding such a view would put them in the same camp as those who believe in fairies at the end of the garden, and I suspect this is something they seek at all costs not to be associated with. Their opposition to the straw man of irrationalism forces them accept, in the absence of proof, the existence of the external world, just as a religious person accepts his faith, in the absence of proof.

In the following quote from Moore, we see this contradiction, which lies at the heart of his belief system, in all its full glory:

This view that, if I cannot prove such things as these, I do not know them, is, I think, the view that Kant was experiencing in the sentence which I quoted at the beginning of this lecture, when he implies that so long as we have no proof of the existence of external things, their existence must be accepted merely on faith. He means to say, I think, that if I cannot prove that there is a hand here, I must accept it merely as a matter of faith – I cannot know it. Such a view, though it has been very common among philosophers, can, I think, be shown to be wrong – though

¹² Ayer, *Russell and Moore*, p. 175.

¹³ *Ibid.*, p. 175.

shown only by the use of premises which are not known to be true, unless we do know of the existence of external things. I can know things, which I cannot prove; and among things which I certainly did know, even if (as I think) I could not prove them, were the premises of my two proofs. I should say, therefore, that those, if any, who are dissatisfied with these proofs merely on the ground that I did not know their premises, have no good reason for their dissatisfaction.¹⁴

I am delighted Moore acknowledges that he cannot formally prove the existence of the outside world and will not accept this view is held by faith and faith alone. But, I am also dissatisfied! If we must take this most fundamental and seemingly obvious thing, the external world, as a matter of faith, then faith is critically important.

Reason is faith cultivating itself

I have a lot of sympathy for those who want to root our understanding of the world in something much more solid than faith would appear at first blush.

There is a lot to commend in the highly intellectual Greek mindset, which places reason at the forefront of the knowledge-gathering enterprise. And, the influence of Aristotle's work on syllogistic proofs, which focused on proving everything by argument, except first principles (see the Socrates example mentioned earlier), cannot be underestimated. The Greek mind wanted a demonstration for everything: from first principles, all deductions were made, all demonstrations were arrived at. These first principles were not matters of faith; they could be demonstrated when any attempt to disprove them produced a contradiction. Reason is therefore the proper tool for scientific discovery, as it deals far better with matters of the finite than faith.

The proper application of faith is to explore the given, or those brute facts, such as the existence of the outside world, and the infinite. The twentieth century's foremost advocate of this line of thought was the philosopher R. G. Collingwood. He best expressed it in his article 'Reason is Faith Cultivating Itself', where he observed:

It was because the object of faith is God; and God being infinite, has no relation to anything outside himself by which he can be indirectly known. A finite object – a chair or a geometrical figure – has causes outside itself. Hence, in order to know it completely, you must start outside it, you must know it by its causes, for the cause, in Aristotle's own words, is the middle term of the syllogism. Thus Aristotle's own

¹⁴ Moore, 'Proof of an External World', p. 30.

doctrine proves that, if there is an infinite uncaused being, this being cannot be known syllogistically, its existence cannot be proved by argument; it must be grasped by some kind of intuitive act.¹⁵

And:

The Greek view of life involved cutting human thought into two parts, the one scientific, syllogistic, argumentative, and intellectually respectable; the other intuitive, immediate, irrational, and in the last resort merely superstitious. Under the first head fell philosophy and the sciences; under the second, religion and everyday perception.¹⁶

Collingwood proposed that an uncaused cause, an unmoved mover, was responsible for getting all of physicality up and running. All objects are finite whose causes are outside themselves. Each and everything is moving teleologically to its predetermined end point. To know a thing is to know its causes. For the Christian, God is uncaused and infinite, much as he is for both Plato and Aristotle. God cannot be demonstrated syllogistically as he cannot be thought of in relation to cause and effect. Christianity showed that faith was superior to reason, because we must intuitively grasp matters of the infinite just as we intuitively grasp the ultimate truths of science. The fact that we take all of this on faith is counterintuitive to the modern mind, but it is the world we occupy. If we reflect a bit further, we might recognise that for all our reasoning, we need faith to understand anything at all. The fact that the foundation of science rests on faith and has the same status as faith in a deity, openly expressed by theologians, seems lost on most. For Collingwood, faith was the wellspring of all beliefs in a deity and the bedrock of all understanding.

Christianity was in fact at the birth of the scientific revolution, as it encouraged the use of faith to perceive the infinite but the use of our senses to perceive the finite world. The three great Christian saints of the Middle Ages, Augustine, Aquinas and Anselm, therefore put faith at the top of knowledge and reason underneath it. You were to have faith in order to understand the fundamental ground for being, or God, from which all of reality cascaded forth. Your faith allowed you to explore the outside world and all your surroundings in pursuit of understanding creation.

¹⁵ Collingwood, 'Reason is Faith Cultivating Itself', p. 4.

¹⁶ Ibid., p. 5.

The approach of these Christian authors was no different to that of their Jewish ancestors. In the eighth century BC, the prophet Isaiah wrote: 'If you will not believe, surely you shall not be established' (Isaiah 7:9). With Christianity, we now return to that original element that the Jews knew ever so well, well before the Greeks: faith. Faith was not to be concerned with the finite world of sense perception, but of the infinite only. Faith in a supreme reality is the first organ of knowledge; reason flows from it and is subordinated to it. This was the dominant, but not exclusive, Christian position, and this is still the case today.

The overall result was a revolutionary move away from the Greek intellectual bifurcation between scientific thought and the irrational towards a synthesis. Collingwood explains it well:

The main principle is this: the finite falls within the infinite, not outside it; therefore the sphere of faith and the sphere of reason are not two mutually exclusive spheres, but the sphere of reason falls within the sphere of faith. Faith is our attitude towards reality as a whole, reason our attitude toward its details as distinct and separate from each other.¹⁷

He claims that unless we observe this principle, there will be no settlement in the dispute between faith and reason.

In the Middle Ages, when many believers argued for demonstrable proofs of God, Augustine, Aquinas and Anselm showed that even the most rational proof still sits on the bedrock of faith. Even Anselm's famous ontological¹⁸ proof rested on the substrate of faith. Anselm commented: 'I believe, in order that I may understand; for this I know, that unless I first believe I shall never understand.'¹⁹ Faith has absolute authority and priority over reason. The very demand for a proof of God elevates reason over faith.

Another saint of the church, St Clement of Alexandria, writing at the end of the second century AD, also understood that faith was the underlying support for any truth statement.

Now Aristotle says that the judgment which follows knowledge is in truth faith. Accordingly, faith is something superior to knowledge, and is its criterion.

¹⁷ Collingwood, 'Faith and Reason', 1928, p. 140.

¹⁸ Ontology: the study of existence and the nature of existence, or being, and how they relate to each other.

¹⁹ Anselm, *Proslogion*, p. 6.

Conjecture, which is only a feeble supposition, counterfeits faith; as the flatterer counterfeits a friend, and the wolf the dog. And as the workman sees that by learning certain things he becomes an artificer, and the helmsman by being instructed in the art will be able to steer; he does not regard the mere wishing to become excellent and good enough, but he must learn it by the exercise of obedience. But to obey the Word, whom we call Instructor, is to believe Him, going against Him in nothing. For how can we take up a position of hostility to God? Knowledge, accordingly, is characterized by faith; and faith, by a kind of divine mutual and reciprocal correspondence, becomes characterized by knowledge.²⁰

Clement devotes one whole chapter of his *Stromata* to show that faith is the starting point for gaining any knowledge whatsoever.²¹ In Book VI, Clement summarises: ‘so neither can knowledge be attained without faith. It is the support of truth.’

§

If you accept the thought process above, you can see that reason is embedded in the very fabric of faith. Faith in the conformity of the universe to its laws, the rules of logic, the existence of a world independent and outside of the mind – all rely on faith as you certainly can’t prove them.

If you are a materialist and hold that reason has dispensed with God, we have established that you hold your materialistic world view as a matter of faith. But far more worrying for you should be the fact that you hold this matter of faith not on the grounds of reason, on a fatal contradiction.

To hold a conception of a material and finite world or universe, you must accept the causality of anything material; if something does not have a cause, it is not physical. If you then assume that finite physical things just exist, your project commits intellectual suicide. What you are saying is that the universe has no cause. If you presuppose an infinite series of prior physical causes to explain the existence of a material world, in reality you are saying that the material universe we observe is causeless and indeed does not exist as the material universe we observe. You are conclusively impaled on your contradiction.

²⁰ *The Stromata*, book II, ch. IV, p. 350. See also Clement of Alexandria, *The Stromata, or Miscellanies*, bk II, ch. 1, <http://www.earlychristianwritings.com/text/clement-stromata-book2.html>, accessed 29 May 2017.

²¹ *The Stromata*, book I, ch. V, ‘Philosophy the Handmaiden of Theology.’

This is why theologians and some philosophers are lead by reason to assume the existence of an uncaused cause. If there is nothing left to start a physical cause, it needs a prior one: an uncaused, immaterial cause. There is no other conclusion that stacks up. This is precisely what theologians assert as God. Philosophers may take out the religious connotations associated with the word God and substitute what I call the understanding of the fundamental ground for being as the first cause. I will use the two to mean the same thing – an infinite and uncaused thing.

On such a basis, we can build our understanding of the world. This is the power of faith and its handmaiden, reason. And this is what Christianity gave us: a rational synthesis of faith and reason. This understanding allowed science to flourish, and it is implied in the thought process of all scientists, even though many seem unaware of it. At this point, it is worth pausing to ask again: who is off with the fairies? The theologian who accepts the logic of an immaterial first cause, or the atheist, who is truly religious and irrationally faith based, who accepts a causeless universe that implodes in on its own contradiction: a material property (the universe) that has no cause and thus no materiality (a non-universe).

So how is this puzzle resolved to the modern mind, if you are not satisfied with a religious solution? Rene Descartes' *Cogito*²² holds part of the answer. He held that the conviction of one's own existence as real – that you cannot help but have it – is a coincidence of both faith and reason. Or, in Collingwood's words: 'In the certainty of my own existence I have a conviction which is rational in the sense that it is universal and necessary, but a matter of faith in that it rests not on argument, but on a direct conviction.'²³

Your existence does not depend on proof to be believed, that is for sure. It is a fact that it cannot be denied. It is a performative contradiction to do so. If you try and deny you exist, your thought or utterance regarding this confirms your very existence. This is precisely why we know we exist.

Again from Collingwood: 'Descartes has shown that our knowledge of our own existence is of exactly the same kind as this direct knowledge of God by faith, with this difference, that it can never desert us when we acquire its presence.'²⁴

²² *Cogito ergo sum*: 'I think therefore I am' (Descartes, René. *Principles of Philosophy*. 1644).

²³ Collingwood, 'Reason is Faith Cultivating Itself', p. 8.

²⁴ *Ibid.*, pp. 8–9.

To be more precise: in either acknowledging that I exist or trying to deny it, reason and faith coincide. My belief that I exist rests on faith arrived at by intuition but also via reason, in the sense that it is a universal necessity and cannot be denied by any thinking being. When you think, you presuppose you. It is unlike first principles in that are all deniable, and there are as many of these as there are points of view. All natural rights – for example, the right to life, liberty and the pursuit of happiness, as enshrined in the constitution of the United States as first principles – can be denied. Different starting points can be inserted, depending upon the authors' subjective preferences – for example, the right to freedom of speech, religion and private property rights. However, Descartes *Cogito*, 'I think therefore I am', cannot be denied; it is held via reason. But we also hold onto it by total unquestioning faith – even though it would appear to be a 'given' at first glance.

Kant moved this conversation away from the conflict between faith and reason into the sphere of metaphysics. He maintained that God, freedom and morality were subjects for metaphysics, not proofs. Proofs are for the finite things:

We do not demonstrate them, not because they are too uncertain, but because they are too certain: they lie too close to our minds to be proved, they are too inextricably interwoven with our experience to be argued about. To prove them is like buttoning up your own skin.²⁵

While the existence of the entire world and universe is taken on faith, science tells us about the details. Yet science assumes that the laws of nature are in operation, and that untrue premises cannot logically follow from true premises, so it also rests on faith. If it denies this, science denies itself.

The honest scientist should not hold the very substrate of the universe and its laws as a 'mere' matter of faith. Collingwood tells us, and I agree:

Not at all: faith they are, but not mere faith, because the faith which they express is a rational faith in the sense that it is universal in everyone – even in you, who pretend to doubt it – and necessary to all thought, even the thought by which you pretend to criticize it.²⁶

The intuitive certainty outlined by Descartes is actually the foundation of all knowledge. When I am reasoning, I know that I am not talking nonsense, and my

²⁵ Ibid., p. 10.

²⁶ Collingwood, 'Faith and Reason', p. 139.

premises will bind my conclusions. Reason depends for its very coherence on the article of faith, which is indemonstrable. It springs forth from faith. The certainties of reason, according to Collingwood, 'are certainties of precisely the same kind as Descartes' cogito ergo sum. They cannot be proved, because they lie too close to us.'²⁷ These are the absolute presuppositions of all proofs, the conditions from which all syllogistic arguments begin. Faith can never be the product of reason, as you cannot group finite quantities together to reach the infinite. What is more, 'faith is presupposed in argument itself.'²⁸ Collingwood is stating that to argue, or to even think this, presupposes mind as a fundamental irrefutable axiom that you cannot deny, but one that cannot positively prove itself except by contradiction, so you hold your very mind as a matter of faith: 'Reason cannot generate faith, but reason alone can reveal faith to itself, can display it to its own nature.'²⁹

To add understanding to faith means faith revealing itself. I quote Collingwood at his best:

And anybody who thinks he is perfect in his faith may logically and morally refuse to torment himself by following the stony path of reason. But anyone who finds his faith less clear and strong would wish it must take steps to amend it; and these can only be finite kind. Faith, in and by itself, cannot be cultivated; and if I have made myself clear, I shall be understood when I conclude by saying that reason is nothing but faith cultivating itself.³⁰

In summary: reason is the *thinking* aspect of faith.

²⁷ Collingwood, 'Reason is Faith Cultivating Itself', p. 10.

²⁸ Ibid., p. 13.

²⁹ Ibid., p. 13.

³⁰ Ibid., p. 14.

Chapter 2

Faith and the Scientists

We must expect and demand a scientific spirit in our professional men of religion and a religious spirit in our professional men of science.¹

It is a valid point that reason will never get rid of faith, as if it did, it would get rid of itself. But the current consensus in the scientific and philosophical community does not acknowledge this. And, anyone from such a community who even alludes to this relationship between faith and reason comes under a barrage of invective. Not much seems to have moved on since Collingwood was writing in the 1920s. Large sections of the scientific community presuppose, unquestioningly, the rationality of the universe as a given; they take it as a matter of blind and unthinking faith.

An apostate scientist dares to suggest his community is faith based

A recent debate highlights this situation. In 2007, Professor Paul Davies wrote a *New York Times* op-ed entitled ‘Taking Science on Faith’, in which he attacked the absolute presupposition of science that the uniformity of the universe and its laws was a given.² Dangerously, but modestly, he suggested that the scientific community might like to consider other possibilities to help explain the universe. You may think that he would be welcomed as a revolutionary and a free thinker, but he was attacked by no less than ten other eminent scientists for suggesting that they should question their static faith – which they, of course, refuse to recognise as faith.³ Probably the most binary and unthinking attack from a fellow scientist was made by Sean Michael Carroll, a senior research associate in the Department of Physics at the California Institute of Technology:

¹ Collingwood, ‘Reason is Faith Cultivating Itself.’

² Paul Davies, ‘Taking Science on Faith’, *The New York Times*, November 24, 2007, http://www.nytimes.com/2007/11/24/opinion/24davies.html?_r=0.

³ Coyne et al., On ‘Taking ‘Science on Faith’ by Paul. C. Davies.

Human beings have a natural tendency to look for meaning and purpose out there in the universe, but we shouldn't elevate that tendency to a cosmic principle. Meaning and purpose are created by us, not lurking somewhere within the ultimate architecture of reality. And that's okay. I'm happy to take the universe just as we find it; it's the only one we have.⁴

One of the undisputed benefits of the scientific frame of mind has been its relentless quest for knowledge. So, it does seem strange that we would unquestionably accept the given of the universe as we find it, never seeking to find out *why* it is. Carroll's faith is of the unquestioning kind, indeed of the superstitious kind. It seems like a gross intellectual oversight that Carroll and his fellow disputants seem to not understand this fact. The shades of the mystic, the witch doctor, permeate through Carroll's view of the origins of the universe and the enduring uniformity of it.⁵

The Philosopher R. M. Hare in his essay 'The Simple Believer'⁶ describes the religious nature of a scientist going about their work:

Suppose that a scientist has a hypothesis which he is testing by experiment, and the experiment shows him that his hypothesis was false. He then, after trying the experiment again once or twice to make sure there has been no silly mistake, says 'My hypothesis was wrong; I must try a new one.' That is to say, he does not stop believing in, or looking for regularities in the world which can be stated in the form of scientific 'laws'; he abandons this particular candidate. Thus, whatever happens, he still goes on looking for laws; nothing can make him abandon the search, for to abandon the search would be to stop being a scientist. He is just like the religious believer in this; in fact, we may say that belief of the scientist is one kind of religious belief – in kind, moreover, which is not incompatible with what is called Christian belief, for it is part of it.

I want to emphasize this point, because it is the most important I have to make. When the scientist refuses to give up his search for causal explanations of things,

⁴ Paul C. Davies, 'Taking Science on Faith,' 31 December 2006, Edge, https://www.edge.org/conversation/paul_davies-taking-science-on-faith.

⁵ One of the most informative and easy-to-read books addressed to the layman audience concerning the Higgs Field was written by this scientist. I thoroughly recommend it, despite his wanderings into areas he knows little about regarding the *why* of the universe, as he is a gifted scientific pedagogue. See Carroll, *The Particle at the End of the Universe*.

⁶ I am grateful for an email exchange with Dr David Gordon of the Mises Institute for drawing my attention to this book.

even when any number of proposed explanations fail, he is acting in an essentially religious manner.⁷

Hare explicitly notes the empirical fact that ‘It is part of Christian belief to believe in the possibility of explaining things by means of scientific laws.’⁸

This will be explored later when we challenge the view which has gained credence that places religion in a hostile relationship with science. For now, we will maintain that the best scientists approach their science in a religious manner. At heart, the white coat of the laboratory is coming from the same place as the white smock of the clergy. Even though the high priests of science now appear to carry more authority than the high priests themselves, their methods are the same.

The apostate’s qualification

At the end of his article, Paul Davies clarifies his position and suggests a way forward for his community of non-believing believers:

My article pointed out that the widespread belief in immutable perfect transcendent prior laws underpinning the physical universe, while not necessarily wrong, is nevertheless held as an act of faith, similar in character to belief in an all-perfect divine lawgiver. Let me be clear about the sense in which I am using the word faith here. Obviously faith in the laws of physics isn’t on a par with ‘faith’ in the popular religious sense (such as belief in miracles, prophecy, the bible as historical fact,⁹ etc., all of which I personally regard as completely ridiculous). Rather, in using the word faith I refer to the metaphysical framework, shared by monotheism and science (but not by many other cultures), of a rational ground that underpins physical existence. It is the shared faith that we live in a universe that is coherent, a universe that manifests a specific mathematical scheme of things, a universe that is, at least in part, intelligible to sentient mortals. These tacit assumptions running through science, that stem from monotheism, can all be challenged. The universe doesn’t have to be that way! But most scientists believe it is that way.

...

⁷ Hare, *Essays on Religion and Education*, pp. 13–14.

⁸ Ibid., p. 14.

⁹ I would refer the learned professor to my second book, *Against Atheism: The Case for Christ*, for the real evidence for faith provided by the Bible, and I would challenge this aspect of his statement.

My interest in pursuing this project is to critically examine ultimate explanations of existence, for which there is a long tradition within religion, and a rather short one within science. I plead guilty to Lawrence Krauss' complaint that I am sidestepping some hugely important issues, such as the moral dimension of religious faith, the tragedy of human existence and suffering, and the question of purpose in the universe. My concern is admittedly with a restricted physics/cosmology agenda, as that is the only area in which I can claim some modest authority. However, the conceptual framework I am developing can accommodate a universe with something like 'purpose,' albeit one that is inherent in, and emergent with, the universe, rather than imposed upon it from without.¹⁰

Along with Lee Smolin, Davies suggests that he and his colleagues investigate in greater detail how the laws of physics have emerged from within the universe. Such theories of emergence would not be given and taken on faith as they would be subject to testing. It is odd to me that this enlightened scientist, who has grasped the fact that the laws of nature seem to spring forth from (secular) faith, does not see that the reasoning he uses still springs forth from a substratum of faith. Will the laws of reason be subjected to the same emergent thinking? Can it be possible that one plus one might have originally equalled one, but slowly drifted over an unthinkably large time span to equal two? I think not. Such an approach would be called polylogism: asserting that logic and your powers of reason can be different, that A can be non-A.

The concept of an emergent natural law is called polynaturalism. But, while it is scientifically intriguing, I feel it would also falter. The moving of any fundamental cosmic constant one way or the other would wipe us out of existence in the blink of an eye, so there is nothing *emergent* about it. Although the evolutionary algorithm works within such parameters, we should not confuse its mechanism of operation with the black-and-white nature of the universe's physical laws and how they appear to operate.

Davies and Smolin attempt to ground science in laws that have emerged and are not timeless, but change and evolve, just like biological systems which can be subject to proper scientific inquiry. I view their attempt as a truly heroic effort to move science away from its faith-based grounding. And, in my opinion, it fails. One needs to assume a 'meta-law' that will provide the *conformity* to allow you to

¹⁰ Davies, 'Taking Science on Faith.'

reason, to expect to observe a *uniformity* of the universe and its laws and induction (which Smolin calls ‘precedent’) that is assumed to make this emergent, evolving system work. We will look at this in more detail later when we discuss ‘The Curious Case of Lee Smolin’.

Let me say once more: science is never free of faith. Smolin and Davies miss the point that even if the universe can be looked at via the lens of many emergent aspects, and speculated upon via reasoning, it all still rests on the same bedrock of faith. If there are emergent evolutionary laws and pathways of the great cosmic fundamental constants, then they will be laws explained by an unchanging reason and logic that in turn need explaining.

Faith is so much a part of their fabric that they do not see it, even with a sophisticated thinker like Davies who grasps this in part, and Smolin, who wishes to find a way to reject it.

The atheist philosopher Terry Nagel noted that for science to happen at all, it rests on an assumption that there is a basic intelligibility underlying the process:

The view that rational intelligibility is at the root of the natural order makes me, in a broad sense, an idealist – not a subjective idealist, since it doesn’t amount to the claim that all reality is ultimately appearance – but an objective idealist in the tradition of Plato and perhaps also of certain post-Kantians, such as Schelling and Hegel, who are usually called absolute idealists. I suspect that there must be a strain of this kind of idealism in every theoretical scientist: pure empiricism is not enough.¹¹

Nagel may well be right. Empiricism is but a method of looking at specific things, but never a method suitable for understanding the whole of reality. The cosmologist, whose endeavour is to explore the foundations of the cosmos, will never be able to answer questions as to ‘why anything’ at all. Science can only ask and answer the questions of science via its method and show us the ‘how’. Its remit, properly understood, is not the ultimate questions of the ‘why’.

This distinction seems to elude many scientists, with the result that when they do pursue this line of questioning, they all too often conclude it is either pointless or unanswerable. This is not a surprise, as science only looks at one aspect of our experience via its own methods of hypothesis, measurement and quantification. It

¹¹ Nagel, *Mind and Cosmos*, p. 17.

can't answer the 'why' question, nor should it try, to as it is ill equipped to do so: it is a round hole to a square peg. A classic illustration is to read Dawkins on science: he is magnificent when he delves into questions of why, but he is like a rabbit in the headlight going hither and thither while thinking he is going somewhere!

If I am right that science cannot provide the fundamental answers concerning why we exist, whether God exists and why the universe exists, then what branch of knowledge can answer these ultimate questions? To answer this question, I fear we must delve into the very murky and at times unsatisfactory world of metaphysics and theology. But, before we do so, we will discuss in more detail the methodological errors of those scientists who do attempt to answer the 'why anything' in the universe question.

The great methodological misunderstandings of science

The proper starting point of science is to have an absolute presupposition that is credible but untestable – neither right nor wrong. This is a true metaphysical proposition.

As we have seen, at the conjunction of faith and reason, exemplified in Descartes' *Cogito*, we have a universal truth: I exist. This is a truth that is arrived at via reason and cannot be denied: when you start to reason and consider that you might not exist, you contradict yourself. That you cannot positively prove your existence means that you hold it to be true by faith alone. This is a good absolute presupposition with which to start your system of reasoning.

Likewise, the conformity and uniformity of the laws of nature and logic are universally assumed but cannot be proved. We do, however, have good reason to take them on faith. To be clear: it is reasonable to absolutely presuppose them. Once more at this conjunction, we see faith and reason overlapping. These are true metaphysical absolute presuppositions. When a scientific scheme purports to start from something, we need to examine whether it is a metaphysical proposition or a pseudo-metaphysical one. If it is the former, it is good science; if the latter, it is fiction.

As an example, we will look at a case in biology. Some scientists in this area begin their investigations with pseudo-metaphysical utterances, which means their conclusions are bound to be inaccurate and more akin to science fiction. Such unsupported propositions should be tested by science rather than treated as

metaphysical propositions that form the foundation of science. This often happens when a scientist is tempted to root their system in a bigger narrative. Richard Dawkins does this in his book *The Selfish Gene*,¹² where he engages in a kind of metaphysics. Here is his ‘In the Beginning’, Genesis-type moment:

At some point a particularly remarkable molecule was formed by accident. We will call it the Replicator. It may not necessarily have been the biggest or the most complex molecule around, but it had the extraordinary property of being able to create copies of itself. This may seem a very unlikely sort of accident to happen. So it was. It was exceedingly improbable. In the lifetime of a man, things that are that improbable can be treated for practical purposes as impossible. That is why you will never win a big prize on the football pools. But in our human estimates of what is probable and what is not, we are not used to dealing in hundreds of millions of years. If you filled in pools coupons every week for a hundred million years you would very likely win several jackpots.¹³

The probability of accidental causes, molecules that possess a self-replicating ability that emerges out of nowhere, will be looked at in more detail in a later chapter. For now, I want to look at Dawkins’ metaphysics, followed by his pseudo-metaphysics. Concerning the former, he takes on faith the orderliness of the universe. This allows him to conduct science in a predictable way – as a given, unquestioningly, and as a matter of blind, unthinking faith. Underlying logic and reason are assumed, taken on faith alone. He asks no questions about why: they just are. Dawkins’ pseudo-metaphysics is his assumption that trillions of trillions of actions of non-conscious random matter can lead to the creation of conscious life, and that this randomness works in a completely ordered way.

¹² Dawkins, *The Selfish Gene*, 1976, p. 16. This book, from a collector’s perspective, is a true gem. It will be read in many hundreds of years’ time as it is a book that has helped shape the ideas of this period. Although he builds on Darwin, he advances new understandings about the evolutionary method and phenotypic effects that are now in common usage. I had my first edition signed by the great man himself and inquired if he still had his first edition with the iconic dust jacket. He said no. So I got him one. Opposite page 247 in his autobiography (Dawkins, *An Appetite for Wonder*), I presume this must be my gift to him!

¹³ Dawkins, *The Selfish Gene*, 1976, p. 16.

Theoretically, all of this can be tested empirically.¹⁴ As we are dealing with material, non-introspecting matter, it could be subject to the testing and refutation that the scientific community excels in. If so, wouldn't it be the mother of all experiments! But, although it may *become* science, it is not yet the case. None of the points Dawkins makes are either proven or anywhere near to being proved. As they relate to finite matter, they are subject to the lens of science which, to date, provides no reason for believing such speculations. His start point is based on a pseudo-metaphysical presupposition: that's the technical and polite wording for it. In the vernacular, we would call this sheer speculation.

Dawkins further states from his pseudo-metaphysics:

What does matter is that suddenly a new kind of 'stability' came into the world. Previously it is probable that no particular kind of complex molecule was very abundant in the soup, because each was dependent on building blocks happening to fall by luck into a particular stable configuration. As soon as the replicator was born it must have spread its copies rapidly throughout the seas, until the smaller building block molecules became a scarce resource, and other larger molecules were formed more and more rarely.¹⁵

The next important link in the argument, one that Darwin himself laid stress on (although he was talking about animals and plants, not molecules) is competition. The primeval soup was not capable of supporting an infinite number of replicator molecules. For one thing, the earth's size is finite, but other limiting factors must also have been important. In our picture of the replicator acting as a template or mould, we supposed it to be bathed in a soup rich in the small building block molecules necessary to make copies. But when the replicators became numerous, building blocks must have been used up at such a rate that they became a scarce and precious resource. Different varieties or strains of replicator must have competed for them.¹⁶

So – order from randomness occurs at some point, on a sufficiently large scale for life to occupy a whole planet, and competition for scarce resources thereafter abounds. This is a scientific proposition that is just *supposed*. For many, the Genesis

¹⁴ An *empirical judgement* is reached when a proposition is formed and tested, observations are made and the proposition is either confirmed, modified or denied on the basis of the observations. The classical example is any thought-out experiment and its result.

¹⁵ Ibid., p. 17.

¹⁶ Ibid., p. 20.

of the Hebrew Bible is just supposed, too, and I think this passage from Dawkins will sound just as mysterious 4000 years after it was written as Genesis does today. The difference between the two is that Genesis never purports to be science, but rests as a story, a backdrop surrounding an even more mysterious event: that of the creation of the entire cosmos, explained to our ancestors in language they could understand thousands of years ago. Never has this been taken literally by any mainstream theologian, but rather read and understood metaphorically. Dawkins' creation-of-life moment is pseudo-metaphysics masquerading as science which he wants you to take as serious fact. I submit he would be better off saying something like: 'I don't know how life was created, but I do know by what method it moved in time, from one incremental change, slowly, to the next, by the process of natural selection, and this natural selection is driven by the selfish replicating gene inside of us.' Stepping outside science, trying to plug the gap in our knowledge of the 'why' of creation, then attempting to slip in some science – which in reality is pseudo-metaphysics – undermines Dawkins' credibility. Science and scientists do their best when they stick to what they know best.

Methodology can be tedious, I agree. Although, as we know, if you build your house on sand, it will be blown away in the first big flood or storm.

Religion and science: enemies or allies?

If it is true of the scientist's belief that his researches are not pointless, may it not also be true of the Christian moralists' belief that his morality is not pointless? The scientist does not know that even the most long-established hypothesis may not be refuted by new evidence tomorrow. All that has been written about induction has not altered the fact that belief in the nature of regularity of the universe is an act of faith; and yet we base all our actions on this faith.¹⁷

Most of the publically vocal scientists would wince at the thought that they might be 'faith heads'.¹⁸ They perceive themselves as the masters of rationality, for whom no challenge is too great. Whatever their great achievements in helping entrepreneurs provide better, faster, stronger goods and services, or doctors more effective treatments for ailments,

¹⁷ Hare, *Essays on Religion and Education*, p. 21.

¹⁸ The insult used by Dawkins et al. against those recognise their limitations and embrace faith. As we will explore later, the handle may be more appropriate for himself.

The scientist may be unconscious that the experiment which he is making rests upon his certainty that the universe as a whole is rational; but his unconsciousness of the fact does not alter the fact. Without absolute confidence in the uniformity of nature, or whatever name he gives to the rationality of the universe, he would never try experiments at all.¹⁹

Yet grand unifying theories of everything seem doomed to be elusive to man. In each age of humankind, scientists have presupposed they were nearly there to finding an equation representing everything, only to be amended or refuted by some other great discovery. I cannot help feeling there is a pattern repeating itself here: the holy grail of a unifying physical theory gets tantalisingly close, only for a subsequent discovery to come along that shifts this endeavour further out of reach. That said, in the pursuit of such a discovery, findings filter down from the ivory towers of research that have very useful application to the modern world. Long may those discoveries continue, but if scientists deny the role of faith, they deny their own discipline; they deny science. In setting themselves up against faith, they end up attacking themselves.

We must pay more attention to the deep and inseparable unity of faith and reason.

To look for the infinite by throwing away the finite would be very much like making the players stop playing in order to hear the symphony. What they are collectively playing is the symphony; and if you cannot hear it for the noise they are making, you cannot hear it at all.²⁰

Likewise, theologians and scientists need to recognise each other as siblings:

A person who says he believes in God, but shrinks from developing his belief into a science of theology, or a person who professes faith in the rationality of the world but will not say how exactly this rationality manifests itself in detail, is like the man who says, I believe this bridge will bear me, but I would rather not walk across it.²¹

More than ever before, we need this reuniting of faith and reason to get a more accurate picture of reality.

Perhaps scientists and openly faith-orientated people should focus instead on eliminating superstition. This is where there is a true synthesis between the two

¹⁹ Collingwood, *Faith and Reason*, 1968, p. 141.

²⁰ Ibid., p. 143.

²¹ Ibid., pp. 143–44.

camps of faith and reason. Superstition occurs when one sections off a part of finite reality and refuses to let reason enter in to perform an analysis. True religion ought not offer any hiding places for superstition, and those religions that do should be labelled superstitious, like the atheist religion. Reason is always at loggerheads with superstition, but so is faith.

When scientists recognise that the sharp arrow of reason is sheltered in a rich bath of warm, comforting and reassuring faith, and when they embrace their faith, they will surely produce better science. Science needs to acknowledge its substratum of faith and recognise that this is the enabling factor that allows it to investigate anything finite at all. And, the theologian must never be afraid to let reason into his innermost sanctum. It must be allowed to root out, refute and destroy superstition. If he does this, he does his faith a great service.

Three things, therefore, must happen simultaneously. Religion must set its house in order by scrupulously searching for superstitious elements within itself and seeking to eradicate them. Science must set its house in order by abandoning mythologies and occult forces and being truly scientific. And these processes go forward – they are not things that can be done once for all – the quarrel between religion and science will die away, and each will gradually learn to find in the other not a rival enemy, but a friend and ally.²²

It may be that Collingwood was too premature in stating the following: ‘Reason has won every battle; but faith has won the war, because by its defeat it has learnt to be itself and to claim for its own not this detail or that within human life, but human life as a whole.’²³ I think this was well, but hastily, written. As faith has been hounded out by our increasingly secular society, it is sometimes hard to believe that faith has won the war!

²² Ibid., p. 146.

²³ Ibid., p. 147.

Chapter 3

Our Medieval, Dark Age, Primitive, Superstitious, Religious (Christian), Off-with-the-Fairies Ancestors!

In his *Stromata*, written during the end of the second century, we find Clement of Alexandria describing the scientific method and its usefulness in helping mankind explore nature. He also notes that this method rests its demonstrated truths on self-evident things that are indemonstrable and can only be taken as a matter of faith:

Now, not only demonstration and belief and knowledge, but foreknowledge also, are used in a twofold manner. There is that which is scientific and certain, and that which is merely based on hope.

In strict propriety, then, that is called demonstration which produces in the souls of learners scientific belief. The other kind is that which merely leads to opinion ...

Now demonstration differs from syllogism; inasmuch as the point demonstrated is indicative of one thing, being one and identical; as we say that to be with child is the proof of being no longer a virgin. But what is apprehended by syllogism, though one thing, follows from several; as, for example, not one but several proofs are adduced of Pytho having betrayed the Byzantines, if such was the fact. And to draw a conclusion from what is admitted is to syllogize; while to draw a conclusion from what is true is to demonstrate.

So that there is a compound advantage of demonstration: from its assuming, for the proof of points in question, true premisses, and from its drawing the conclusion that follows from them. If the first have no existence, but the second follow from the first, one has not demonstrated, but syllogized. For, to draw the proper conclusion from the premisses, is merely to syllogize. But to have also each of the premisses true, is not merely to have syllogized, but also to have demonstrated ...

In point of fact, the philosophers admit that the first principles of all things are indemonstrable. So that if there is demonstration at all, there is an absolute necessity that there be something that is self-evident, which is called primary and indemonstrable.

Consequently all demonstration is traced up to indemonstrable faith.¹

It is very clear that this second-century Christian saint understood both the scientific method and deductive reasoning from first principles.

The widely held, inaccurate view of the history of science

The Edge article quoted in the previous chapter expresses a widely held but inaccurate view about the relationship between faith and science. According to this view, the Greeks laid the foundations of science over 2,500 years ago but its progress was impeded by the arrival of Christianity. After the fall of Rome, the Dark Ages and the Middle Ages descended upon the Western world, during which religion and superstition reigned supreme and little or no scientific progress was made. Then the Humanists and the Enlightenment arrived on the scene to wake us up from our primitive, pitiful, peasant-like existence by giving us science! Glory to those rationalists who saved humanity from its witless existence! During this period, the narrative continues, religion actively fought against the questioning, inquisitive scientific mind, restricting free thought and executing heretics as you would swat flies. Thankfully, reason triumphed and we are in a better place today. So says the gospel of modern scientists and historians.

One of the first to proselytise this view was Edward Gibbon, who argued: ‘In the revolution of ten centuries, not a single discovery was made to exalt the dignity or promote the happiness of mankind.’²

To support his view, Gibbon refers to the emperor Justinian’s closure of the Classical School of philosophy in Athens in 529. It is clear that Gibbon blames the theologians, who

superseded the exercise of reason, resolved every question by article of faith, and condemned the infidel or sceptic to internal flames. In many a volume of laborious controversy they exposed the weakness of the understanding and the corruption of the heart, insulted human nature in the sages of antiquity, and proscribed the spirit of philosophical inquiry, so repugnant to their doctrine, or at least to their temper, of an humble unbeliever.³

This statement, however, is not supported by the facts. According to Pelikan:

¹ Clement of Alexandria. *Ante-Nicene Fathers*, p. 559.

² Pelikan, *The Spirit of Eastern Christendom*, p. 1.

³ Pelikan, *The Emergence of the Catholic Tradition*, p. 41.

The closing of the Athenian academy was more the act of a coroner than an executioner. The establishment of the imperial University of Constantinople by Theodosius II, or perhaps by Constantine himself, had already transferred the centre of Greek learning from Athens to the new capital of the Hellenic world.⁴

The scientist Scott Atran writes in a similar vein:

The scientific revolution began in earnest when a Polish cleric, Nicolaus Copernicus, bucked his faith and theorized that the earth turned around the sun. The Church did not pay much mind as long as the theory remained in the realm of speculation. But when Italian philosopher Galileo Galilei empirically confirmed the theory with a telescope, the Church banned Copernicus's teachings as false and altogether opposed to the Holy Scripture. In 1633, Galileo himself was brought to trial by the Holy Inquisition and compelled to recant.

Given the supposed risk of society's moral degradation in the face of the free choice to make up one's own mind (I think, therefore I am), the Church violently insisted that ideological faith in absolute authority (In the beginning, God created the heavens and the earth) must always trump the more tentative teaching that goes with clear reasoning and experimental observation. When the Enlightenment unshackled scientific thinking from lingering religious control, religion opted for a separate realm where science would not operate. Science, for the sake of its peace and independence, generally accepted this division into separate Magesteria. In 1992 the Catholic Church cleared Galileo's name and in 2000 Pope Jean Paul II apologized to God (not to Galileo) for the trial.⁵

And:

Einstein, like Newton before him, believed that the universe was structured with deterministic mathematical regularity; Bohr and most of Einstein's later colleagues did not. Einstein did not ignore Bohr, or want to try him or burn him at the stake, but continued to argue with him and to provisionally accept his findings.⁶

James Hannam challenges this common world view in his book *God's Philosophers: How the Medieval World Laid the Foundations of Modern Science*.⁷

⁴ Pelikan, *The Emergence of the Catholic Tradition*, pp. 41–42. See also Hannam, 'Emperor Justinian's Closure of the School of Athens.' Here the historian James Hannam hunts down and actually translates this decree and it seems that public funding was removed from heretical teaching but no ban on it.

⁵ Coyne et al., 'On 'Taking Science on Faith' by Paul C. Davies.'

⁶ Ibid.

⁷ Hannam, *God's Philosophers*.

The achievements of medieval science are so little known today that it might seem natural to assume that there was no scientific progress at all during the Middle Ages. Writers use the adjective ‘medieval’ as a synonym for brutality and uncivilized behavior ... Even historians, who should know better, still seem addicted to the idea that nothing of any consequence occurred between the fall of the Roman Empire and the Renaissance.⁸

Closely coupled to the myth that there was no science worth mentioning in the Middle Ages is the belief that the church held back what meagre advances were made.⁹

Following in the tradition of the writings of the American Lynn Thorndike (1882–1965) and the German Anneliese Maier (1905–71), who did much to revive this lost part of our history, Hannam launches his counterattack. Focusing specifically on 500–1500 AD, he lists the modern inventions and knowledge-enhancing events that arose during this period. He begins with the modest but revolutionary invention of stirrups and ends by straightening out the facts surrounding the trial of Galileo.

Our much-maligned pre-Enlightenment ancestors

When reading Hannam, we learn that the laws of Rome restricted how much load a horse could pull. Peasants worked around this by restriction by chaining a horizontal wooden bar to the front of the plough. They attached this bar to straps on each side of the horse’s harness, reducing the force of the load and allowing more to be pulled by the animal for less energy. The invention of the horseshoe and developments in mill technology further increased productivity.

At the fall of Rome, the population of the UK numbered 500,000. By the time of the Normans, it had risen to 5 million. The Normans used stirrups, allowing them to concentrate on fighting rather than keeping their balance on a horse.

In the fifth century, Probus of Antioch translated much of Aristotle for the Arabs. In the ninth century, the Assyrian Christian, Hunayan ibn Isaq, translated Plato’s *Republic*, Aristotle’s *Categories* and *Physics*, and seven books of Galen’s anatomy. The latter must have been a very brave undertaking, as Islam does not permit pictures of the body. At the same time, the Syriac Christian, Yahya ibn Adi, translated Plato’s *Laws*, Aristotle’s *Topics*, Theophrastus’ *Metaphysics*, and more,

⁸ Ibid., p. 1.

⁹ Ibid., p. 2.

into Arabic. Whilst the Muslims helped to preserve these Greek texts, it is important to note that they were always extant in the Eastern Orthodox world. It is a myth that it was the Islamic world which preserved these texts.

I picked up my copy of one of the last Church Fathers, who wrote just after the birth of the Muslim world, to test if his works and the Classical Greek works he references, were lost to the Christian world.¹⁰ His text on the Orthodox faith, which includes references to Aristotle, was first translated into Old Slavonic in the tenth century, then in the same century into Arabic by Anthony, superior of the Monastery of St Simeon Stylites near Antioch. In the twelfth century, Pope Eugene III ordered translations from the Greek into Latin. Islam benefited from this Greek philosophy because it was translated by Christians into Arabic. The myth of Islam preserving Western thought should be resisted as it is simplistic and not true. This research into publishing timelines could be done for any of the great books of antiquity, demonstrating the continuous chain of knowledge through the centuries in the West.

It is important not to downplay the Arab injection of knowledge into the Western World, but we need to remind ourselves that it was not the ‘everything’ that modern writers would have you believe.

Our place in the cosmos

The medieval world was far more informed about its place in the cosmos than commonly assumed. In the sixth century, Boethius wrote in his *Consolation of Philosophy*:

It is well known and you have seen it demonstrated by astronomers, that besides the extent of the heavens, the circumference of the earth has the size of a point; that is to say, compared to the magnitude of the celestial sphere, it may be thought of as having no extent at all.¹¹

Few might know that the ‘Mathematical Pope’, Gerbert of Aurillac (c. 946–1003), played a major role in furthering Europe’s understanding of mathematics and the cosmos. He popularised the use of Arabic numerals (including zero) and the abacus in the West, and possibly introduced the astrolabe to Europe – a Persian device that could predict lunar eclipses and movements of the stars.

¹⁰ St John of Damascus, *The Fathers of the Church*.

¹¹ Hannam, *God’s Philosophers*, p. 35.

We are often told that medieval folk believed the earth was flat and that the Bible had told us this was so. The Mappa Mundi in Hereford Cathedral, a medieval European map of the world, is used as an example. It portrays a circular earth surrounded by sea, with Jerusalem and the Mediterranean at its centre. In reality, this map illustrates what mapmakers understood to be the inhabited world at that time. Just because they mapped the area on a flat surface does not mean they believed in a flat earth! As Swinburne notes,

The falsity of the presupposition does not, therefore ... affect the truth-value of the sentence which uses them. Psalm 104 praises God for many marvels of nature including that 'he laid the foundations of the Earth, that it should not be moved forever.' (104:5). Now the earth has no 'foundations' in some other body, as the Psalmist supposed. But what he was getting at was the earth was not wobbly, you can build on it, it is firm; and he expressed the claim that God is responsible for this stability, the sentence is true.¹²

If the Bible was found to conflict with current science, then Medieval scholars argued for a non-literal view to be taken in favour of the science of the day. In the fifth century, for example, St Augustine pointed to a conflict in Genesis, where the sun was created on the fourth day yet light was created on the first day. It was clear to him that the Bible should not necessarily be read literally. In *De Genesi ad Litteram*, Augustine argued for a metaphorical interpretation of such verses.¹³

St Thomas Aquinas was also an advocate of this approach:

Thus Aquinas doubted in whether there were in the literal sense 'waters above the firmament' (Genesis 1:7) on the scientific grounds that any water in such parts would be compelled by its weight to fall down to the Earth. He therefore interprets the text in accord with the principle that 'God was speaking to ignorant people and out of condescension to their simpleness presented to them only those things immediately obvious to the sense.'¹⁴

Psalm 96 has been used by those who argue that the Bible views the earth as flat:

The world also is firmly established, It shall not be moved ... Let the heavens rejoice, and let the earth be glad; let the sea roar, and all its fullness; let the field be

¹² Swinburne, *Revelation*, p. 167.

¹³ See Saint Augustine, *Genesi Ad Litteram*, p. 12.

¹⁴ Swinburne, *Revelation*, p. 182. See Aquinas' *Summa Theologiae* 1a 68 3.

joyful, and all that is in it. Then all the trees of the woods will rejoice before the LORD (verses 10, 11–13, NKJV).

Now, do we really think the psalmist was asking us to believe the sea had a voice and that it roars? Or that the earth could be glad like a human could be glad? Or that the trees themselves could whoop with joy as people might when watching an uplifting film? Or is the psalmist trying to evoke emotion – dare I say it, a feeling of enchantment – in the reader? For surely it is absurd to read this literally.¹⁵

Astronomers from the time of the Greeks observed that Mercury and Venus were only visible at sunrise and sunset and therefore speculated that these planets rotated around the sun. The Greeks argued that all planets were meant to move in perfect unison – a theory that did not explain the changing brightness of some planets or the erratic and at times backwards movement of others. Many of these puzzles were only resolved after the Copernican revolution.

In the Old Testament book of Job, there are some precise scientific observations about a spherical world: ‘He made the Bear, Orion, and the Pleiades, and the chambers of the south’ (Job 9:9). And later: ‘He drew a circular horizon on the face of the waters, At the boundary of light and darkness’ (Job 26:10). Earlier in this same chapter, we read that God ‘stretches out the north over empty space; He hangs the earth on nothing’ (Job 26:7). Then, in the book of Isaiah, we read: ‘It is He who sits above the circle of the earth’ (Isaiah 40:22). The Bible is clear on its teaching about a spherical earth, and Copernicus leaned on its ancient teaching.

The Talmud tradition suggests Moses as the author of Job but we will probably never know. Since the Chaldeans mentioned in the story are marauding raiders, the book was probably written before they built cities, placing it around 1500 BC. If this is the case, the Bible’s awareness of the existence of the southern hemisphere predates its Enlightenment ‘discovery’ by probably 3000 years! Even if we set Job aside, we have the testimony of the eighth- to seventh-century BC prophet Isaiah, which has been teaching a spherical earth for nearly 2100 years.

¹⁵ Even the most hard-headed atheist scientist, Richard Dawkins, uses misleading anthropomorphic language. For example, he labels genes as ‘selfish’, suggesting they have a mind capable of self-interested thoughts. Dawkins knows they don’t have a mind and states this, but he is restricted to using human-centred language as we have no other way to communicate. The Bible’s writers were similarly restricted. It’s a case of the pot calling the kettle black.

In the Book of Job, you will also see language suggesting the world and all creation was built on solid foundations, on ‘pillars’ and so on. I tend to view these passages as talking in the language of the time to communicate effectively to the target audience. After all, we moderns still say the sun is ‘rising’ in the east and ‘setting’ in the west, rather than ‘look at the sun disappearing over the horizon, we must have rotated around our axis again.’

The acceleration of scientific study and education

In the twelfth century, universities were established to undertake the scientific study of God’s creation, nature itself. The study of ‘natural philosophy’ blossomed during this period.

Most significant of all for the future development of science was the movement to translate into Latin an enormous body of newly discovered scientific and medical writing from the ancient Greek and Islamic worlds. This flood of new knowledge meant that Western Europe could assimilate it and then progress from all that had gone before.¹⁶

If any period deserves the label of ‘renaissance’ then it is the twelfth century.¹⁷

During this time, Adelard of Bath translated Euclid’s *Elements*, the foremost book on geometry. Most of the key texts of Western antiquity were also translated from Greek and Arabic into Latin. In the West, the universities formed themselves into corporations, independent of either royal or state control. These corporations were the forerunners of the modern corporation, which enabled groups of individuals to form one united body with its own legal status separate from its constituent members. Here we see the founding principles of the establishment of that very essential element of modern life: the corporation! The Law School of Bologna, set up in 1158, was the first of these corporations. The early thirteenth century saw the establishment of Oxford and feeder ‘public’ schools, all inspired by the Christian faith, to encourage wider participation in the education system.

As with all human institutions, both now and in antiquity, the church has periods it might rather forget. The Spanish Inquisition was one of these periods. Ironically, the Inquisition used new legal techniques, promulgated by the Law School of Bologna,

¹⁶ Hannam, *God’s Philosophers*, p. 61.

¹⁷ *Ibid.*, p. 61.

to investigate cases of heresy. If a heretic was found guilty, they were invited to do penance and repent. At this time, the church had no power to execute; it was required to hand heretics over to the secular powers for punishment. Over a few centuries, about 5 per cent of cases ended in execution, to the shame of the church. Estimates of the total number of deaths caused by the Inquisition range from the low tens of thousands to around 300,000 deaths over nearly 400 years.¹⁸ This will be discussed in more detail in a later chapter.

As the church began to realise that large parts of the population had no education and were therefore incapable of discernment, it became apparent that it was better to focus on education in these matters than prosecuting for beliefs that had been poorly thought out. This realisation led to the establishment of a new education movement. It is a paradox that this cruel part of church history led to a massive educational mission aimed at the wider population, but it did.¹⁹

Theology

In 1216, a Spanish priest, Dominic of Caleruega, founded the Order of Preachers, also known as the Dominican Order. He taught that representatives of the church must live their lives like Jesus, otherwise how could anyone expect to learn anything about the Christian message from them? The black habit they wore led them to be called Blackfriars. They became involved with the emerging universities, reversing a ban on the teaching of Aristotle in 1231, firmly establishing that natural philosophy was the handmaiden of theology.

The Greek philosophers were now becoming fully integrated into the Western church, sowing the seeds for the Enlightenment. Thomas Aquinas (1225–1274), an Italian Dominican friar, considered the teaching of Aristotle to be an essential topic of study. His scholastic method and ‘Five Ways’²⁰ demonstrated how reason could be used to bolster faith.

It was around this time that theologians took a leaf out of the medical profession’s book and established minimum standards to ensure high-quality teaching. It now took seven years to qualify as a theologian. They also forced a long overdue separation between the teaching of philosophy and theology. New graduates of

¹⁸ See the detailed body count in Appendix 1.

¹⁹ Buchanan, *Inquisitions in Medieval Society*.

²⁰ The Five Ways are five traditional arguments concerning the existence of God.

philosophy had to swear they would not enter into the realms of theology unless they trained in theology. The same applied for the discipline of philosophy.

Sadly, this was not a clear home run for reason. In 1277, the Bishop of Paris listed 219 condemnations of the teachings of Averroes, a commentator on Aristotle. The bishop prohibited anyone from saying: 'God cannot do anything that is naturally impossible.' His condemnations did not get much traction because Aquinas had constantly referred to Averroes in his works, and the Dominicans had successfully lobbied for Aquinas to be raised to sainthood.

Short-lived regressions such as these pop in and out of our history, but overall the church was at the forefront of education, with faith allowing reason to be its chief lead. The Averroes episode was less about a banning of philosophy and more about a curtailment of its role so that the disciplines of philosophy and theology could be taught separately within properly established intellectual demarcations.

Physics

In the early fourteenth century, studies by Bradwardine, Heytesbury, Swineshead and Dumbleton – known as 'the Merton Calculators' as they were based around Merton College, Oxford – paved the way for Newton. The mathematician Archbishop of Canterbury, Thomas Bradwardine, invented logarithms 300 years before Napier was accredited with inventing them. He also speculated about how, in a vacuum, a light and a heavy object would drop at the same speed.

Over the English Channel, the Rector of the University of Paris, Buridan, was also busy laying the foundations of Newtonian mechanics. Contra Aristotle, he argued that a hand moves a ball by giving it impetus, but he agreed with Aristotle that there was no friction in the heavens. He held that if something did not interrupt this impetus, the moving would last forever. This line of thought led to questioning what caused the planets to move and stay in motion. Buridan also worked on ideas that were precursors to relativity, after observing the night sky. Although it appeared that stars rotated around the earth, he did not like the thought of the immensely large universe turning around the tiny earth. If this was God's plan, it was inelegant. Instead, he used the analogy of a boat travelling down a river with an observer on the boat and another on the bank: to each observer, the other would appear to be moving. Buridan pre-dated Copernicus by two centuries. In the fifteenth century,

Cardinal Nicholas Cusa also argued in *On Learned Ignorance* for a non-earth-centric universe with planets rotating relative to each other.

Ockham's Razor

At the turn of the fourteenth century, Franciscan monk William of Ockham arrived on the scene. William was a supporter of the nominalist position, as opposed to the universalist position of St Duns Scotus.²¹ Against Scotus, he argued that we can explain all individual things without the need to invent imaginary universals.²² This is the principle on which the famous 'Ockham's Razor' was based – that is, 'multiple entities should never be evoked unnecessarily.'

This principle is often used by modern science to reject more complex theories. Yet to the scientist, universals such as species and electrons have real properties. If we employed Ockham's Razor, scientists would lose these key tools to explain the universe. This is quite the paradox, as he is held high esteem by modern science which so frequently uses universals plucked from their Platonic, universal heaven! Collingwood, in *An Essay on Philosophical Method*, makes a similar point using the analogy of a medical student being taught about a textbook case of tuberculosis.²³ However, the student should always be mindful that it is just that – a textbook, hypothetical case. If you speak to any doctor, they will tell you that any diagnosis is patient-specific and therefore unique. Some scientists would do well to take this into account and carefully distinguish between when they are talking in abstractions to assist them with understanding, and when they are referencing reality.

²¹ St Dun Scotus carried on the work of Aquinas in advocating reason as a tool for understanding God. He did not argue that God was constrained by the natural laws of the universe he created; rather, he could do anything.

²² Universalist philosophy held that when you can think of a common concept such as a person or a tree, actual real-world examples of you as a person or a tree in your back garden, will have all your, or its, descriptive properties, held in common with the abstract archetype conception that you have of a person or tree. Like the concept of $2+2=4$, in reality, the archetype does not exist. However, to deny that the abstraction of $2+2=4$ has no real application to the phenomenal world is absurd. Universals like this exist in all times and places, but they are not to be found in our own reality as we know it. Often universals are said to be transcendent to our world as we know it; however, you can also argue that the universals are held in common with each physical manifestation of the archetype in the world and therefore do not need to exist out of space and time. For the Nominalist, everything is complete in and of itself – or unique, if you prefer – and does not need to get its attributes from a universal, somewhere in the transcendent place about which we know nothing.

²³ Collingwood, *An Essay on Philosophical Method*, pp. 119–121.

Medicine

One common myth that is worth debunking is that the church banned human body dissection. *De Sepulturis*, the Papal Bull of 1300, banned the boiling of bodies, not their dissection. Human dissection was on the syllabus of every major university, most of them funded and run by theological institutions. We must remember that it was ‘medieval barbarians’, upon whose shoulders we stand, who progressed in their field to the point of being able to prevent and cure what we can today. It should also be remembered that by 1306, sight-enhancing spectacles were in existence.

Technology

Not only reading glasses were made, but a monk from St Albans, the clockmaker Richard of Wallingford, invented a mechanical clock which could chime in any of the 12 hours. His clock is on public display at the Abbey Cathedral of St Albans.

And, let us not forget that the invention of the printed book occurred toward the end of the medieval period. Working with components of printing technology already in existence, Gutenberg, invented moving typeface and a non-smudging ink. By combining the two technologies, he could print books on a large scale, to the great benefit of humanity. Thousands of books were printed in this period and distributed to a much wider audience than ever before.

Note to Kris for later: Section elaborating on Dawkin’s views deleted here, possibly for later insertion in chapter devoted to Dawkins and other atheists. **Toby, I deleted more material on Dawkins, after reading your email of 26.3. It has been saved for possible inclusion in Appendix section.**

The two great scientists, Copernicus and Galileo: standing on the shoulders of their great ancient and medieval predecessors

Many of the accurate deductions of the ancients were not accepted until proven by the scientific method, which started to get into full swing in the Renaissance.

In 1507 Copernicus circulated his first ideas about the heliocentric universe; later in 1543 he published *On the Revolutions of the Heavenly Spheres*. He examined in detail the problem that wherever you were on earth, the whole of the universe always appeared the same; he argued that the universe was so large, whatever we

observed from earth would never change in appearance. He did not acknowledge the work of Aristarchus of Samos, who in the third century BC wrote about this phenomenon. Neither did he mention Buridan's observations about the rotation of the earth, and he may have even directly plagiarised from the bishop:

if anyone is in a moving ship who imagines he is at rest, then should he see another ship, which is truly at rest, it will appear to him that the other ship is moved ... And so, we also posit that the sphere of the sun is everywhere at rest and the earth in carrying us would be rotated. Since, however, we imagine we are at rest ... the sun would appear to us to rise then to set, just as it does when it is moved and we are at rest.²⁴

Copernicus, 200 years later:

When a ship sail on a tranquil sea, all the things outside seem to the voyagers to be moving in a pattern that is an image of their own. They think, on the contrary, that they are themselves and all the things with them are at rest. So, it can easily happen in the case of the earth that the whole universe should be believed to be moving in a circle [while the earth is at rest].²⁵

Nor does Copernicus mention Cardinal Cusa's work some sixty years earlier.²⁶

While Galileo is celebrated by moderns for the discovery of a great many things despite the church's opposition, as we saw in the Scott Atran quote earlier, Hannam suggests an alternative view.²⁷

There is a common perception that Galileo was responsible for being the first to argue that objects of different weights fall at the same speed. However, John Philoponus proposed this in the sixth century, while Thomas Bradwardine had raised it as a possibility under vacuum conditions. In 1553, Giovanni Battista Benedetti published his own results showing incorrectly that density was the determining factor in the speed of falling objects. This was later proved to be incorrect, yet Galileo agreed with him. Two years earlier in 1551, the Dominican priest Domingo de Soto had published a textbook giving an accurate description of objects falling under gravity, which was widely used by Dominican teachers. In

²⁴ Hannam, *God's Philosophers*, p. 275.

²⁵ Ibid.

²⁶ Cusa, *Philosophical and Theological Treatises*.

²⁷ Hannam, *God's Philosophers*, pp. 323–36.

addition the mean speed theorem had already been developed by the Merton calculators and Nicholas Orseme.

The canon of science also holds that Galileo established the existence of vacuums. Yet it was the Pope-appointed teacher Francisco Patrizi, not Galileo, who described how vacuums could exist. Curiously, it is also argued that Galileo proved Copernicus to be correct, even though it was Kepler who did so.

Our modern scientists holler that the Inquisition imprisoned Galileo for his scientific theories. This is partly correct, but there are some critical qualifications. In 1610, Galileo published *The Sidereal Messenger*, describing what he had discovered using the telescope. Since the time of Aristotle, all celestial orbs were considered perfectly formed. Galileo showed that earth's moon had craters on it and Saturn had 'ears' and other imperfections. Cardinal Bellarmine asked the Jesuit Christopher Clavius to confirm these findings, which he did, while Kepler confirmed how the telescope worked. Influenced by the Counter-Reformation, Cardinal Bellarmine took a literalist approach to the Bible, despite over a thousand years of scholarship by church fathers such as Augustine. Copernicus's book was banned and Galileo was warned against advocating the heliocentric view. Galileo then went on a mission to have this decision reversed.

A year later, The Congregation of the Index made ten adjustments to Copernicus' work to change it from a factual, scientific study to a hypothetical treatise. Corrections were to be inserted into the books already issued. Galileo then found an ally in the new Pope, Urban VIII, who was sympathetic Galileo's view if it could be seen as a 'model' way of describing the workings of the universe. In 1624 Galileo had six meetings with the Pope Urban, who thought it was beyond any person's ability to truly explain the workings of the universe. Galileo's model was the best they had. In 1632 Galileo published for the lay person – in Italian, not Latin – his *Dialogue* proving the Copernican system.

Galileo modelled one character, Simplicio, a naïve simpleton, on Urban, humiliating the pope. He was then brought before the Inquisition to be tried for heresy. Although Galileo had been instructed not to teach any of Copernicus' views, even as models, he claimed he had no recollection of this agreement even though there was an unsigned memo concerning it. During his trial, in order to save his life, he lied outright to the Inquisition, saying he did not believe in the Copernican system. Although it was clear he *did* believe in the Copernican system, he refused to

admit this and announced he would subject himself to any punishment the church should administer to him. Galileo was found seriously suspected of heresy and sentenced to life imprisonment, which was immediately commuted to house arrest. His arrest and imprisonment seem to have had more to do with insulting the Pope than the views he shared with Copernicus.

Confident denial or conceit wrapped up as wisdom?

The chief philosopher cum archpriest of atheism, A. C. Grayling, shows how little he is aware of the science and inventions of the medieval period. Or possibly the inconvenient truths described in this chapter do not fit with his narrative of denial.

The achievements of the classical world, all its deficits acknowledged, are astonishing across the range of literature to engineering, from architecture to government, from quality of life, to empire. The irruption into the classical world of the oriental superstition of Christianity interrupted the course of progress for a thousand years – the thousand years between the basilica of Maxentius in Rome and Brunelleschi's dome from Florence's cathedral, for until the latter was achieved, no one knew how to repeat the architectural and engineering feats of the basilica. That is merely a marker of what was lost when religion became the main issue destroying a civilisation by its schisms, heresies, its divisions, internal weakness, its focus not on the human good in life but a suppositious utopia in a posthumous existence²⁸

At his rhetorical best, Grayling sets the scene for the common atheist myth: Classical civilisation ends, but the great humanists pick up where they left off; reason trumps faith and progress resumes. His narrative arch starts at the end of Classical civilisation with the basilica completed by that significant Christian, Emperor Constantine, and finishes with a dome created by Brunelleschi, another noted and devout Christian.

It is disingenuous for a scholar like Grayling to gloss over the great Christian scientists who have been motivated by their faith to fully explore God's creation, creating and applying the scientific method that has yielded so many life-changing discoveries for the mutual benefit of mankind.

I agree with Hannam, who believes that, at best, 'creative tension' is the way to describe the church's interaction with science, not one of conflict:

²⁸ *To Set Prometheus Free*, p. 23.

This book should lend some support to the sceptic claiming that the term ‘scientific revolution’ is another one of those prejudicial historical labels that explain nothing. You could call every century from the twelfth to the twentieth a revolution in science, with our own century unlikely to end the sequence.²⁹

And concerning our medieval ancestors: ‘We should not write them off as superstitious primitives. They deserve our gratitude.’

I am inclined to agree with him on both points.

²⁹ Hannam, *God’s Philosophers*, p. 342.

Chapter 4

The Surprising Friend of Theism: Evolutionary

Method

Today's evolutionary, naturalist, reductionist scientists propagate a myth when they argue that the theory of evolution is incompatible with theism. They assume that the evidence for evolution is so overwhelming that you have no choice but to ditch your belief in God. However, this theory is based on the *a priori*¹ thought of an algorithm working away, so it does not actually conflict with theism. Theists may welcome the theory's empirical findings while disputing its ability to answer 'why' questions.

A leading atheist, Daniel Dennett, describes the method of evolution as an orderly algorithm which you can draw directly from the work of Darwin himself:

If during the long course of ages and under varying conditions of life, organic beings vary at all in the several parts of their organisation, and I think this cannot be disputed; if there be, owing to the high geometrical powers of increase of each species, at some age, season, or year, a severe struggle for life, and this certainly cannot be disputed; then, considering the infinite complexity of the relations of all organic beings to each other and to their conditions of existence, causing an infinite diversity in structure, constitution, and habits, to be advantageous to them, I think it would be a most extraordinary fact if no variation ever had occurred useful to each being's own welfare, in the same way as so many variations have occurred useful to man. But if variations useful to any organic being do occur, assuredly individuals thus characterised will have the best chance of being preserved in the struggle for life; and from the strong principle of inheritance they will tend to produce offspring similarly characterised. This principle of preservation, I have called, for the sake of brevity, Natural Selection. Natural selection, on the principle of qualities being inherited at corresponding ages, can modify the egg, seed, or young, as easily as the adult. Amongst many animals, sexual selection will give its aid to ordinary selection, by assuring to the most vigorous and best adapted males

¹ An *a priori* judgement is a form of mental reasoning that yields truths which do not need empirical observation to validate them. The classic example is any mathematical trail of reasoning: you do not need to have a pair of twosomes in front of your eyes to know the addition of them will equal four. In all judgments of this type, the predicate – or, if you like the part after 'is' – is found in the subject. Thus, with 'my wife is a woman', the nature of being a woman is contained in the word 'wife'.

the greatest number of offspring. Sexual selection will also give characters useful to the males alone, in their struggles with other males.²

Darwin had discovered the power of an algorithm. An algorithm is a certain sort of formal process that can be counted on – logically – to yield a certain sort of result whenever it is run or initiated.³

Life on earth has been generated over billions of years in a single branching tree – the Tree of Life – by one algorithmic process or another.⁴

This algorithm can be interpreted as follows:

1. A broad range of species of living things has been present on earth over a very long period of time.
2. When life-threatening events happen, those members of a species that survive have characteristics more suited to survival than other members.

Inheritance ensures these characteristics are passed on to the next generation, contributing to the wellbeing of the species. It is ironic that Dennett was a student of Gilbert Ryle, who dismissed any notion that an *a priori* argument could establish a fact, as we have one here at the heart of evolutionary theory.

Although Darwin offers a theory for how life moves from one part of the evolutionary tree to the next, he did not attempt to explain the origin of life or why there is life at all. The Bible, though, tells us life was created from dust. Over 3,000 years ago, King Solomon noted: ‘All go to one place: all are from the dust, and all return to the dust’ (Ecclesiastes 3:20). While a king from 3,000 years ago cannot be expected to know about the building blocks of life, he had a fairly good grasp of the beginning: ‘Then the dust will return to the earth as it was, And the spirit will return to God who gave it’ (Ecclesiastes 12:7). I would have thought this is the *only* way to interpret Genesis 2:7 and 3:19. We were created from such a substance, probably the smallest known item known to man 3,000 years ago: a speck of dust.

What is not widely known is that the Bible also touches upon evolution. The author of the Wisdom of Solomon,⁵ writing some 2000 years before Darwin, writes

² Darwin, *On the Origin of Species*, p. 127.

³ Dennett, *Darwin's Dangerous Idea*, p. 50.

⁴ Ibid., p. 51.

⁵ This book is included in the Orthodox and Catholic Bibles, but appears, at best, in the Apocrypha of Protestant Bibles, or not in them at all.

the following: ‘For earthly things were turned into watery, and the things, that before swam in the water, now went upon the ground’⁶

Evolution and the creative process

Although Dennett and Darwin do not give us an answer as to the ‘why’ of creation, they do base the creative process on *a priori*, undeniable logic.

Yet two of Dennett’s philosophical ancestors, Plato and Aristotle, were creationists, and there was a logical process at play in their reasoning. Aristotle, the master founder of the rules of logic, reasoned that there must have been an unmoved mover. This eternally unmoved mover had no actuality in the physical world; to think of the mover being involved in praxis or action in the finite world would compromise the mover. This is discussed in his books *The Nicomachean Ethics* and *Metaphysics*. David Sedley provides a useful outline:

The reason why in Aristotle’s view no directive mind can be at work in natural processes is not any preference on his part for scientific over theological modes of explanation. It lies rather in the conviction that the Platonic account gets the theology wrong. God’s causality in the natural world is omnipresent, as Plato held, but must be such that all the operative drives and impulses belong to the natural entities, leaving god himself eternally detached and self-focused.⁷

Aristotle argued that if there was no divine craft in nature, why was nature fixed on reaching its teleological end point? He thus proposed four causes of being: material, moving, formal and final. To explain these four elements, Aristotle discusses the case of the pig:

1. Its material matter or cause is its mother’s and father’s prior material matter.
2. Its moving cause is the day-to day-changes the pig undergoes.
3. Its formal cause is its essential form of a pig.
4. Its final cause is being a fully developed pig.

I can speculate how this pig was implied in the first pig. Just as Pythagoras’ number is implied in the concept of a right-angled triangle, so all existing pigs are implied

⁶ Wisdom of Solomon 19:9, King James Bible Online, accessed 26 January 2017, <http://www.kingjamesbibleonline.org/book.php?book=Wisdom+of+Solomon&chapter=19&verse=19>.

⁷ Sedley, *Creationism and Its Critics*, p. 173.

all the way back to the original singularity of creation. The formal cause is implied in the pig's parents, all the way back to the beginning!

This means that a few billion years ago, at the very moment of the creation of the first life form, you and I were implied in it, as was every living thing that comes before and after us. Aristotle compares the pre-existence of form in nature to the way that an artefact's form pre-exists the artefact by its presence in the artist's mind.

I would push this point further and argue that your genetic code was presupposed in the moment of creation, as was everything else. Yes, the creation event was preprogrammed with you and every living life form that has been, is, and will be already implied, in that moment. Wow!

I simply do not believe this is at all possible by chance alone – a view that would put me at odds with a group of philosophers known as the atomists. The atomists did not suppose any purposive re-programming, instead theorising that all atoms follow a mechanical sequence that happens to be fortuitous for us, in that they allow us to exist. Along with Aristotle I would argue that that the pre-programmed nature of cause and effect does in fact show an original purpose.

In *On the Nature of Things*, the Roman atomist⁸ Lucretius describes how faster, cleverer, more agile creatures outcompeted other creatures to survive and prosper. Although we recognise elements of the Darwinian process in his work, there is no concept of evolution over vast periods of time. The Epicureans, like Lucretius, had no concept of the gradualist approach to evolution over many centuries. To explain how changes took place, they evoked the power of a very large time span. Most modern Darwinists, like Dawkins and Dennett, also assume a large span of time is needed, or certainly billions of years, for these changes to occur randomly. If you do hold that the finite can be infinite, then of course any and every set of combinations of things could happen. Thus, complex systems of the body like eyes can be attributed to an accident.

However, the infinity assumed is not logically possible. As we discussed earlier, to be material and finite implies a prior cause. Also, *at some point*, a finite thing

⁸ An atomist holds that reality is composed of atoms (the smallest individual things) and voids. The Greek word *atomon* (indivisible) is the root of our word 'atom'. The Atomists, a school of ancient Greek philosophy, reduced all phenomena down to the smallest individual units – much like their modern successors, the scientific naturalists. They had no requirement for anything outside of their closed system of reality to give cause to its existence. They could claim to be the first atheists.

must have a prior cause that is immaterial, otherwise it is a finite thing that is uncaused, which is contradictory. That materialism implies a prior physical cause is glossed over to sustain the atomist's theory of the origin of life. This did not occur to the atomist epicureans or today's naturalist scientists.

Darwin did not argue, like the atomists, that infinity played a central role in the evolutionary process. Rather, he focused on the method of life's creative process, concluding that it was evolutionary in nature. Modern Darwinists, however, jump from the theory of evolution to the conclusion that it explains the origin of life. For example, A. C. Grayling, on Darwinism, writes the following:

Religious apologists who say their views are compatible with Darwinism accept that biological evolution occurs over great periods of time, yet say that a deity is involved in designing and sponsoring this process. Consider a parallel. Suppose it was once believed that flowers are coloured because fairies paint them while we sleep. Once we understand the natural process by which flowers come to be coloured, it would not merely be redundant but contradictory to claim that *in addition* to the biological process that causes floral colouration, it is also part of the explanation that they are painted (in the very same colours) by fairies. For if the biological account is correct, the fairy-tale account is false (and vice versa): one cannot hold both to be true together.⁹

Thus, Grayling likens his fairies to God. However, he does not explain how this creation began, which is surely the proper domain of scientists.

The Bible's explanation for how creation began can be summarised as follows:

In the beginning was the Word, and the Word was with God, and the Word was God. He was in the beginning with God. All things were made through Him, and without Him nothing was made that was made. In Him was life, and the life was the light of men. And the light shines in the darkness, and the darkness did not comprehend it (John 1:1–5).

There is nothing contradictory to evolution theory in this text. The theist claims the trigger point is God. The atheist claims that the trigger point lies somewhere in a primordial soup where cell-like structures get together to begin life as we know it. As the Bible makes no direct claims, other than that God created everything,¹⁰ the

⁹ Grayling, *The God Argument*, p. 116.

¹⁰ Unless you choose to take a very literal reading of Genesis, which neither the apostles nor the church fathers chose to do.

theist can hold a consistent account of creation with God as the creator and evolution as its prime method. Although Ockham's Razor is often used to razor *out* the need for a deity, I find it a more compelling case to use the Razor to rule a deity *in*. God, the un-caused non-material cause, is implied in the evolutionary process as the start of it, the immaterial first cause that must be at the foundation of all physicality, the programmer of the whole of that moment of the creation of life past, present and future.

Whilst evolution plays a role in the unfolding of the plans of creation, it is not the complete answer to the *method* of the creator. If we assume the method of the creator is evolution, then incremental variations over time cannot possibly account for why humans, as a species, stand not just incrementally above the most intelligent animals, but way ahead of them in terms of cognitive abilities. I know this is a deeply unfashionable view to hold. It could be argued that we need these attributes to compete against our fellow humans in the survival of the fittest. I would argue, however, that the rationality of human beings produces a climate of cooperation. It is this cooperation that has allowed humans to accelerate in leaps and bounds beyond the capabilities of all other creatures. This is not a process that is driven by evolution, as currently described by any of its advocates that I am aware of. There is an *a priori* logic to evolution, but it is not a complete explanation for the why and how of life.

Evolution 2.0

Whilst the algorithm of evolution works away, with natural selection being the final determinant in deciding which species survive and which do not, there are evolutionary wonders working away in real time, changing species. Some of these processes, which are well known to biologists, refute the theory that evolutionary change is purposeless and lacks teleology. Perry Marshall is the person responsible for drawing these processes to my attention.¹¹ They are briefly summarised here.

In the 1930s, the scientist Theodosius Dobzhansky subjected fruit flies to radiation in an effort to encourage mutation. These insects breed fast – once every two weeks, so over 30 years of experiments you can study 600 generations of potential mutations. Another way to look at this is to imagine four generations of scientists

¹¹ *Evolution 2.0*.

per century, who together would be able to study 150 centuries or 15,000 years of potential mutations. Over this significant time frame, we would expect to see some new mutations. And we did: the fruit fly developed an odd leg on its head and other strange deformations at times, but no advantageous mutations appeared.¹²

In 1969, Francisco Ayala exposed fruit flies to very modest levels of radiation and eventually radiation-resistant fruit flies appeared. Self-adjustments had been made in the fruit flies' cellular machinery.¹³ This is a remarkable demonstration of a very quick adaption to an event, as opposed to small, random changes over time. In 1981, David Staller and Richard Moyer carried out a similar experiment on fungus, which initiated its own repair and adaption mechanism. Staller noted that a very small dose acted as a warning to the organism, which then switched on those very same repair systems to brace itself for a higher dose.¹⁴ In 1944, Evelyn Witkin did pretty much the same with bacteria, stimulating mutations with UV light, and she ended up with bacteria that had rapidly developed self-repair systems.¹⁵

With regards to bacteria, Marshall notes:

An eight-digit password with upper- and lower-case letters and numbers has more than 10^{14} (100 trillion) possible code combinations. The bacterium *Mycoplasma genitalium*, widely studied because it has one of the smallest genomes, has 582,970 base pairs. That makes 10^{23} (100 billion trillion) possible code combinations. The human genome, with 3 billion base pairs, has 10^{38} possible code combinations ... [if] a hacker has to try 100 billion combinations, on purpose, to guess one eight-digit password, then how long would it take for a random copying errors to produce an eye?¹⁶

If we follow conventional evolutionary theory, there is a vanishingly small probability that the simplest of life forms will make one random adaptation that is successful. This suggests that in the experiments just mentioned, something other than random chance was at work. Furthermore, to sustain evolutionary theory based on chance mutations, these improbable events must have happened billions and trillions of times over for each life form to be in the state it is today – unless there is some pre-programming that speeds up these adaptations.

¹² Ibid., pp. 29–32, 294.

¹³ Ibid., p. 32.

¹⁴ Ibid., pp. 32–33.

¹⁵ Ibid., p. 33.

¹⁶ Ibid., p. 35.

An atheist may counter, ‘well don’t put in an even more impossible event, that of a supernatural creator to negate these odds,’ but they do not recognise that cold hard logic tells you this must be the case. Why? As we have already discussed, causality and physicality cannot be separated. There is no causeless physical thing. Therefore, to keep hold of the idea of a material universe, you can only suppose a non-material, non-physical first cause that exists in and of itself and is *immaterial*. If you are a rational person, you are forced to conclude a First Cause, or Prime Mover, God, Godhead, the Big It, or whatever you choose to call it. The God of the Abrahamic faiths revealed itself as ‘I AM’. That is probably as good as it gets for our understanding. The absolute presupposition of God is in fact a *natural* explanation that trumps the illogic of blind chance.

Marshall’s key observation is that with any code – for example, the computer’s binary code of 0’s and 1’s – if you corrupt a tiny part of it, the entire message becomes nonsensical. Scratch your DVD and you have impaired the code written onto it that produces your audiovisual experience. Marshall uses the example of the disease cystic fibrosis, which ‘is caused by a deletion of three basic pairs in one gene on chromosome 7. This tiny copying error causes a major birth defect.’ If we accept the current presuppositions of science, then we must believe that on the whole, random changes in the code are successful in promoting change that works for the benefit of an organism. Yet with the case of cystic fibrosis, a tiny copying error causes deadly defects. For a mutation to benefit a species, it would have to be very accurate to effect positive change. What is even more interesting is that cells do their best to correct copying errors. This is because *random mutation is destructive*.

If the assumption of a process of random mutations can be questioned as a credible explanation for evolution, this opens up the possibility that something drives the evolutionary algorithm. Changes over time clearly do happen, and a number of scientists now take the view that the cell itself is hardwired or pre-programed to effect positive, successful evolutionary adaptations.

The Nobel Prize winner, Barbara McClintock, subjected maize to radiation, which triggered cells to repair, or patch up damaged DNA using a dormant part of the genome. She repeated this process on the maize’s progeny, which successfully

reproduced and grew.¹⁷ This process of *transposition* is a key part of the cell's tool kit to re-engineer its DNA. Competition and natural selection play no role in this process; change is made by the cells themselves.

Experiments by the geneticist Evelyn Witkin showed the same processes at play in bacteria, and in 1968 James Shapiro confirmed that bacteria could transpose elements in its DNA.¹⁸ In 2000, the University of Colorado reported that a starving protozoan would mate, then restructure its DNA by making in the order of 100,000 changes so that it would survive. Whether it is responding to heat shocks, pollution or a lack of food, the changes – which are not always perfect – make the protozoan more suited to its new environment. Transposition therefore seems to be a factor in driving the evolutionary algorithm of change over time. But, the time in question can often be an instant!

Horizontal gene transfer has been described by the Nobel Prize-winner Carl Woese as the dominant form of evolution in the single-cell organism.¹⁹ Here is an example. If an antibiotic attacks a bacterium by flooding it with toxins, this bacterium will copy a portion of another bacterium's DNA that contains the code to make a pump to get rid of the toxin. Having got rid of the toxin, it then starts to multiply. This can happen in minutes across a whole population of bacteria. These new DNA code adaptations take place with a clear intent to get rid of the toxin.

Thus, natural selection seems to take place at the macro level, when uncompetitive laggards in the evolutionary mix become extinct – like the Dodo. At the micro level, however, cells can effect real-time, purposefully driven actions. Genetic, cell-driven engineering seems to be the driver in the micro world.

The problem of intermediate stages

In *The Origin of the Species*, Darwin stated that 'if it could be demonstrated that any complex organ existed which could not possibly have been formed by numerous, successive slight modifications, my theory would absolutely break down.' It seems that Darwinian theory, as currently advocated, is indeed breaking down.

Darwin also acknowledged that the lack of intermediate stages in the fossil record posed a problem for his theory of slow, gradual evolution by natural selection:

¹⁷ Ibid., pp. 81–88, 90–91, 112, 135, 224, 233, 295, 299.

¹⁸ Ibid., pp. 83–85, 88–91, 139, 150.

¹⁹ Ibid., pp. 96, 216.

why then is not the very geological formation and every stratum full of such intermediate links? Geology assuredly does not reveal any such finely graduated organic chain: and this, perhaps, is the most obvious and greatest objections which can be used against my theory.

540 million years ago, there was a huge explosion in the fossil record known as the ‘Cambrian explosion.’ For the 2.5 billions years prior to this even, not much happened in terms of changes in life forms. This pattern of evolution has been described as ‘punctuated equilibrium.’

The process of symbiogenesis could explain this event. It is a process of cooperative creation, where cells or whole organisms merge together to create new ones. One example is lichen, which is the result of algae and fungus merging together. In 1939, Eugen Thomas performed an experiment showing there was nothing slow or gradual about this process.²⁰ Another example is mitochondria, a structure in your cells that converts oxygen to energy. Mitochondria has its own DNA, indicating it was once an independent cellular organism that was swallowed by what became its host cell. A similar process gave rise to chloroplasts, the part of the plant cell where photosynthesis takes place.

The example of the bacterial flagellum is frequently cited by proponents of Intelligent Design. This is the part of bacteria that acts like a propeller, moving at 10,000 to 100,000 rpm. As has been argued by Michael Behe in his book *Darwin’s Black Box*,²¹ if the slightest change is made to this structure, it becomes useless. It would seem impossible that a gradual, copy-error-by-copy-error process has brought this structure into existence over a gradual, slow evolutionary timeline.

Marshall concludes:

Based on everything we’ve seen about Transposition, Horizontal Transfer, Epigenetics, and Symbiogenesis, it seems quite reasonable to hypothesize that bacterial ancestors built these subassemblies using their cognitive and linguistic abilities. Eventually an exceptionally capable cell brought those subassemblies together to for the flagellum we know today.²²

²⁰ Ibid., p. 129.

²¹ Behe, *Darwin’s Black Box*, pp. 69–73.

²² Marshall, *Evolution 2.0*, p. 172.

Thus, ‘Evolution 2.0 is defined as the cells capacity to adapt and to generate new features and new species by engineering its own genetics in real time.’ Marshall concludes that *adaptive variation + natural selection + time = Evolution 2.0*.

Who made God then?

Our DNA code contains three billion base pairs – the equivalent of 750 MB of digital data that could fit on a standard CD. The language of DNA is made up of a four-letter alphabet: A, C, G and T, which correspond to adenine, cytosine, guanine and thymine. These letters are arranged in groups of three. There are four possible letter combinations for each of these groups, so $4 \times 4 \times 4 = 64$ ‘words’ in the genetic language. These 64 words give instructions as to which of 20 amino acids should be built. Amino acids are the building blocks of proteins, and therefore of life. You have to ask, where does this DNA come from? We are told by most biologists that DNA came from RNA. The problem is, you need RNA to produce the proteins that build the RNA in the first place.

It is logical that the code of life would come first, as for any system based on working to a code. Every bit of technology you own contains a code (designed and written by someone), an encoder (that deals with the rules of the code) and a decoder (that obeys the rules of the code). The rules of any process are defined in advance. A system such as your DVD player cannot evolve by trial and error.

Codes are not matter and they’re not energy. Codes don’t come from matter, nor do they come from energy. Codes are information, and information is in a category all by itself.

The logical inference was: (1) The pattern of DNA is a code, (2) all the codes whose origin we know are designed, so (3) therefore we have every reason to believe DNA is designed.²³

No code comes into existence in and of its own. Code is information, which is neither energy nor matter, but consciousness.

Some years ago Dawkins wrote a famous GA software program to demonstrate how Darwinian evolution might successfully work. He entered the following random string of letters into the program:

WDLTMNLT DTJBKWIRZREZLMQCOP

²³ Ibid., p. 194.

One letter at a time, his program evolved this string of letters and deleting results it didn't want, the program reached its preprogrammed goal of the following sentence:

METHINKS IT IS LIKE A WEASEL

This was heralded as a success. However, Dawkins' software program was programmed to compare each new sentence to the goal sentence and either select it for continued 'mutation' or reject it based on whether it more closely resembled the goal than the previous mutation. But his very own '1.0' Darwinian evolution explicitly forbids preprogrammed goals!²⁴

Ironically, Dawkins *plays the role of God*, the coder, in this experiment in an effort to prove there is no God!

Whilst I can accept natural selection as a process, in the final analysis, it has no creative power in and of itself. The 'universal acid' that Dawkins' disciple Dennett argues is the ability of the gene pool to produce an abundance of variants, allowing natural selection to get to work and produce all the wonderful things we observe today, is at best fantasy and at worst delusional.

²⁴ Ibid., p. 222.

Chapter 5

The Current Canon of Science

The ever-moving gospel of science

Some treat science as if it were a sort of infallible oracle, like a divine revelation – or not infallible (since it seems so regularly to change its mind), at any rate such that when it comes to fixing belief, science is the court of last appeal.¹

Two of the most important and overarching contemporary scientific theories are general relativity and quantum mechanics. Both are highly confirmed and enormously impressive; unfortunately, they both can't be correct.²

In previous chapters, we have seen how our ancestors used science to create things that mostly improved people's wellbeing. Theologians dealt with the nature of 'why anything at all?' questions; science dealt with the 'how'. Over time, scientists became better at answering the how question – and wonderfully speculative in their pseudo-metaphysical attempts to answer the 'why'. The theory of evolution is a great example of science falling foul when it is used to address the 'why'.

I was born into the understanding of the Judeo-Christian creation story in its non-literal sense. The big bang was the 'how' it was done (by whom or what, science could shed no light), and evolution was the process by which life moved along. As science has changed its spots, we now have theories of a multiverse, a universe from nothing, and emergent universes. Concerning evolution, there is much stronger advocacy for something-from-nothing in the primordial soup, a moment of magic when life spontaneously emerges under the right conditions.

I am no natural or physical scientist, so the best I can do is read books by leaders in the field of physical and natural science and try to understand them. Importantly, I always carry with me an inquiring mind which tries to understand these scientists' views of the world, the universe and everything in it, and whether they can answer any of the big questions such as the 'why' and 'how' of the universe.

¹ Plantinga, *Where the Conflict Really Lies*, p. xi.

² *Ibid.*, p. xii.

The ‘why’ has become ever stranger not just to the scientist, but also to the layperson like me to understand. For example, the eminent scientist Brian R. Greene, in his opening remarks for his magnum opus *The Fabric of the Cosmos*, comments:

The overarching lesson that has emerged from scientific inquiry over the last century is that human experience is often a misleading guide to the true nature of reality. Lying just beneath the surface of the everyday is a world we’d hardly recognize. Followers of the occult, devotees of astrology, and those who hold to religious principles that speak to a reality beyond experience have, from widely varying perspectives, long since arrived at a similar conclusion.³

This was also the case at the dawn of modern science, where two very different views of the way the universe works competed against each other for prime spot. Newton proposed that his laws of motion, governing what we observe and capable of predicting the movements of the starry heavens above us with great accuracy, operated in relation to a static and fixed absolute space. Leibniz put up his hand in firm protest and said all talks of space are meaningless unless they are about relations between things. Space, being empty, is meaningless as it has nothing in it. Space did not exist as Newton proposed, but only as a collection of relations. The Newtonian juggernaut ploughed on and sunk Leibniz’s views.

Appearance and reality

In the quote above, Greene draws our attention to the ‘misleading’ nature of reality. Philosophers have, since the dawn of Greek thought at least, always understood this disconnect between appearances and reality.

However, it may not even occur to the layperson that what they think is real is only what the lens of their mind tells them is real. Having lived their lives in this unquestioning state, it comes as a total shock – even to the well-educated – that what they think is objective reality is ... well ... not as objective as they think. It is a surprise to many when they realise that they hold this belief in an objective reality totally and unquestioningly on faith and faith alone.

One of the reasons I stress this now is to show that people who demonstrate religious faith have at least questioned their beliefs and know they are faith-dependent, whereas atheists operate blissfully unaware that they are bathed in faith-

³ Greene, *The Fabric of the Cosmos*, p. 5.

based presuppositions. Being aware that you need faith to hold your beliefs is surely better than being totally ignorant that you need to have faith to even begin to reason at all!

I will now move on to looking at how some philosophers have addressed this issue over the centuries.

First, I return to the point Leibniz makes, as it is relevant to later discussion. And, worth mentioning here are the views of F. H. Bradley, predating Einstein's revolutionary theories by some 20 years. In the opening section of *Appearance and Reality*, Bradley writes: 'I shall point out that the world, as so understood, contradicts itself; and is therefore appearance, and not reality.'⁴ Like Leibniz, Bradley argues that everything – space included – is relational, and nothing is truly distinct.

He begins by distinguishing between primary qualities (those we perceive or feel) and secondary qualities (the residue of feelings in us). For example, an object such as a table has unique properties in and of itself, its primary qualities. Secondary qualities are those that linger in our mind – descriptions of its firmness, shape, texture. Secondary qualities do not actually exist: they are adjectives applied by our minds to describe the object. Yet without these descriptions, the table ceases to exist and so also the perceiver's understanding of it. You become baby-like, blissfully unaware of that which you cannot comprehend.

This apparent contradiction leads Bradley to conclude that appearances relate to reality but reality does not relate to appearances. He cites an example: an ear can hear, but the ear itself is not audible.

Returning to the table, we may use several adjectives to describe it: it is hard, supportive, wooden, and so on. Yet while the table is a mixture of these adjectives, it possesses no single adjective, making it in a sense illusory: 'If you predicate what is different, you ascribe to the subject what it is not; and if you predicate what is not different, you say nothing at all.'⁵ The table's independent unity, the material reality of it, is an appearance to us, a collection of adjectives in relation to our mind. And curiously, these adjectives are also made by our mind.

⁴ Bradley, *Appearance and Reality*, p. 11.

⁵ *Ibid.*, p. 20.

Bradley then goes on to conclude: 'Relation presupposes quality, and quality relation. Each can be something neither together with, nor apart from, the other; and the vicious circle in which they turn is not the truth about reality.'⁶ You cannot think of qualities without evoking distinctions, you cannot think of distinctions unless they are in relations, and you cannot think of relations unless you are thinking of qualities. A circle of reasoning is used to describe what we perceive as reality. The way we look at things, therefore,

is a makeshift, a device, a mere practical compromise, most necessary, but in the end most indefensible. We have to take reality as many, and to take it as one, and to avoid contradiction. We want to divide it, or to take it, when we please, as indivisible; to go as far as we desire in either of these directions, and to stop when that suits us.⁷

Materialism holds that the qualities of an object are an accurate representation of what it truly is, while our senses are subjective add-ons that help us understand the primary world. But Bradley asks: do these external relations hold? We cannot do away with the adjectival without doing away with the object. And we cannot do away with the subjective thought without doing away with the thinker. Materialism is appearance only. What is more, our body:

is no exception, for we perceive that, as extended, solely by the action of one part upon another percipient part. That we have no miraculous intuition of our body as spatial reality is perfectly certain. But, if so, the extended thing will have its quality only when perceived by something else; and the percipient something else is again in the same case. Nothing, in short, proves extended except in relation to another thing, which itself does not possess the quality, if you try to take it by itself.⁸

...

In short, it is the violent abstraction of one aspect from the rest, and the mere confinement of our attention to a single side of things, a fiction which, forgetting itself, takes a ghost for solid reality.⁹

Yet the materialist, from defect of nature or of education, or probably both, worships without justification this thin product of his untutored fancy.¹⁰

⁶ Ibid., p. 26.

⁷ Ibid., p. 33.

⁸ Ibid., pp. 15–16.

⁹ Ibid., p. 16.

There is a quasi-religious aspect to the materialist's understanding of the world of objects: they hold onto an atomised view of nature by blind, unquestioning faith.

G. E. Moore has argued that there is a mixing of the external object and the mind-realised object within Bradley's belief that the idea is implied in the thing itself and cannot be separated.¹¹ An idea is a concept, and different ideas can have common content that represent the same concept. This connection of concept is independent of the idea. I personally believe that we are kidding ourselves if we think a complex series of connections about a concept can exist outside of any connectivity to the mind – we would have to think of this new, independent relationship in the first place. This does not mean that if a tree falls in a wood and nobody observes it, it does not exist – just that a person cannot conceive of it existing until, well, they conceive it.

Bertrand Russell, inspired by Moore's argument, proposes the existence of external relations in maths.¹² For example, the number 4 must be independently bigger than 2 to have any meaning whatsoever, and it must stand in relation to it externally. However, I would maintain that a mathematical construct is only an abstraction. Taken on its own, it remains an abstraction and cannot be used to suggest independent external things.

Russell further argues that if we consider something as simple as A being taller than B, it would imply a relationship. And, if everything is relational, you end up in a situation where to be coherent you can only have a whole in which A and B are in it and not distinct. But, since they are distinct, they must be related externally and therefore this relational edifice of Bradley must be rejected, and a plurality of atomistically minded, independent things must exist. In abstract, I can concur with this. However, when I think of a real A person being taller than a real B person, I cannot separate out what I mean by 'person' until I populate A and B with real characteristics and attach several adjectives to them that are related to me, the describer. So, I would argue that A and B are only distinct because my mind has made them so: they are internally related based on how my mind interprets their appearance. If A and B are only distinct when they are perceived through the mind, then they cannot be independent of the mind.

¹⁰ Ibid., p. 17.

¹¹ Moore, 'The Nature of Judgement.'

¹² Russell, *The Principles of Mathematics*.

In conclusion, I believe, despite whatever our common sense tells us, that we are stuck with a reality of appearance, rather than a concrete, mind-independent world that we can rationally believe in; we can only have a faith that it exists.

Space and time

We now turn our minds to space, that mind-bogglingly big emptiness we like to think of as ‘out there’.

If we pause to think about it, however, we begin to see that the concept of such a space full of nothing is nonsensical: we, who are solid, physical objects, exist in it. This means that what we call space is something that possesses solidity in parts and is therefore also relational. And if it is relational, as Leibniz suggested several centuries ago, it is a collection of things or a collection of spaces, which makes the concept of one big expanse of space meaningless. So it would seem that we need to bin our common sense preconceptions of space and accept that appearance is not reality.

In 1687 in his *Philosophiæ Naturalis Principia Mathematica*, Isaac Newton proposed the notion of absolute space. Out of this notion grew the common sense view of space and physical objects being separate and independent of each other. This view is still widely held, despite being disproved over one hundred years ago. Newton’s world is mechanistic and thoroughly deterministic. It is also mind-independent and externally related. For example, his laws of motion have allowed us to understand how objects move and how their movement affects the movement of other objects.

Some 230 years later, Einstein proposed that space and time were not separate, but rather one and the same, space–time, and it was this space–time that occupied everything.¹³ Thus, the correct way to view the world was in terms of the warping of space–time itself, with the depressions and impressions moving objects towards or away from each other. If you imagine jumping on a trampoline, then at the bottom of your downward jump the fabric of the trampoline forms a ‘U’ shape under your feet. Then imagine your feet are the planet earth: light is forced to go around the planet to carry on its journey, rather than in a straight line, along a flat

¹³ I note the opening of the Bible in Genesis 1:1: ‘In the beginning God created the heavens and the earth.’ Time starts (the beginning), the cosmos is birthed (the heavens) and the earth and all material things are established. Not bad for a 3500-year-old book!

dimension. Everything is moving in relation to everything, warping the fabric of space–time, of which we are an intricate part. The clear and distinct boundaries of Newton’s absolute space and absolute time no longer apply. In Einstein’s ‘relational merger’, there is just one absolute: the speed of light, which moves at 1.07 billion kilometres (670 million miles) per hour relative to everything.

If we think about the implications of Einstein’s work, his theory of Special Relativity describes how if you are still, watching a still bird, you are not moving through space but you are moving through time; if the bird flies off in front of your eyes, it is now moving through space as well as time. However, if it could fly at the fastest speed possible, the speed of light, it would keep pace with time and therefore be stationary in relation to it. It would be timeless, not moving through time. At distances under the speed of light, we all move relative to each other and to everything. Our individual time clocks are the same if we are not moving in relation to each other, but as soon as we move relative to each other, my reality of what is happening to me would be marginally different to your perception of it because light takes time to get from point A to point B.

For Einstein, space and time are inseparable, and we move in the fabric of space and time simultaneously – or, as I prefer to think, we are part of that fabric. He proposes that our laws of physics do not distinguish between past, present and future: there is said to be symmetry in the laws of nature. Crack an egg open, and as far as the laws of physics are concerned, if you know the trajectories of each and every particle of that exploding egg, you can reverse its trajectory. Yet we observe so much asymmetry in the way time moves from past, present to the future, that the egg is never reassembled. Do an experiment, all things being equal, in London, Paris or New York: it will deliver up the same results. Do it on a moving train, or in a stationary lab: it will still yield the same outcome. The laws of physics are said to be indifferent to time and apply themselves in the same way all the time, making no past, present or future distinction.

For Newton, the clock ticked off time for everybody, everywhere, in the whole of ‘absolute’ space. For Einstein, each and every thing has its own clock ticking away, with different speeds relative to everything else. The laws of physics can still be applied in this predictable but relative world, with the one-ness of space–time and the speed of light being the new absolutes. Space–time is made up of a lot of

‘nows’: there is no distinction between past, present, or future. This is what we will look at next.

The timelessness of reality

In his book and also in a YouTube clip,¹⁴ Brian Greene clearly explains how what we term ‘past, present and future’ – the common-sense view – all exist now, ‘out there’ if you like. Greene encourages us to imagine events that are happening to him there and then. The examples he uses are his being in his office, noting the clock strike 12 noon, the cat jumping off his windowsill and a pigeon flying in St Mark’s Square, Venice, Italy. This is a slice of time. Then imagine each and everyone one of us having something happening to us and around us in that slice of time. We can then imagine each and every discreet slice of time of our life and the lives of all who preceded us, right back to the origin of life itself and then back even further to the Big Bang. Greene then asks us to imagine all these slices of time lined up – much like slices in one giant loaf of bread. Right now, in this moment, if we sliced that loaf of time, you would be in it, reading this book.

This must be the case if time is inseparable from space. Just as we can think of a timeline back to the Big Bang, the start of space–time, those discreet moments of each physical past must still exist. Wow!

Now, imagine an alien on a bicycle billions of miles away in that slice of time we are experiencing right now (an example Greene uses in the video). If it cycled away from us at a few miles per hour, its time would be ticking off slightly differently to ours. (Remember the example of an observer watching a bird? Motion between objects affects time between objects.) After a few minutes of cycling away from us, the alien’s ‘now’ slice of time will be different to ours. If the alien moves away from us, its slice of time in relation to us would be in the past. If it moves towards us, the reverse happens and its slice of time will now encompass the future ‘now’ slice that we may or may not exist in, depending on how fast it cycles. So, not only do all the ‘now’ slices of the past and present exist, but also all of the future slices of time.

Now, if that is not baffling enough, we must keep in mind that the Quantum view of the world, which we will look at shortly in more detail, tells us that in each and

¹⁴ Greene, *The Fabric of the Cosmos*; Paralaks, ‘The Illusion of Time.’

every moment, there is a kaleidoscopic array of the smallest potential things known in the universe that only ‘decide’ what to be in that very moment. I use the word ‘decide’ in quotation marks, as a wave or particle, as far as we are aware, has no mind to help it ‘decide’ what to become. Indeed, the decision on what to become seems to depend on the human mind observing it, as we will see later. This implies that although the past and the now we exist in have a certain solidity in their slices of time, the future is not predetermined: its potentiality is waiting to be observed by us and made to happen. So, the common-sense view of time being like a flowing river, moving from A to B to C, would not appear to be real at all. There are only a whole series of nows – past, present and future – all lined up in a row of space-time. Physical laws are oblivious to our anthropomorphic conception of time, thus they are time-less and time insensitive. To them, there is only the whole of space-time, a oneness of reality. There is no flow for these laws.¹⁵

Time and physics

Two philosophers who addressed these issues before Einstein were F. H. Bradley in his *Appearance and Reality* and J. Ellis McTaggart in his famous essay in the journal *Mind*, ‘The Unreality of Time.’ Bradley asks us to think of time in the common-sense way of past, present and future, like a stream flowing. This is relational. If you view time as the whole of this passage of discrete units, then it has no duration at all and ceases to be time, but if you give each unit in time duration, it ceases to be an independent unit. It all becomes a matter of relation. And, once again, if you specify time as a quality of a moment, it sits in relation to something and ceases to be a moment. It seems impossible to maintain a coherent conception

¹⁵ If we are both motionless, my now is the same as your now. If we move, our nows will be slightly different, although of course both equally as valid. This new relativity-based understanding of the world suggests that our common-sense-version of time as past, then now, moving into the future, is a mental construct that does not reflect reality, as my now, at one end of the room, will be slightly different from your now. For someone in the UK and someone in Australia, actions may be happening seconds apart. Momentarily, you could be dead in one place and viewed to be alive in the other place, and both views would be right. Following relativity, we can deduce that we have a series of nows from the start of the big bang encompassing every moment, in what seem to us the past moments, the present moments and indeed the future moments, or nows. A theist would sit very comfortably with this evocation of reality as if God is the cause of it. God sits alongside it, or encompasses it, as the causal agent, and thus can observe all moments, being therefore omniscient. Or, another type of theist would argue that these real moments emerge from the creator and thus are all capable of being known to it.

of plain-speak time. If you think of ‘now’ as during and into the past, and the future as becoming, any process within the now destroys it and makes it a ‘not now’: ‘It perishes in ceaseless oscillation, between an empty solidity and a transition beyond itself to-wards illusory completeness.’¹⁶

If you imply a relationship in order to get the concept of time up and running, past is related to now and you destroy the quality of past. The now of present and future do not stand alone for the same reason, and if you then follow this reasoning to impose a unity on the whole of time, it becomes timeless, as physicists like Einstein and beyond would suggest.

Consider first an ‘A’ theory of time, where time flows from the past, to the present and then to the future. Let’s use the example of World War 2 to explain this conception of time. This war was once in the present – for example, my grandparents told me all about their experiences serving in the air force and army during the war, during their particular slot of time. Back then, it was ‘now’ to them. It is now their past, just as it is the past to us. For my great-grandparents, that war was in their future and they did not know about it. According to the A theory, an event can be past, present or future depending from whose perspective. An event can also change its position in this time series: events in our future will become present events for our children and so on. In this sense, we say time flows from past, present to future, or our future becomes our present, that becomes our past. So it would appear that each event has a past, present and future to it, which is contradictory as you cannot be a past, present and future moment at a particular instant. You can only say something is present in relation to something past or future.

However, we can look at time another way. Consider a ‘B’ theory of time, where a past event, World War 2 (T1), is *fixed* in relation to a more recent event, the election of Donald Trump as president of the US (T2). These are two events of the past on a timeline of all events of past, present and future, each a ‘now’ relationally distinct from all other events, all fixed on their timeline. They will never change.

But, if there is no change, there is no time as described by the A Theory! There is no passage or flow of time. Neither the A nor the B is coherent. Time, in the common-sense view, would appear to be unreal.

¹⁶ Bradley, *Appearance and Reality*, p. 40.

J. Ellis McTaggart concludes:

this explanation involves a vicious circle. For it assumes the existence of time in order to account for the way in which moments are past present and future. Time must then be pre-supposed to account for the A series. But we have already seen that the A series has to be assumed in order to account for time. Accordingly the A series has to be pre-supposed in order to account for the A series. And this clearly is a vicious circle.¹⁷

You may say time is an absolute presupposition but, as you know, there is a contradiction, so it must fall away.

It is interesting to note how both philosophers and physicists come to the same conclusion that time is unreal, but from different starting points. We only have a series of ‘nows’.

I am forced to accept that I presuppose time as a flow or an arrow going in one direction to make a common-sense view of the world possible, even though I know it is incoherent. I take my common conception of time as a matter of pure faith when I truly think about it.

Quantum wonderland

According to the laws of quantum mechanics, we cannot know the exact location or speed of a single particle with certainty; we only have a series of probabilities that a particle will be doing this or that when observed at a fixed point in time. And, according to the ‘Copenhagen Interpretation’ of quantum mechanics, any information we gather about a particle is obtained through human observation.

Bishop Berkeley argued that a tree is only ‘there’ because it is thought of or perceived of as ‘there’. He did not deny an external world; rather, he proposed that when humans are not thinking about an object such as the moon, it is still there in reality since God, the great architect of the universe, is always observing it. Strip Berkeley’s view of its religious connotations, and we have a belief that the fundamental ground for being lies in the observing.

¹⁷ McTaggart, ‘The Unreality of Time.’

Heisenberg showed that when you observe a particular particle, your very act of observation affects its position.¹⁸ Your observation contaminates the very thing you wish to observe. You can fix its position at the expense of knowing its velocity, and vice versa. Furthermore, particles seem to act in partnership with each other.¹⁹

When we fix, say, the location of one, we fix that of its partner particle and, what is even more bizarre, this partner particle can be anywhere in the universe, suggesting a widespread connectivity. Greene explains:

We used to think that a basic property of space is that it separates and distinguishes one object from another. But we now see that quantum mechanics radically challenges this view. Two things can be separated by an enormous amount of space and yet not have a fully independent existence. A quantum connection can unite them, making the properties of each contingent on the properties of the other. Space does not distinguish such entangled objects. Space cannot overcome their interconnection. Space, even a huge amount of space, does not weaken their quantum mechanical interdependence.

Some people have interpreted this as telling us that ‘everything is connected to everything else’ or that ‘quantum mechanics entangles us all in one universal whole.’ After all, the reasoning goes, at the big bang everything emerged from one place since, we believe, all places we now think of as different were the same place way back in the beginning. And since, like the two photons emerging from the same calcium atom, everything emerged from the same something in the beginning, everything should be quantum mechanically entangled with everything else. While I like the sentiment, such gushy talk is loose and overstated.²⁰

Although Greene is uncomfortable with the thought that quantum mechanics points us to the oneness of reality, he does not propose an alternative model.

Reconciling the Newtonian big and the quantum small

¹⁸ As an introduction, see ‘Uncertainty principle’, in *Wikipedia, The Free Encyclopedia*, 24 May 2017, accessed 2 June 2017,

https://en.wikipedia.org/w/index.php?title=Uncertainty_principle&oldid=781958232.

¹⁹ The most current science would seem to suggest that this is a property of the waves/particles themselves and could exist independent of observation. However, we cannot observe them independent of observation! (For a summary of where the current science is up to with this, see previous footnote).

²⁰ Greene, *The Fabric of the Cosmos*, p. 122.

To briefly recap: it would seem that we have a world of big things that move in accordance with Newtonian laws, and a world of small things that work according to a quantum way of understanding where there are many possible outcomes. Some scientists have tried to bridge the gap between the big and the small worlds by finding an overarching explanation for the existence of both of them.

In a series of articles between 1948 and 1950, Richard Feynman developed what we know as the ‘Sum over Histories’ approach, which may provide a solution to the seeming paradox of a timeless universe, pre-determined, with laws of physics being indifferent to all.²¹

Feynman had been thinking about the famous Double Slit Experiment, where tiny lumps of matter are fired at a screen with slits in it.²² First of all, imagine marbles, representing small lumps of matter, being fired at two screens, one behind the other. If you shoot some marbles at the first screen, which has a slit in it, the marbles that make it through the slit will hit the second screen and leave indentations where they struck the screen. If we added a second slit to the first screen, adjacent to the first slit, then the same effect would be observed after shooting more marbles: There would be a series of indentations on the second screen, following closely the shape of the two slits the marbles passed through. If you repeated the experiment with the screens submerged in water, and instead of shooting marbles, you generated a series of waves, you would observe the same effect as the single-slit marble experiment. However, if we add a second slit, the part of the wave that goes through each split forms a smaller wave. After passing through the splits, the heads of the smaller waves cancel each other out, leaving an interference pattern on the second screen with peaks and troughs representing a series of undulating indentations. Now, when we fire a single electron at one of the two slits, we do not observe a marble-like effect (indentations behind only the slit) but a wave-like effect on the back screen (multiple indentations). So, this particle of matter is behaving like a wave and passing through both slits simultaneously!

Importantly, if we try to observe the process of the electron passing through both slits simultaneously, it behaves like a marble, passing through just one slit and

²¹ For a good introduction, see ‘Richard Feynman’, in *Wikipedia, The Free Encyclopedia*, 25 May 2017, accessed 2 June 2017 at https://en.wikipedia.org/w/index.php?title=Richard_Feynman&oldid=782162739.

²² A helpful explanation can be viewed here: ‘The Infamous Double Slit Experiment’, 22 December 2006, www.youtube.com/watch?v=wEzRdZGYNvA, accessed 24 May 2017.

indenting the screen in just one place. The very act of observation seems to influence how matter behaves in that moment. Feynman showed how all the probabilities are contained in this one moment and when observed, matter instantiates itself. In the quantum world, theoretically there are infinite possible outcomes in terms of what matter can or cannot do, but as soon as it becomes observed matter, it obeys the Newtonian laws of the big world of things we are more familiar with.

Feynman stated that if an electron can pass through both a left- and a right-hand hole in a screen through which it is being shot, to arrive at the same point on the receiving screen, and if we get the same results in the same experiment performed time and again in the laboratory, then to some extent all probable outcomes are contained in this one outcome. The probability wave contains all possible histories, all potentiality, if you like, to arrive at the one possible outcome, determined by you.

The mechanical predictability of Newton's laws of motion, with their seeming perfection when measuring large objects, becomes more understandable now in the seeming chaos of the quantum wonderland. A wave or a particle, embedded in its quantum field, can have many potential instantiations of itself, suggesting unpredictability. If we take the Sum over Histories approach, we accept the apparent chaos but recognize that the grouping together of all these probabilities is lost in the big scale and is simply unobservable.

Long ago, the fifteenth-century theologian and philosopher Nicolas of Cusa displayed shades of this thought process of Feynman's. In Book I of *On Learned Ignorance*,²³ he asks us to consider a circle and a straight line – seemingly very different things. Imagine the circle's circumference getting bigger and bigger, to the point that a part of the circle you now observe looks like a straight line. This is just like the 'big' of the Newtonian world of mechanical prediction: the big makes the small unobservable, but still very real. Cusa called this a 'coincidence of opposites', an apt phrase for the apparent paradox of the big and the small world of physics.

Concerning time, it would seem to me that the past is a moment that can be fixed and the future would be a moment that is not fixed already, but potentially fixed. Certainly, the architecture of the quantum world is the limiting factor in what can, or cannot happen. However, it provides us with the comforting view that free will

²³ In Cusa, *Philosophical and Theological Treatises*.

within this potentiality is very much there, and real. We are not a Newtonian-determined object occupying our part of absolute space, trundling through the cosmos at a predetermined mechanical pace. Nor are we a fixed moment, one of many in that Einsteinian paradox.

The quantum world does give us a hint that the future is dominated by quantum mechanics, and our free will works to trigger causality in the mix of the future. Being able to manipulate the potentialities of the quantum world gives great potential for making other possibilities beyond the norm. We are determined only in the very loose sense that we can only do what is quantumly possible. This gives hope for a great new future for science to manipulate the quantum world to create a whole new range of things to serve mankind. For those theists who believe that a creator created the universe, it is child's play for that creator to mess about with quantum probabilities to produce any variety of miracles which, paradoxically, would then be perceived to be natural rather than unnatural events.

Lee Smolin argues that quantum mechanics does away with the concept of timelessness:

quantum mechanics describes a universe in which you can make probabilistic predictions of how systems behave, but in which those systems have as much freedom from determinism as any physical system described by probabilities can have. So in the sense that quantum systems are free, they are maximally free.²⁴

This formulation cannot be expressed outside a framework in which time is real, because it makes essential use of the distinction between past and future. So we can abandon the idea that there are time-less and deterministic laws of nature without losing any of the explanatory power of physics.²⁵

Cusa, in Book II²⁶ introduces us to the metaphor of 'enfolded' and 'unfolded.' He argues that we differentiated beings and finite things are enfolded, all part of this Oneness in the fundamental ground of Being – or, as he would put it, God – and we are unfolded in terms of becoming in time. In other words, for Cusa, we are part of the fabric of the universe right now, enfolded or embedded in it; as time (or our series of nows) moves on, we unfold each time into that reality, repeating this process on and on as long as we exist.

²⁴ Smolin, *Time Reborn*, p. 150.

²⁵ Ibid.

²⁶ Cusa, *Philosophical and Theological Treatises*.

If you strip this of all its religious connotations, it contributes to a secular understanding of the Einsteinian version of a timeless universe incorporating all past enfolded into it and all quantum actualities pruned down to being instantiated and real. Moving into the future, we have our ongoing unfolding quantum probabilities, fixing themselves in the now.

Theories of big and small worlds

Everett's Many-Worlds Interpretation (1957)

The eminent scientist Hugh Everett disagreed with the idea that wave functions could be collapsed into an instantiated thing. He proposed instead that each and every wave function happens. You are dead and alive, but in different universes. Each and every potentiality from the countless variations of you being alive and performing countless actions has its own parallel universe. Although there is no evidence that parallel worlds exist, several noted scientists have advocated this view, so it is considered a serious potential solution to the quantum possibility outcomes that seem to conflict with our certain world. This, surely, is the wildest attempt to avoid a creation moment, be it the secular Big Bang or a theistically created Big Bang. The critical question here is whether the concept of infinity is able to accommodate these countless combinations.

A note on infinity

Imagine a series of zeros unfolding off into infinity. If we then add a series of number ones to the series of zeros – which is now infinite? I can only conclude that each compromises the other's infiniteness and thus they become finite. The concept of infinity therefore has no relevance to objects in the finite world. Indeed, even concerning constructs of our minds such as mathematical constructs, it is incoherent. All we know about the universe confirms it has a boundary and thus is finite in some way.²⁷ Even if you propose endless matter, it is always a material something differentiated from a material something else. Even though you can say the words 'endless matter', matter without a cause is not matter at all, but nothing. Take away its causality and it ceases to be physical. Immateriality might be the only potentially

²⁷ See, for example, Jesse Emspak, 'Does the Universe Have an Edge?', Live Science, 2 June 2016, www.livescience.com/33646-universe-edge.html, accessed 24 May 2017.

unlimited thing. In fact, theologians have argued that the only infinite thing was the immaterial creator of the universe; it is hard – indeed impossible – to think of anything material as being infinite. The infinite, when applied to our finite physical world, forms an abstraction, a mind construct, and applying it to the real world is surely a mistake. The Many-Worlds Interpretation must be incoherent because of it.

The Roman philosopher Lucretius summarised the atomistic view this way: if there are an infinite number of atoms combining in an infinite number of ways, following clear laws of nature, we do not need a creator. Evolutionists propose that significant time and infinite combinations gave rise to the chance-driven universe we occupy. However, I believe their start point, their founding axiom of the reality of infinity, is contradictory at its core. I cannot take Everett's Many-Worlds Interpretation any more seriously than creation and evolution by chance alone.

String theory

The latest development in physics is string theory, favoured by scientists like Greene.²⁸ Elements of this theory can be traced back to the Pythagoreans, and Pythagoras himself. Borrowing from the Hebrew biblical understanding of the world as a sphere, Pythagoras saw it as an orb floating in the substance of space. He assumed the rotation of the orb created various opposites such as hot or cold, wet or dry. This is rather like when we spin blood to separate its components, such as plasma. Pythagoras presumed this on a global scale to arrive at the material separations we observe. He argued that matter was one homogeneous substance, from which all things came, until this process of spinning started. Furthermore, differences in nature reflected differences in geometrical structure. So, what we observe conforms to a predictable geometry that is mathematically quantifiable.

The Pythagoreans showed that what determines the nature of sound in a string instrument is not the instrument itself but the vibrations resulting from the movement of the strings. The relationship between these different sounds can be expressed as a mathematical formula, and it can be applied to all sorts of physical phenomena. Vibrating stings forming in strict and predictable patterns and manifesting themselves in matter seems to be what modern string theory is about. Greene suggests:

²⁸ Greene, *The Fabric of the Cosmos*, pp. 338–412.

superstring theory starts off by proposing a new answer to an old question: what are the smallest, indivisible constituents of matter? For many decades, the conventional answer has been that matter is composed of particles – electrons and quarks – that can be modelled as dots that are indivisible and that have no size and no internal structure. Conventional theory claims, and experiments confirm, that these particles combine in various ways to produce protons, neutrons, and the wide variety of atoms and molecules making up everything we’ve ever encountered. Superstring theory tells a different story. It does not deny the key role played by electrons, quarks, and the other particle species revealed by experiment, but it does claim that these particles are not dots. Instead, according to superstring theory, every particle is composed of a tiny filament of energy, some hundred billion billion times smaller than a single atomic nucleus (much smaller than we can currently probe), which is shaped like a little string. And just as a violin string can vibrate in different patterns, each of which produces a different musical tone, the filaments of superstring theory can also vibrate in different patterns. These vibrations, though, don’t produce different musical notes; remarkably, the theory claims that they produce different particle properties. A tiny string vibrating in one pattern would have the mass and the electric charge of an electron; according to the theory, such a vibrating string would be what we have traditionally called an electron. A tiny string vibrating in a different pattern would have the requisite properties to identify it as a quark, a neutrino, or any other kind of particle. All species of particles are unified in superstring theory since each arises from a different vibrational pattern executed by the same underlying entity.²⁹

The mathematical relationships expressed in music, or the relationships proposed by this new string theory, all seem to come together in this theory of a series of strings, vibrating and producing different particles depending on the pitch of the vibration. As I understand it, much of this theory is still in hypothetical formation and has not yet been deemed provable by scientific method.

In the beginning, at time zero

What is potentially an even bigger hurdle for scientists to explain is what happened at the big bang. The point of singularity is a point so small as to be nothing, yet this ‘no space’ or nothing contains everything and is infinitely dense. You need a strong, blind, and unquestioning faith in current explanations for the big bang for it to be

²⁹ Ibid., p. 18.

the starting point for your deductive and induced reasoning concerning the creation of the universe. The sceptical psychologist and scientist J. B. Davies³⁰ argues that the big bang starts off from an impossible position of zero volume and infinite mass, two contradictory concepts. Such a start point is nonsensical. This is not to imply that the process described nanoseconds after the big bang (what is called Plank time, 10⁻⁴³ seconds after) is nonsensical, but surely its conventional start point is. A particle cannot have no volume into which infinite mass must fit.

Greene passes no comment on this contradiction at the heart of big bang theory, but he does write that it:

says nothing at all about time zero itself. And since, according to the big bang theory, the bang is what is supposed to have happened at the beginning, the big bang leaves out the bang. It tells us nothing about what banged, why it banged, how it banged, or, frankly, whether it ever really banged at all. In fact, if you think about it for a moment, you'll realize that the big bang presents us with quite a puzzle. At the huge densities of matter and energy characteristic of the universe's earliest moments, gravity was by far the dominant force. But gravity is an attractive force. It impels things to come together. So what could possibly be responsible for the outward force that drove space to expand? It would seem that some kind of powerful repulsive force must have played a critical role at the time of the bang, but which of nature's forces could that possibly be?³¹

An answer to Greene's question was provided in the 1980s by the theory of inflationary cosmology. This theory suggests that in certain conditions, gravity can be repulsive rather than attractive. This happens when the act of compression into a small point also compresses energy, adding more weight into the mix. Pressure builds up until BANG! Unimaginable power capable of driving an expanding universe is released. I am sure that Greene and his colleagues take this in good faith. He tells us how, as the universe expands, matter and radiation lose energy to gravity while inflation gains energy from it, and so the big bang show rolls on and on, faster, bigger, quicker, self-reloading. One of the most liberating passages in Greene's book,³² is his summing up of inflationary cosmology:

³⁰ Davies, *God Versus Particle Physics*.

³¹ Greene, *The Fabric of the Cosmos*, p. 272.

³² *Ibid.*, p. 313.

This means that at the onset of inflation, the inflation field didn't need to have much energy, since the enormous expansion it was about to spawn would enormously amplify the energy it carried. A simple calculation shows that a tiny nugget, on the order of 10–26 centimetres across, filled with a uniform inflation field – and weighing a mere twenty pounds – would, through the ensuing inflationary expansion, acquire enough energy to account for all we see in the universe today.³³

Thus, in stark contrast to the standard big bang theory in which the total mass/energy of the early universe was huge beyond words, inflationary cosmology, by 'mining' gravity, can produce all the ordinary matter and radiation in the universe from a tiny, twenty-pound speck of inflation-filled space. By no means does this answer Leibniz's question of why there is something rather than nothing, since we've yet to explain why there is an inflation or even the space it occupies. But the something in need of explanation weighs a whole lot less than my dog Rocky, and that's certainly a very different starting point than envisaged in the standard big bang.³⁴

Children, don't try this at home please!

I am delighted Greene is humble enough to realise that the 'why' question remains unanswered.

³³ Ibid.

³⁴ Ibid.

Chapter 6

Scientists and Philosophers: The God Debate Rages on Down the Centuries

The curious case of Lee Smolin

In his book *Time Reborn*, Lee Smolin recounts how, in his younger years, he yearned for the timeless world of physics and set his heart on a search for an equation to explain everything. After a lifetime of research at the cutting edge, he concluded: 'I used to believe that my job as a theoretical physicist was to find that formula; I now see my faith in its existence as more mysticism than science.'¹

Smolin has revolted against the priesthood of conventional science by arguing that if the universe is everything, then the laws that operate within it cannot come from beyond it. In this he is a true scientist, rejecting transcendental crutches in favour of following the rules of induction and empirical testing to yield results. He is quite correct to argue that a scientific cosmological theory must be able to make falsifiable predictions for it to be, well, scientific. Accepting the laws of nature as a 'given fact' carries no truck with Smolin. If his research program is successful, he will be able to shift science from its philosophical groundings founded over 2,500 years ago. This is a big task.

In my 1997 book, *The Life of the Cosmos*, I proposed a mechanism for laws to evolve, which I modelled on biological evolution. I imagined that universes could reproduce by forming baby universes inside black holes, and I posited that whenever this happens, the laws of physics change slightly. In this theory, the laws played the role of genes in biology; a universe was seen as an expression of a choice of laws made at its formation, just as an organism is an expression of its genes. Like the genes, the laws could mutate randomly from generation to generation. Inspired by then-recent results of string theory, I imagined that the search for a fundamental unified theory would lead not to a single Theory of Everything but to a vast space of possible laws. I called this the landscape of theories, taking the language from population genetics, whose practitioners work with fitness landscapes.

¹ Smolin, *Time Reborn*, p. xxi.

Over the last decade, many string theorists have embraced the concept of a landscape of theories. As a result, the question of how the universe chooses which laws to follow has become especially urgent. This, I will argue, is one of the questions that can be answered only within a new framework for cosmology in which time is real and laws evolve.

Laws, then, are not imposed on the universe from outside it. No external entity, whether divine or mathematical, specifies in advance what the laws of nature are to be. Nor do the laws of nature wait, mute, outside of time for the universe to begin. Rather the laws of nature emerge from inside the universe and evolve in time with the universe they describe. It is even possible that, just as in biology, novel laws of physics may arise as regularities of new phenomena that emerge during the universe's history.²

For Smolin, the most critical task of the scientist is to understand how relationships between things emerge. Things that we assumed are immutable – for example, rocks and water – are not in fact fixed in space–time. Rocks eventually change into other things, water into ice or mist. Atoms rearrange themselves in different ways when they move from one state to another. This leads Smolin to ask this question: if things in space and space itself are emergent, why not time?

Smolin needs to reclaim time from current physics' focus on timelessness if his research program is to have any chance of working. Time must be able to evolve. There is a deep contradiction at the heart of Smolin's research, as to evolve is to change with time, but that does not seem to concern him. The terms of engagement in his project are as follows, and they are truly scientific and therefore laudable:

Although we don't yet have the cosmological theory, we already know something about it, if the principles I've put forward are sound:

- It should contain what we already know about nature, but as approximations.
- It should be scientific; that is, it has to make testable predictions for doable experiments.
- It should solve the Why these laws? problem.
- It should solve the initial-conditions problem.

² Ibid., p. xxvi.

- It will posit neither symmetries nor conservation laws.
- It should be causally and explanatorily closed. Nothing outside the universe should be required to explain anything inside the universe.
- It should satisfy the principle of sufficient reason, the principle of no unreciprocated action, and the principle of the identity of the indiscernibles.

Its physical variables should describe evolving relationships between dynamical entities. There should be no fixed-background structures, including fixed laws of nature. Hence the laws of nature evolve, which implies that time is real.³

His own theory of cosmological natural selection fits his brief. The hypothetical starting point is that new universes are created out of black holes. The mechanism of their birth is based on the idea that quantum gravity does away with singularities, starts and beginnings.⁴ According to Smolin, there is a theoretical robustness supporting this idea, so I will have to defer to his expertise on this point. As there are a billion billion of these black holes, his theory does sound reasonable. Different sets of laws can emerge from different black holes with many different combinations, and it is possible that a set of conditions perfect for life – for example, life on our planet – can emerge out of just one hole. This may take a second or zillions of years, but subject to sufficient testing and prediction, it is possible.

Smolin introduces the principle of precedence as nature's method of selection:

Such a principle would explain all the instances in which determinism by laws work but without forbidding new measurements to yield new outcomes, not predictable from knowledge of the past. There could be at least a small degree of freedom in the evolution of novel states without contradicting the application of laws to circumstances that were repeatedly produced in the past. Common law in the Anglo-Saxon tradition operates by a principle of precedence, whereby judges are constrained to rule as judges have in the past, when presented with similar cases. What I want to suggest is that something like this might well be operating in nature.⁵

³ Ibid., p. 122.

⁴ Quantum gravity is a subset of physics that seeks to study gravity without ignoring the quantum world. Gravity was always hitherto subject to the scientific investigations based on our understanding of classical 'big world', or from atoms and above, physics.

⁵ Smolin, *Time Reborn*, p. 146.

If nature is like this, then the future is genuinely open. We would still have the benefit of reliable laws in cases with ample precedent, but without the stranglehold of determinism.⁶

You can test a pair of particles for an entangled property like contrary that is a property of neither particle separately. Second, there appears to be an element of genuine randomness in the response of quantum systems to their environments. Even if you know everything about the past of a quantum system, you cannot reliably predict what it will do when one of its properties is measured.

These two features of quantum systems let us replace the postulation of timeless laws with the hypothesis that a principle of precedence acts in nature to ensure that the future resembles the past. This principle is sufficient to uphold determinism where it's needed but implies that nature, when faced with new properties, can evolve new laws to apply to them.⁷

Smolin's approach is truly scientific, which contrasts with some of his scientific colleagues, who accept, as just given, that the timeless laws, the cosmic constants, the just rightness of all of these parameters that make life perfect for us, are not capable of testing and potential falsification, the hallmark of what it is to be science.

Smolin does, however, attack the anthropic argument in a way that reveals his own absolute presuppositions and will, I think, compromise his research project. Smolin asserts that the anthropic principle runs from premise to conclusion as follows:

1. Galaxies are necessary for life. Otherwise stars would not form, and without stars there is no carbon and no energy to promote the emergence of complex structures, including life, on the surfaces of planets.
2. The universe is full of galaxies.
3. But the cosmological constant has to be smaller than the critical value⁸ if galaxies are to form.
4. Hence, the anthropic principle predicts that the cosmological constant must be smaller than the critical value.

⁶ Ibid., p. 147.

⁷ Ibid., p. 148.

⁸ Smolin defines 'critical value' as the point above which the constants of cosmology and physics would mean that the universe would expand so fast, no galaxies would ever form.

Can you see the fallacy? Point 1 is true, but it plays no role in the logic of the argument. The real argument starts with point 2. The fact that the universe is filled with galaxies is evident from observations; it is irrelevant whether or not life would be possible without them. So the first point can be dropped from the argument without weakening the conclusion. But point no. 1 is the only place life is mentioned – so once it's dropped, the anthropic principle plays no role. The correct conclusion is:

4. Hence, the observed fact that the universe is full of galaxies implies that the cosmological constant must be smaller than the critical value.⁹

In my understanding, following Aristotle, a syllogism should start with a premise, and by unpacking what is implied in this premise, we should obtain new knowledge in the conclusion. When I say new, as we all know in reality, it must already be implied in the premise; you have revealed what was already there.

So,

1. Premise: we have observable laws of nature.
2. Deduction: we could not have galaxies, star formation, carbon formation, 'us' formation, without these.
3. Conclusion: we observe it was ever thus; with only one tick of the dial this way or that in the laws of physics, we would be blasted into oblivion!

In this way, the anthropic argument is formally correct. What you could argue, however, is that while it is correct, it is an analytical proposition, and like all wholly analytical propositions it is a tautology and tells me nothing about reality. This argument is popular in those philosophy departments that have embraced the analytical realism of the twentieth and twenty-first centuries. Following Kant, I would say this anthropic cosmological principle is an analytical synthetic, *a priori* proposition that is relevant to reality.¹⁰ The anthropic cosmological principle gives

⁹ Smolin, *Time Reborn*, pp. 135–136.

¹⁰ Analytic propositions are those things that we know just by thinking about them. They are mental constructs such as the mathematical concept of the number 2. This construct tells us a great deal about things, but it is from the mind and known as true without having to test it. A synthetic proposition is one where we have to observe something or a set of things, to then derive some new empirical knowledge about it. An experiment would involve synthetic propositions, such as observing the boiling point of water at different altitudes to ascertain that the boiling point of water varies. An historical observation might be that history teaches us that our enemies' enemy is our friend. A synthetic *a priori* proposition is one that is just known as true; it is self-evident and cannot be contradicted by empirical testing. An example is the foundation of economics, which is based on the irrefutable

meaning to the world we participate in. Its empirical observations, the cosmological constants, appear as fundamental absolutes and certainly I would not want to, let alone could, live in a world where these did not exist!

One of the thrusts of Smolin's book and research program is to make these laws subject to empirical observation. He provides a neatly thought out and signposted way to this end, and this is the scientific method par excellence. But I am sceptical about what truth it can reveal. The two ways of gaining knowledge – empirical and deductive – are as far apart as chalk and cheese, and when people blur the two, confusion arises. Nevertheless, both paths can yield truth. If the anthropic syllogism is correct, as I believe it is, it is just that – as correct as any of our well thought-out mathematical equations.

Smolin's project must be open to being proved wrong by the scientific method. In contrast, the anthropic method is one of formal *a priori* deduction; it is formally right as syllogisms go, but unprovable by any other non-analytical (i.e. empirical) measures. Scientists attempting to cross the divide will generate much confusion.

The project is cutting-edge science, fantastically ambitious and empirically based, as true science should be. Yet in the final analysis, the emergent universe Smolin proposes needs to evoke a 'meta law' not testable by his empirical methods. He acknowledges that this is an infinite-regress situation, where one law needs to be explained by another and can only be terminated by a meta law. If his project is to retain the concept of materiality, which these laws only work in and on, he requires a prior physical cause for all physical things. You are then faced with suggesting a causeless (nonsensical) first bit of physicality, which violates the understanding of materiality. Smolin will not follow what logic dictates – an immaterial first cause as proposed by the centuries-old cosmological argument – as this does not suit his scientific mind. He is therefore stuck in a vicious circle of unreasoning that makes all that he holds dear, a material reality, based on a contradiction.

starting point that all human beings need to act or do something, to satisfy their needs and wants. It follows from this, that they are doing the most highly prioritised act in the now, right there and then. We can therefore observe that we rank our needs and wants in descending order, the most urgent first, the least, last. This is the concept of the downward-sloping demand curve. You cannot contradict this, even if you tried, as your attempt to contradict it would be your most pressing need or want in the now. So, something known *a priori* has a real bearing on reality and is not just a mental construct. Synthetic *a priori* propositions are very important when we look at the Ontological Argument later in this book.

Smolin would be better off proposing a meta law (or call it the First Causeless Cause, The Prime Mover, Tao, Brahmin, Demiurge or, dare I say, God) as an absolute presupposition as it is neither right nor wrong, but gives you a starting point for deduction and induction. This would be the start of his metaphysics proper. The rest that follows would be genuine science, propositions that can be tested. If he set his project up like this, he would advance the case of science that much further.

You cannot hope to try to describe the world in which we live, let alone the whole cosmos, without absolute presuppositions. We need rationally thought-out placeholders to generate any thoughts. That is why I believe we will fail to explain the universe in one great big equation or series of them. But, we can become fully coherent if we accept the fact that we are going to have to plug in one or two absolute presuppositions at the start of it all. Conversely, if you create a couple of pseudo-metaphysical presuppositions, then they deserve to be exposed as propositions and treated to the laser logic of inspecting and exposing the deductive errors contained within. Empirical testing to reveal the truth is the scientist's game. The trick in all of this is to adopt the right starting point. As to the question of why the universe exists, in fairness to Smolin, he admits he has no idea: 'it is beyond the scope of the principle of sufficient reason.'

For Smolin, space is the illusion, not time. Time is the everyday real thing that we experience in terms of past, present and future, despite its contradictions. Space is always relational, with laws emerging as described above and precedence governing the outcome of which laws stick and which do not, which move on to emerge into something else and which cease to be. The quantum wonderland provides the goal posts for the potential futures, or new nows, that will emerge. This approach, despite my critique of parts of it has, I believe, a lot going for it.

The one-man rock band of science: Lawrence Krauss

Krauss, in his book *A Universe from Nothing: Why There is Something Rather than Nothing*, rejects the traditional position that the 'why' of the universe is unanswerable:

These arguments always remind me of the famous story of an expert giving a lecture on the origins of the universe (sometimes identified as Bertrand Russell and

sometimes William James), who is challenged by a woman who believes that the world is held up by a gigantic turtle, who is then held up by another turtle, and then another ... with further turtles 'all the way down!' An infinite regress of some creative force that begets itself, even some imagined force that is greater than turtles, doesn't get us any closer to what it is that gives rise to the universe. Nonetheless, this metaphor of an infinite regression may actually be closer to the real process by which the Universe came to be than a single creator would explain.¹¹

His fellow scientist and atheist, Richard Dawkins, certainly thinks Krauss has answered the 'why' question. In his Afterword to *A Universe from Nothing*, we find the following part-hagiography about his new atheist saint:

If you ask religious believers why they believe, you may find a few sophisticated theologians who will talk about God as the 'Ground of all Isness, or as a metaphor for interpersonal fellowship' or some such evasion. But the majority of believers leap, more honestly and vulnerably, to a version of the argument from design or the argument from first cause. Philosophers of the calibre of David Hume didn't need to rise from their armchairs to demonstrate the fatal weakness of all such arguments: they beg the question of the Creator's origin. But it took Charles Darwin, out in the real world on HMS Beagle, to discover the brilliantly simple – and non-question-begging – alternative to design. In the field of biology, that is. Biology was always the favourite hunting ground for natural theologians until Darwin – not deliberately, for he was the kindest and gentlest of men – chased them off. They fled to the rarefied pastures of physics and the origins of the universe, only to find Lawrence Krauss and his predecessors waiting for them.¹²

After these words, we can only expect something spectacular from Krauss' book. But, before we look at this book in more detail, I will respond to Dawkins' statement that Hume dispensed with all arguments of first cause.

Hume's objections to the cosmological argument

In the above passage, Dawkins evokes the ghost of Hume to suggest that the first cause or cosmological argument, and the design argument, were deftly disposed of whilst he was sitting in his armchair. I will show how Hume is conclusively refuted.

¹¹ Krauss, *A Universe from Nothing*, p. xii.

¹² Ibid., pp. 190–91.

In his *Dialogues Concerning Natural Religion*, Hume masterfully outlines the cosmological argument through Dema, one of his key characters:¹³

1. Everything that exists must have a cause or reason for existing.
2. Everything that exists must either exist necessarily in and of itself or not so exist.
3. If a thing does not exist in and of itself, it must have been caused to exist by something else, which either exists necessarily or in and of itself and so on, ad infinitum.
4. This also applies to the whole universe.
5. If we apply this idea of a series of prior causes, the universe has no cause.
6. If you accept points 1 and 5, you can only conclude it cannot be a beginning-less series.
7. If you accept points 4 and 6, you must conclude that in the absence of the universe being necessary, its cause can only be something that is necessary in and of itself.
8. There is nothing to make you believe the physical universe is necessary.
9. Points 7 and 8 then tell you that the physical universe must be caused by something that necessarily exists in and of itself. This something is commonly called God.

Objections to point 1

Objection 1. Hume argues that you can spontaneously think of one thought then another completely unconnected thought, where no apparent cause is implied.¹⁴ Therefore you do not need a prior cause.

Refutation. Such an abstraction takes place in Hume's mind, so his mind is the causality. We will see later that Krauss commits a similar error when observing

¹³ This is my summary of David Conway's notes about Dema in his book *The Rediscovery of Wisdom, From Here to Antiquity in the Quest of Sophia*. In his book *There is a God*, Flew, the twentieth century's most famous atheist, attributes Conway's argument to converting him away from the atheist world view: 'As for my position on the classical philosophical debates about God, in this area I was persuaded above all by the philosopher David Conway's argument for God's existence in his book 'The Rediscovery of Wisdom: From Here to Antiquity in the Quest of Sophia'. Conway is a distinguished British Philosopher at Middlesex University who is equally at home with classical and modern philosophy ... But in David Conway's *The Rediscovery of Wisdom* and the 2004 edition of Richard Swinburne's *The Existence of God*. I found especially effective responses to the Human (and Kantian) critique of the cosmological argument.'

¹⁴ Hume, *A Treatise of Human Nature*.

particles in a quantum vacuum, popping both into and out of the vacuum, He deduces that these particles are causeless, ignoring the fact that his experiment is resting in a quantum field, from which these particles do pop in and out of existence from and are totally enmeshed in the space-time framework that we all are embedded in. Take away the quantum field and space-time, and Krauss would not even be able to conduct his experiment.

Objection 2. In his *Dialogues*, Hume argues that you could assume the universe is eternal, therefore it would not need a cause.¹⁵

Refutation. If we are to accept the materiality of physical things, by the definition of materiality, a thing must have a cause. If you assert a causeless material universe then the universe cannot be physical, as each and every bit of physicality is permanently linked to a prior causality. If you propose no causality for the material universe, you have no physicality. You are forced to endorse the conclusions of the cosmological argument: there is an immaterial first cause of all physicality.

Objection to point 2

You can think of anything as non-existing without contradiction, and this applies to the deity.

Refutation. Discussion in a later chapter will establish that the only thing that you can think of existing necessarily is the most perfect being whose non-existence would not be perfect, therefore you cannot think of it as non-existent. By definition, it must be necessary. The cosmological argument never argues that the perfect being exists, but it concludes a necessary being that just is, in and of itself.

Objection to the inference of premise of point 4 from premise of point 3

As far as we are aware, despite speculation about the existence of multiple universes, we certainly only have proof of one – our one. Hume says it just exists. To understand the universe, we do not need to know what created it, just the individual causes of all the physical things inside of it. So, Hume argues you can build up an understanding of the universe, by exploring, bottom up, each of its constituent parts, as opposed to proposing, top down, a transcendental first cause of it.

Refutation. Scientists tell us the big bang was the cause of the universe, and Krauss states the case very eloquently for inflationary cosmology. A ‘something’ did

¹⁵ Hume, *Dialogues Concerning Natural Religion*.

happen from a ‘something’ at that moment in a specific time and place. Granted it was unique, but this point does not absolve the universe from any need of a causal explanation.

Objection to point 5

Hume argues that the cause of all the infinite finite things does not go beyond the sum of them. If you can supply the causes to all the finite things of the universe, you do not need to ask for an explanation of the whole as you have already explained it from within – bottom up, if you like, and not top down.

Refutation. When you reach that last cause in Hume’s finite series, you must presuppose its prior existence, uncaused. You are back at a contradiction: a material thing in need of its causal explanation in order to remain a material thing.

Objection to point 8

Hume argues that in mathematics, there are some things that are necessary. If you are a good mathematician, you may know that this is so. If you are an ordinary member of the public, you may not know it is so as you do not understand it. Like mathematics, the universe may well be necessary but we have not worked it out yet.

Refutation. That elusive physical necessary thing, by definition, must possess the nature of necessity, and this, on its own, is not going to explain why the so-called necessary thing pops into existence. I would also be wary of applying a mental abstraction to the real world of physicality of the first cause.

Kant’s objections to the cosmological argument

Immanuel Kant was a religious man. Yet his arguments against the proofs of God are now used to deny the existence of God. In his *Critique of Pure Reason* he writes that he had: ‘found it necessary to deny knowledge of God in order to make room for faith.’¹⁶ He also explains his rejection of the cosmological argument.

Objection to point 1

Kant says we know that nature is made up of lots of causes, but we can never know the original cause because it is just too complex. We make what he calls a ‘transcendental deduction’ when we evoke God as the first cause: God is considered

¹⁶ Kant, 1781, p. xxx.

to transcend the universe and therefore be outside of it. From this position, we deduce the cause of the universe from what is outside of it: God. For most of us, this is what he calls a category of the mind – a way we need to think if we want to make sense of the origin of the universe and all that exists in it. We make this deduction to explain the stability we observe in the laws of nature – rather than random things popping into and out of existence. Kant then argues that change – for example, a rock eroding over time and changing into dust – only takes place in time. As there can never be time before time, we can only assume that physicality, or the known physicality that we call the universe, is permanent.

Refutation. As we have seen before, when discussing Hume's objections to the existence of God, nothing physical exists in and of itself, nothing physical is necessary, you me or the stars and all the heavenly bodies have no claim to just exist. Everything is contingent on some prior cause. We are therefore warranted to ask the 'why does it (the universe and everything in it) exist' question.

Objection to point 2

Kant says that it is in our minds only that we can think of all things needing to have a first cause. There is nothing in the physical world that does not have a prior cause, that exists simply in and of itself. God can be thought of not to exist, and he does not have to be necessary to start the first cause that causes the next cause and so on.

Refutation. If we assume the universe just exists, we are saying it has no cause. If we say it has no cause, we are saying it has no physicality, as you cannot separate the two related properties of physicality and causality without destroying them. So, a causeless universe is a contradiction. It ceases to be physical if it is causeless. Indeed, it ceases to be. As we know it exists, we can only assume, in fact logic dictates, a prior non-physical cause. This is what is commonly called God.

Objection to point 8

Kant suggests that although we can have the thought that the universe needs a creator as the first cause of all physical things, such a thought does not actually tell us anything about the physical world we occupy. The hypocrisy of this line of thinking is clear: However, Kant is using an *a priori* argument – that is, nothing can be thought of as not existing – to move on to a matter of empirical fact. Leaving that aside, the thrust of his argument continues that just because everything is contingent,

once again the physical substance via which all change takes place gives us no grounds for assuming it is anything but permanent.

Refutation. This is the same as for point 2, so I will not repeat it.

Hume's objections to the design argument

In his *Dialogues*, Hume uses the character of Cleanthes to state the design argument:¹⁷

1. Nature looks like it is designed. Things in nature resemble the things we design.
2. Just as we design things that resemble nature, it is probable that their causes are similar.
3. Whatever the cause of things in nature, it will more than likely resemble the cause of man-made things – that is, a creator.
4. With man-made machines, humans are the cause.
5. It is likely that the nature of what caused the thing is a non-human intelligence.
6. It is highly likely that this intelligence exists.

First objection to point 1

Hume argues that the universe does not resemble any of our man-made contrivances. Even the humble vegetable has not been brought forth into existence by humanity's intelligent design, let alone anything close to it, so it is hard to believe that the universe could have been created, or planned by, a human-like super being.

Refutation. Hume did not know what we know today about fundamental cosmological constants. At the time, he was rejecting the Newtonian mechanical predictability of all things. That being said, the certainty that X always happens after Y suggests some notion of planning. Kant accepts the design argument in part, but only if the cosmological argument holds. He maintains that even if it did hold, all it allows the design argument to do is suggest an architect for being, and not the God of the Abrahamic Faiths. You have to have faith for that, which Kant did.

What are the cosmic fundamental constants?

¹⁷ Again, I adapt Conway's useful summary of Cleanthes with my own additions and subtractions.

Scientists tell us that there are fundamental constants of nature, or of the universe. Change a constant ever so slightly, and the whole of what we observe will be eliminated or compromised, to the extent that at best our existence is seriously threatened. These constants, which number 19 or more, include the speed of light in a vacuum, the Newtonian constant of gravitation and the Planck constant.¹⁸

With dials set to these constants, the universe seems to have exploded into existence.

There has grown up, even amongst many educated persons, a view that everything in Nature, every fabrication of its laws, is determined by the local environment in which it was nurtured – that natural selection and the Darwinian revolution have advanced to the boundaries of every scientific discipline. Yet, in reality, this is far from the truth. Twentieth-century physics has discovered that there exist invariant properties of the natural world and its elementary components which render inevitable the gross size and structure of almost all its composite objects. The size of bodies like stars, planets, and even people is neither random nor the result of any progressive selection process, but simply manifestations of the different strengths of the various forces of Nature. They are examples of possible equilibrium states between competing forces of attraction and repulsion.¹⁹

What this means is that the various structural parameters of our universe did not gradually evolve by a trial-and-error process of selection before they were able to find the right life-supporting values. Instead, they emerged from the Big Bang with the right values already programmed in. This is what the term invariant means – it means that these structural values were never otherwise, which itself can only mean that these structural parameters emerged from the Big Bang in precisely the right format to promote the existence of life several billion years later.²⁰

Roger Penrose, writes the following:

This now tells how precise the Creator's aim must have been, namely to an accuracy of one part in 10 to the 10¹²³rd power. This is an extraordinary figure. One could not possibly even write the number down in full in the ordinary denary notation: it would be 1 followed by 10¹²³ successive 0's. Even if we were to write a 0 on each separate proton and on each separate neutron in the entire universe—and

¹⁸ Wikipedia contributors, 'Physical constant,' *Wikipedia, The Free Encyclopedia*, https://en.wikipedia.org/w/index.php?title=Physical_constant&oldid=761636314 (accessed January 26, 2017).

¹⁹ Barrow & Tipler, *Anthropic Cosmological Principle*, p. 288.

²⁰ Corey, *The God Hypothesis*, p. 42.

we could throw in all the other particles for good measure – we would fall far short of writing down the figure needed.²¹

If there was such a thing as infinity in a finite world, it would allow for such an event as a random chance. As there is no infinity in a finite world, we must conclude that such an event is impossible, unless by some purposeful act of creation.

Second objection to point 1

Hume asserts that there is too much natural evil in the world for there to be any intelligence in design. Indeed, it is incongruous to a loving designer. He states:

- a. All animals suffer pain.
- b. Nature should not display the regularity that it does if a benevolent designer needed to interfere all the time to stop pain.
- c. If there was a benevolent designer, you would expect to see far more happiness around.
- d. There are lots of natural disasters that would not be there in the eventuality of a loving designer.

Refutation. I will respond to these statements as a whole. If you have what Hume would see as a more lovingly created world, you would have a God (Good) Shepherd managing each and every minute detail of nature and every moment of our lives. Going back to more than 4000 years BC – if you believe Genesis – God’s promise to Noah was never to interfere by creating terrible natural disasters.

And God said: ‘This is the sign of the covenant which I make between Me and you, and every living creature that is with you, for perpetual generations: I set My rainbow in the cloud, and it shall be for the sign of the covenant between Me and the earth. It shall be, when I bring a cloud over the earth, that the rainbow shall be seen in the cloud; and I will remember My covenant which is between Me and you and every living creature of all flesh; the waters shall never again become a flood to destroy all flesh. The rainbow shall be in the cloud, and I will look on it to remember the everlasting covenant between God and every living creature of all flesh that is on the earth. And God said to Noah, ‘This is the sign of the covenant which I have established between Me and all flesh that is on the earth’ (Genesis 9:12–17, NKJV).

²¹ Penrose, *The Emperor’s New Mind*, p. 344.

Religious followers of the Abrahamic faiths know that if an earthquake occurs, they are to thank God if anyone survives, not curse Him because the world is not perfect. Hume does not see what religious people have long known: humankind has its own affairs to run, which implies a God that does not run a perfect world for us.

If humans did not understand this at the time of Noah, one of the Old Testament prophets, Isaiah, reminded them again in the eighth to seventh century BC:

For this is like the waters of Noah to Me;
For as I have sworn
That the waters of Noah would no longer cover the earth,
So have I sworn
That I would not be angry with you, nor rebuke you.
For the mountains shall depart
And the hills be removed,
But My kindness shall not depart from you,
Nor shall My covenant of peace be removed,
Says the LORD, who has mercy on you (Isaiah 54:9–10).

If there is endless happiness, you are not in a position to really know happiness. To know anything, you need to know what distinguishes it from other things – that is, you must also know unhappiness.

In fact, the picture Hume is painting is that of a world where nothing can exist as we know it. If we wanted to experience this Platonic heaven of Hume, a land of perfect abundance and love for all, we would need to postulate a non-scarce world, where the natural distribution of resources around the planet is exactly uniform. Each and every human would have exactly the same as the next, all enjoying abundant resources. They must then possess perfect knowledge concerning how to use these resources in order to obtain the perfect amount of things they yield in the most perfect way. They must also know who to trade with, with perfect knowledge of all prices everywhere at all points in time to be happy. Logically, this would mean there actually would be no trade as it is a situation of abundance for all; in effect, scarcity is abolished. This is not a world we recognize, it is not a human world. Hume's objection can only amount to a wishful plea for more happiness to be spread about, and would we not have to assume a benevolent God would have dished up more of this goodness? Well yes, I agree in some respects: you can never say no to more good things. However, cast out all of what Hume calls natural evil

and we cease to have the world we want to live in at all as it is a non-human world. I believe anyone really thinking about what Hume is saying will weigh up the experiences we have and think, yes, we would all like more happiness, but we would all reject the Platonic land of perfection as that is not living at all.

The central problem of ‘why do the righteous suffer?’ is first addressed in the Book of Job for believers of the Abrahamic faiths. The answer comes at the end of the book: if you have trusted God, you will be vindicated by your trust. Suffering for innocents can result from sin, be needed for strengthening, and provide an opportunity to see a brighter future and recognise God’s grace. And sometimes we just have no idea why, and it seems odd and cruel. While this may sound feeble and a hard thing to tell the mother of a five-year-old child suffering from terminal cancer, this is what the Abrahamic faiths have always believed.

The New Testament addresses this matter slightly differently:

There were present at that season some who told Him about the Galileans whose blood Pilate had mingled with their sacrifices. And Jesus answered and said to them, ‘Do you suppose that these Galileans were worse sinners than all other Galileans, because they suffered such things? I tell you, no; but unless you repent you will all likewise perish. Or those eighteen on whom the tower in Siloam fell and killed them, do you think that they were worse sinners than all other men who dwelt in Jerusalem? I tell you, no; but unless you repent you will all likewise perish’ (Luke 13:1–5).

Jesus did not deny the connectivity between sin and disaster, nor did he positively affirm it. The message is clear: now is the time to repent, as at any point in time disaster could strike you. No observer of either the act of Pilate or an act of random natural disaster should feel morally superior, as their time could be any time.

And He went through the cities and villages, teaching, and journeying toward Jerusalem. Then one said to Him, ‘Lord, are there few who are saved?’

And He said to them, ‘Strive to enter through the narrow gate, for many, I say to you, will seek to enter and will not be able. When once the Master of the house has risen up and shut the door, and you begin to stand outside and knock at the door, saying, ‘Lord, Lord, open for us,’ and He will answer and say to you, ‘I do not know you, where you are from,’ then you will begin to say, ‘We ate and drank in Your presence, and You taught in our streets.’ But He will say, ‘I tell you I do not know you, where you are from. Depart from Me, all you workers of iniquity.’

There will be weeping and gnashing of teeth, when you see Abraham and Isaac and Jacob and all the prophets in the kingdom of God, and yourselves thrust out. They will come from the east and the west, from the north and the south, and sit down in the kingdom of God. And indeed there are last who will be first, and there are first who will be last' (Luke 13:22–30).

Access to heaven is though a narrow door. Only those who know God, the owner of the house, will gain access. A sinner never will. A repentant sinner might. Anyone, not just the Jews, would be included in the heavenly banquet. And there you have it: the heavenly banquet is our absence of evil. It is a place not of this world. To try to make it a place of this world, whilst admirable, will be impossible. The message is: don't equate natural disasters with sin or sinful acts with disaster. Instead, get your affairs in order, and repent and believe, as you do not know when your time will be.

Non-believers and agnostics like Hume do not accept this line of teaching. However, for those of faith, the answer was provided thousands of years ago.

Objection to point 2

In response to point 2, Hume asks: why assume just one designer and not a multiplicity of designers to explain the many different things we observe in the universe? He asserts instead that blind chance is the driver for change.

Refutation. It is always best to choose the simplest plausible explanation rather than multiplying your need for other causes, as per Ockham's Razor. This is the same refutation that applies to all the multi-universe theories that currently carry currency. Also, on the balance of probability, the unique harmony of the cosmic laws infers one entity doing the designing.

Darwin provided us with a plausible methodology of change over time, post-creation. But, he did not explain the leap from non-living to living matter. There are wild speculations about matter in the primordial soup coming together in the right combinations to get a living cell up and running, so that it can not only self-select, but self-replicate. However, I wonder what the odds are of a single self-replicating, self-selecting cell coming randomly into existence?

In the words of the agnostic scientist Michael Denton:

To grasp the reality of life as it has been revealed by molecular biology, we must magnify a cell a thousand million times until it is twenty kilometres in diameter and resembles a giant airship large enough to cover a great city like London or

New York. What we would then see would be an object of unparalleled complexity and adaptive design. On the surface of the cell we would see millions of openings, like the port holes of a vast space ship, opening and closing to allow a continual stream of materials to flow in and out. If we were to enter one of these openings we would find ourselves in a world of supreme technology and bewildering complexity. We would see endless highly organized corridors and conduits branching in every direction away from the perimeter of the cell, some leading to the central memory bank in the nucleus and others to assembly plants and processing units ... We would wonder at the level of control implicit in the movement of so many objects down so many seemingly endless conduits, all in perfect unison. We would see all around us ... all sorts of robot-like machines. We would notice that the simplest of the functional components of the cell, the protein molecules, were astonishingly complex pieces of molecular machinery, each one consisting of about three thousand atoms arranged in highly organized 3-D spatial conformation. We would wonder even more as we watched the strangely purposeful activities of these weird molecular machines, particularly when we realized that, despite all our accumulated knowledge of physics and chemistry, the task of designing one such molecular machine ... would be completely beyond our capacity at present and will probably not be achieved until at least the beginning of the next century.

What we would be witnessing would be an object resembling an immense automated factory, a factory larger than a city and carrying out almost as many unique functions as all the manufacturing activities of man on earth. However, it would be a factory which would have one capacity not equalled in any of our most advanced machines, for it would be capable of replicating its entire structure within a matter of a few hours. To witness such an act at a magnification of one thousand million times would be an awe-inspiring spectacle.²²

Harold Morowitz, an atheist scientist, was asked by NASA to make the calculation for life by chance. If you get to 1/10¹⁵ of a chance, you need more than the 15 billion years of the universe to allow it to happen. After studying the protein molecule, he calculated 1/10²³⁶. This takes into account all the known atoms of the universe coming together to just form one molecule: 'The universe would have to

²² Denton, *Evolution*, pp. 328–29.

be trillions of years older, and trillions of times larger, for a protein molecule to have occurred by random chance.’²³

Morowitz’s atheistic faith leads him to presuppose the existence of some as yet undiscovered laws to help reduce these staggering odds. This, of course, requires faith. And, if you presuppose the prior existence of all the physical laws, and thus all the biocentric laws, to arrive at the conclusion of a biocentric universe, then you have just used circular reasoning: your premises are your conclusion and your conclusion is the premise. This would not be acceptable in any branch of academia – other than in science, whose high priests seem to have a large diplomatic bag of immunity in which to place their get out of jail manoeuvres to achieve the conclusions they are after. Another fallback position for advocates of blind chance is to presuppose the eternity of the universe; as it is eternal, by definition it needs no explanation. The swapping of the aseity of God for the aseity of the universe has a problem because, almost certainly, we do know the universe had a beginning.

Back to Krauss

We now return to Dawkins’ Afterword to Krauss’s book:

Do the laws and constants of physics look like a finely tuned put-up job, designed to bring us into existence? Do you think some agent must have caused everything to start? Read Victor Stenger if you can’t see what’s wrong with arguments like that. Read Steven Weinberg, Peter Atkins, Martin Rees, Stephen Hawking. And now we can read Lawrence Krauss for what looks to me like the knockout blow. Even the last remaining trump card of the theologian, ‘Why is there something rather than nothing?’ shrivels up before your eyes as you read these pages. If *On the Origin of Species* was biology’s deadliest blow to supernaturalism, we may come to see *A Universe from Nothing* as the equivalent from cosmology. The title means exactly what it says. And what it says is devastating.²⁴

The ‘why’ answer would seem to be answered by Dawkins: there *is* no why; it just happened, and that is it. However, Krauss argues that the end point of his book will prove that the universe gets going out of nothing and needs to, if you accept his definition of nothing. His method of acquiring knowledge is empirically and scientifically based, for *a priori* or synthetic *a priori* are anathema to him:

²³ Denton, *Evolution*, p. 247.

²⁴ Krauss, *A Universe from Nothing*, p. 191.

If we wish to draw philosophical conclusions about our own existence, our significance, and the significance of the universe itself, our conclusions should be based on empirical knowledge. A truly open mind means forcing our imaginations to conform to the evidence of reality, and not vice versa, whether or not we like the implications.

Krauss' mind is, in fact, closed to other methods of acquiring knowledge. So his appeal to having an open mind is rhetorical nonsense.

The 'nothing' Krauss refers to is the absence of space and time. We might refer to empty space as nothing, and when our ancestors did so, they would almost certainly have meant empty space with 'no-thing' in it. We in the modern period believe that empty spaces are filled with force fields and dark matter or dark energy that we cannot identify but by the process of deduction assume is there.²⁵ The trust of the book then gives the latest evidence of particles seemingly randomly popping in and out of existence all the time in empty space, or space occupied by what we would formally have called nothing. Interestingly, his atheist colleague A C Grayling dismisses the notion of nothing-ness and says that we can only ever think of something. I think Grayling is correct.

In his chapter 'Existence', Grayling asks 'Why is there something rather than nothing?'²⁶ Grayling argues that since we do not know, the suggestion that a supernatural agency must have created it is question-begging and must be 'dismissed immediately.' Why? As it begs the question about what created that supernatural agency, back we go, forever and ever, never terminating in an answer. Grayling accepts there is something, but sees this as just one of his 'brute facts'. He argues that it is more interesting to ask what something's purpose is, as the original question is unanswerable. He qualifies this by suggesting we can only ask why there is nothing if there was something before:

When all the chocolates are eaten there is nothing in the box because there was something there before; you cannot introduce nothing ('nothingness'?) to a box other than by not putting something in it, or by taking everything out. So the

²⁵ Experiments at CERN seem to confirm that the universe is filled by the Higgs Field – a master force field that gives us mass. Every time we spin around we feel this, when we experience a pressure pulling us outwards. While we do not move relative to Newton's absolute space, we do move in space–time bathed in the Higgs Field which gives us our very mass. This would explain why we and everything else does not float off into the four corners of space and indeed move at the speed of light.

²⁶ Grayling, *Thinking of Answers*, p. 321.

primitive condition is that there is something, and we only understand ‘nothing’ relatively and locally by its absence.²⁷

Personally, I cannot conceive of nothingness. If I think of a totally empty space, as stated in abstraction, then I can, but as Bradley has shown us, the concept of space is incoherent when pondered more deeply. As I understand theism: there is something, it is God, who creates all of the something we call the material world, out of nothing physical. For materiality to stack up, God must be assumed as an immaterial first cause. It always boils down to something from something.

When Krauss is opining on nothing, he is actually opining on something :

Indeed, the immediate motivation for writing this book now is a profound discovery about the universe that has driven my own scientific research for most of the past three decades and that has resulted in the startling conclusion that most of the energy in the universe resides in some mysterious, now inexplicable form permeating all of empty space. It is not an understatement to say that this discovery has changed the playing field of modern cosmology.

We have discovered that 99 percent of the universe is actually invisible to us, comprising dark matter that is most likely some new form of elementary particle, and even more dark energy, whose origin remains a complete mystery at the present time.

And after all of this, it may be that physics will become an ‘environmental science.’ The fundamental constants of nature, so long assumed to take on special importance, may just be environmental accidents.²⁸

Krauss, the atheistic hard case

The atheist religion would not be complete without its most ardent of zealots, Krauss:

I have challenged several theologians to provide evidence contradicting the premise that theology has made no contribution to knowledge in the past five hundred years at least, since the dawn of science. So far no one has provided a counterexample. The most I have ever gotten back was the query, ‘What do you mean by knowledge?’ From an epistemological perspective this may be a thorny issue, but I maintain that, if there were a better alternative, someone would have

²⁷ Ibid., p. 323.

²⁸ Krauss, *A Universe from Nothing*, p. 138.

presented it. Had I presented the same challenge to biologists, or psychologist, or historians, or astronomers, none of them would have been so flummoxed.²⁹

The problem with Krauss' challenge is that theology and religion do not do science, just as science does not (should not) do theology or religion. While there are many scientist theologians who have made great contributions to the scientific endeavour, they were doing science, not theology, at the time.

This does not say that theology provides no knowledge – it provides plenty. The modified ontological argument of Anselm provides strong grounds for a rational proof of the existence of God. This relies on faith in the workings of logic, our ability to reason, and predictability in the universe. The cosmological and design arguments have certainly not been refuted, and they give us reason to believe in a creator of the universe. To me, this would seem to be a fairly important bit of knowledge to grasp. You can go through life with no knowledge whatsoever of the fact that there is a creator of the universe, that I do not doubt, but I suspect most people crave to know something about the origin of life and why on earth they are here at all! We should also not forget that having the knowledge to diligently follow in the footsteps of Christ, which Christians attempt to do, without a shadow of doubt, is knowledge of the good life and enormously beneficial to humanity.

Theoria

As far back as classical Greek philosophy, the concept of *theoria* has been used to describe humanity's search for the ultimate cause of everything. Once you move beyond the physical, which can only answer 'how' questions and not the 'why' question, your only option is contemplation or *theoria*, which is well past the point where Krauss is prepared to go in seeking to answer 'why'. The aim of *theoria* – or contemplation – is to understand God, and in so doing understanding our world.

As much as Krauss thinks religion is the cause of most terrible things in the world and would like to rid humanity of its alleged malignant effects, his view is only held by a very small minority. Since the dawn of humanity, billions of people have adopted religious ways that enshrine core beliefs urging respect for fellow humans and peaceful co-operation. The Decalogue of the monotheistic faiths is a good

²⁹ Ibid., p. 144.

example of this, as is the Golden Rule.³⁰ Knowledge of the good life and the ethical practices of many billions of people have been governed by faith that arose out of *theoria* via religion. While I do not doubt that this knowledge, or aspects of it, can be found without *theoria*, not even someone like Krauss could deny religion's extraordinarily positive, and often silent, effect on humanity, if he were to spend more than a few minutes thinking about it. Religion gives people the knowledge about how to live in accordance with a set of religious rules to aspire to and enjoy a fulfilling and prosperous, well-lived and worthwhile life.

Krauss must not take for granted the conversion of the West to the Judeo-Christian way of life. He is bathed in this tradition, with its respect for the individual at the heart of the political constitution of the United States, from which he writes and opines. It was the church courts which upheld the sanctity of the individual, in contrast to the secular, prince-run courts of the feudal era where the Krausses of many generations back would have been considered the property of their local baron.

Krauss should also remember that the constitutions of the monasteries, which were separate legal entities, led to the endowment of universities with their own distinct legal frameworks. The academic freedom Krauss experiences is a direct result of this religious invention.

Krauss, as we all do, benefits enormously today from our religious antecedents. While theology will not make me a GPS system, it has, over millennia, provided the very architecture to support all of what we know as science today. He should be grateful for Judeo-Christian theology and its dangerous idea of putting the individual at the heart of our thinking.

The science of Krauss

The ultimate limiting factor for Krauss' thinking is time. If a random quantum fluctuation event is to happen that triggers staggering cosmological inflation, it needs plenty of time. But, if you are truly in nothingness, there is no time for any probabilities to play out. This would seem an impossible starting point. If Krauss assumed a something, he could get his scheme up and running. So not only does the

³⁰ The Ten Commandments of Moses are known as the Decalogue. The observance of these these ten laws reduces conflict and promotes peaceful living. The Golden Rule ('Do unto others as you would have them do unto you') predated Jesus, but Jesus added to it, encouraging us to live out this rule in the service of other people. Adopting this approach to life has also led to peaceful existence between people.

quantum field – pre-existing and therefore located in time and post-big bang – have to exist or be presupposed to exist, time also has to exist – which is a post-big bang event. It would seem Krauss’ scheme is fatally impaled on two counts. As discussed, a theologian can argue the case for the fundamental ground for being, or God. This is a something, not the nothing Krauss advocates to get his cosmological inflation going. If Krauss chooses not to better understand that being, instead considering his ‘nothing’ a brute fact, I believe he is doing a great disservice to his inquiring mind.

The first words of that great non-scientific book, the Bible, state the great scientific fact: ‘In the beginning God created the heavens and the earth’ (Genesis 1:1). The beginning is the creation of time, the heavens is the creation of space, and the earth is symbolic of the creation of material matter. This is the space–time of today’s scientists. We call its creator the immaterial cause of the Godhead. From this background emerge Krauss’ quantum things that pop in and out of existence, but they do not emerge from nothing.

As we can see, the gospel of science is ever changing. If science sticks to the ‘how’ as it changes over time, it will continue to deliver spectacular benefits to humanity. If theology sticks to the ultimate ‘why’, and if religion brings us closer to union with the ultimate ground of being, it will continue to be massively beneficial to humanity. Crossing over into each other’s territory always ends in tears.

Chapter 7

On Being

The oneness of reality

For a long time now particle physicists have been dreaming of a grand unification. They have increasingly come to realise that apparently very different phenomena are often aspects of the same thing.

For example, after the experiments of Michael Faraday and others back in the 19th Century, it was soon realised that electricity and magnetism are unified. More than that, the same unification also explained the nature of light.

The idea of unification gathered momentum in the second half of the last century, when it was realised that all of the known forces in nature are, in a sense, copies of this electromagnetic prototype.

The electromagnetic force, the strong force, which binds together atomic nuclei, and the weak force, responsible for the burning of the sun, seem under reasonable assumptions, to fuse together into a single force if the energies are high enough.

In other words, the forces of nature appear distinct only because we have been studying them at too low an energy. It is intriguing that the unification energy is so close to the energy governing the exploding universe, as inferred from the Bicep2 data.¹

In a recent Legatum Leadership Forum meeting,² I was asked to participate in trying to define what ‘prosperity’ meant. This is an impossible task, I thought. Person after person did their best, but not much new fruit was plucked from the tree. This is because it is impossible to get an exact definition from the word itself, as it is a philosophical concept that will, frustratingly, like all philosophical concepts, be truly elusive if you try to look at it as capable of offering a singular definition. This contrasts with a non-philosophical concept – for example, a number – which is a hypothetical construct and is definitive by the very understanding of what it is to be

¹ Professor in Particle Physics, Brian Cox, and Jeff Forshaw of Manchester University, writing about their forthcoming book and in strong support of primordial gravitational waves and the hypothetical X (not their words) Dark Energy driving the initial inflation of the universe (*Sunday Times*, News and Review Section, p. 2, 23 March 2014).

² 27–30 April 2014, Dubai.

a figure that represents, say, a one or a two, relative to something which you can look at in this binary fashion. Alas, it is not the case for philosophical concepts.

I am convinced that both science and philosophy point to there being a oneness to our reality, and that while we perceive specific parts of reality as distinct and real, at the end of the day they are fully part of, and absorbed into, the one nature of all reality. Just as science points towards a unification in all things, so does philosophy. The philosopher may declare his subject matter pure being, yet it is the same pure being as that of the scientist.

I will now explore our understanding of this oneness to reality, what amounts to a philosophical concept, and see whether it *does* lead to the conclusion of an underlying unity.

What can philosophy tell us about reality?

The West's quest to formulate philosophical concepts that could be used to help us understand the why and the how of the universe was started by the Greeks. The quest to understand how we can know things at all began with setting up a sharp distinction between philosophical concepts – which are always open ended, questioning if it is possible to know anything with absolute certainty – and non-philosophical concepts, which are tightly defined and often tautological and questionable if they can provide us with any knowledge at all. Plato included Socrates' illustration of this problem at the end of Book VI of his *Republic*.³ Consider the concept of justice. Is it about retribution, mercy, punishment, or a combination of some or all of these? To define justice, which might seem like a simple everyday concept, people write reams and reams, indeed whole academic tomes. Socrates asked what is justice in Plato's *Republic*, and the conversation continues today, two and a half millennia later. In the case of mathematics, however, you have a predefined hypothesis that never changes. Thus in mathematics there is a natural point at which thinking stops, unlike in philosophy and many of the other humanities where less is concrete and the thinking continues. So, whilst we may have a working definition for justice, it is only tentative and it is always changing at the edges. For example, a handful of decades ago, it would have been considered

³ Plato, *Complete Works*.

just to imprison a homosexual for being a homosexual, but now that would be viewed in Western countries to be unjust. Philosophy, which by its very nature is open ended, can therefore be used to gain a deeper understanding of our reality. This is done by a philosopher using hypothetical starting points to move from a position of no knowledge to having some. Using the dialectic method, we are free to cancel the hypothesis, or assume the opposite and see if this brings further knowledge, as did Socrates. Philosophy is pure and unconstrained, unless it is restricted by the laws of thought it has created – for example, logic.

In my discussion with colleagues at Legatum, our placeholder at the end of the conversation was that prosperity was holistic flourishing. I say placeholder, as we could not conclude a definitive set of words that could cater for every occasion, as we could go on and on to another investigation into what prosperity really means.

The scale of forms

R. G. Collingwood developed a method for exploring philosophical concepts⁴ by first noting that science is concerned with elucidating a series of universal truths. Philosophy, historically, has sought to discover what it calls universals. Collingwood's method can be explained as follows:

We begin with step 1. At this stage, there is a plurality of individual instances that unites all into one class, called the plurality of instances. For example, all the colour reds can be united within a class. In this sense, the colour 'red' is generic while the concept 'colour' is universal.

Then, in step 2, we look a bit closer at the colour analogy in step 1. We see that there is a plurality of *differentiation* in the various colours – red, green, blue – where all are united by something but are different in all other respects. All colours are united in the *class* of colour, though they are different in appearance. Together, they form a *genus* of colour (e.g. red), in which they are each a *species* of colour (e.g. different shades of red).

Looking further afield, we can investigate whether this example helps us to see what is common and what differentiates. When we think of a song, for example, is it a piece of work, art, a poem or a piece of music? Is it a single work or piece of art containing two specific forms? Or is it a bit of everything? I guess if there were five

⁴ Collingwood, *Philosophical Method*.

people to ask, we would all get slightly different answers. With the specific classes of philosophical genus there is almost always an overlap, unlike the sciences.

In natural and empirical science, classification systems work – whether they are applied to quarks, protons, atoms, particles, waves and individual chemical compositions or humans and apes. In fact, science is all about classification in the first instance.

This contrasts with philosophy. Aristotle showed us that *judgment* can overlap in a multiplicity of classes:

That it is raining is a judgment; that it is raining because I can hear it is an inference. Of these two statements, one includes the other; and it is therefore clear that the specific classes overlap: a judgment may also be an inference, an inference may also be a judgment.⁵

Judgments can be affirmative and negative at the same time, which does not accord with the classifications that logic requires in either the sciences or mathematics. If I say ‘this computer has stopped working’, I can positively confirm this computer is not working and that it is (negatively) not in motion. In science, I cannot say ‘this is an atom and not an atom’. Therefore, ‘I am making one statement, not two, and that statement is both the affirmation of one thing and the denial of its opposite’,⁶ which you can only do in areas of study like philosophy.

No methodology can be adopted in philosophy that mimics the mutually exclusive classification used by the sciences and mathematics. To those who attempt such methodology, Collingwood warns: ‘All such inquiries are vitiated by a fallacy, which may be called the fallacy of precarious margins.’⁷

Returning to the example of the computer, any attempt to mitigate the overlap in judgements may lead to the fallacy of ‘identical coincidence’. This is where you recognise the overlap – then pronounce both identical. For example: if, at the Legatum meeting, we identified prosperity with holistic flourishing and concluded they must be the same, we would be committing the fallacy of identical coincidence. We must celebrate their overlapping nature but also bring to light their differences. Before Legatum sets up schools in Ethiopia to educate those who have missed out on key schooling, there will be an absence of the prosperous life due to a lack of

⁵ Aristotle, ‘Nicomachean Ethics’, Book 1, ch 6, in *Complete Works*.

⁶ Collingwood, *Philosophical Method*, p. 39.

⁷ *Ibid.*, p. 48.

education. Once they are educated, they have a greater chance of leading a more prosperous life. To understand prosperity, we need to also understand the absence of it – poverty. The two cannot be separated. Their forms overlap, a characteristic familiar to all philosophical concepts.

Collingwood writes:

I call this the fallacy of false disjunction, because it consists in the disjunctive proposition that any instance of a generic concept must fall either in one or in another of its specific classes; and this is false because, since they overlap, it may fall in both. Applied positively, this yields the fallacy of precarious margins: namely that, since there admittedly is a distinction between two concepts, there must be a difference between their instances. Applied negatively, it yields the fallacy of identified co-incidents: namely that, since the instances can admittedly not be separated, there is no distinguishing the concepts.⁸

The first rule of philosophy is to be aware of false disjunctions. The overlap must be there. While two concepts may be the same, as in the case where one exemplifies the other, their being is not the same. Think of the dutiful-and-happiness and prosperity-and-flourishing examples. Another example is failure and success in entrepreneurship, about which I am often asked. Total failure would mean ceasing to exist, so it is a meaningless concept. Failure is actually embedded in the concept of success. In business, satisfied staff, customers and suppliers are one measure of success. A healthy bottom line is another. However, you could have done better. We can have had partial success and partial failure, but never fully one or the other – only scales of success. Using philosophical language, you can only think of the concept of universal failure in the abstract.

What we can draw from this train of thought is that even if we can think in the abstract about a pure form – for example, a colour, or success or failure, it will remain abstract when we turn our focus to the existing world; it must always be a something and, more importantly, a part of something. Even if we met the most perfect saint representing perfect goodness, that saint would never be fully perfect as they are compromised by their finality – their death, if you like. So on the scale of all forms in our existent world, there is never a perfect extreme end

⁸ Ibid., p. 49.

representation of the pure form, just as there is never a perfect extreme negation of it. R. G. Collingwood calls this the 'Scale of Forms':

The result of this identification is that every form, so far as it is low on the scale, is to that extent an imperfect or inadequate specification of the generic essence, which is realized with progressive adequacy as the scale is ascended.⁹

The lower elements of the scale would hardly appear to be a species of that genus, but they cling to the genus even in the most tangential of cases. But, how could failure be an integral part of success? How can the African lady who used to rely on an open fire in her hut (giving her cancer from fumes) but now has an enclosed charcoal fire with a flue be described as living prosperously while still living in poverty? Well, on the scale of forms, she is a little more prosperous and a little less poor. Poverty is an integral part of the concept of prosperity. Understanding the degrees and opposites is key to further understanding the concept of prosperity. Opposites exist on the same scale of forms. The thing to note is that if there is no opposition, no tension, you have no philosophical concept to discuss. There is always a tension implied in all philosophical concepts.

Another example is the relationship between faith and reason. At the start of this book, I explained how reason cannot exist without faith, and that reason is faith's handmaiden. This implies that a part of reason is contained in the concept of faith. This overlap is lost on many people; nevertheless, it is there, right under our noses, as the most obvious things often are.

On the matter of pure evil

Pure evil, like total failure, is an untenable concept. Imagine an evil villain with an apprentice, or a gang of minions whom he never fully trusts, as he suspects they also have evil running through their veins. Imagine one thing leading to another, resulting in a bloodbath with only one person from the gang left standing. This person cannot be fully evil unless he destroys himself – presumably, a totally evil being would hate everything, including itself, to the point that it would want to kill itself. Thus, pure evil is a nonsense. You only have goodness, which we can observe flourishing with degrees of badness or evil embedded in it, always in tension. Later, I will show how there is one exception to the scale of the forms which you *can* think

⁹ Ibid., p. 61.

of without contradiction: the concept of pure goodness. In the meantime, we will take a closer look at the devil.

If God created all things, it stands to reason that he also created Satan, the nearest manifestation or image of pure evil we have. However, as a created being, he (or it) cannot be totally evil as this falls away into contradiction.¹⁰ In a number of places in the Bible, Satan is recorded as doing God's bidding. For example:

Now there was a day when the sons of God came to present themselves before the LORD, and Satan also came among them. And the LORD said to Satan, 'From where do you come?'

So Satan answered the LORD and said, 'From going to and fro on the earth, and from walking back and forth on it.'

Then the LORD said to Satan, 'Have you considered My servant Job, that there is none like him on the earth, a blameless and upright man, one who fears God and shuns evil?'

So Satan answered the LORD and said, 'Does Job fear God for nothing? Have You not made a hedge around him, around his household, and around all that he has on every side? You have blessed the work of his hands, and his possessions have increased in the land. But now, stretch out Your hand and touch all that he has, and he will surely curse You to Your face!'

And the LORD said to Satan, 'Behold, all that he has is in your power; only do not lay a hand on his person.'

So Satan went out from the presence of the LORD (Job 1:6–12).

So, while evil is the opposite of good, it is also contained in the very manifestation of the form of good – only in varying degrees. In this opposition, this tension, we have one of the greatest philosophical pairings. When you say a person is bad, you are saying they do not do good acts with the frequency that you would expect a person to be doing in order to be called a good person. You also are saying very positively that they do bad acts, more so than would be required to call them a good person. So, bad is both a distinction and an opposite. The bad person, however, is

¹⁰ To explain: if you were totally evil, you would hate everything, even existing. This means you would hate yourself and therefore end up killing yourself. As we know, evil people exist, so there must be some miniscule bit of goodness in them, which is capable of love, to even exist and want to exist – even if it is to do evil things. A maximally bad thing is a contradiction, as to be anything, you need to exist – and if you were maximally bad, you hate even existing. So, to be maximally evil falls into a set of contradictions.

never 100% bad: this is an abstract concept, impossible to imagine in reality.

Applying the scale of forms, there is a spectrum of good and evil. In this case, it is both one of distinction and opposition to varying degrees. All that is higher up the scale of forms will more perfectly embody what is the lower down the scale.

On the matter of pure goodness

Although I have argued that pure evil is an abstract concept, it can be considered in opposition, and in tension with the concept of good. ‘Evil’ represents the degree of absence of goodness on a scale of overlapping forms. However, here I propose that pure goodness *is* real. Nothing overlaps with it in one instance and one instance only: when you are thinking about God in terms of all the possible adjectives and verbs that state something positive about him. But first we need to consider how we know anything at all.

How do we know something is real?

The absolute distinction between an ability to know and not know something can be displayed when you teach a person a geometrical shape of ‘X’ sides so that now they know it, when they did not know of it before. This is a very black-and-white distinction. In philosophy, we are never absolutely ignorant of the matter at hand or as totally complete in our knowledge as we are with a simple geometrical shape: this was apparent when we discussed the nature of prosperity, good and evil.

In his *Republic*, Plato discusses the difference between the dialectic and mathematical approaches and shows how the dialectic demands for itself a non-hypothetical starting point. Plato had long ago laid down that to be, and to be knowable, are the same:

And he who, having a sense of beautiful things has no sense of absolute beauty, or who, if another lead him to a knowledge of that beauty is unable to follow – of such a one I ask, Is he awake or in a dream only? Reflect: is not the dreamer, sleeping or waking, one who likens dissimilar things, who puts the copy in the place of the real object?

I should certainly say that such a one was dreaming.

But take the case of the other, who recognises the existence of absolute beauty and is able to distinguish the idea from the objects which participate in the idea, neither

putting the objects in the place of the idea nor the idea in the place of the objects – is he a dreamer, or is he awake?

He is wide awake.

And may we not say that the mind of the one who knows has knowledge, and that the mind of the other, who opines only, has opinion?

Certainly.

But suppose that the latter should quarrel with us and dispute our statement, can we administer any soothing cordial or advice to him, without revealing to him that there is sad disorder in his wits?

We must certainly offer him some good advice, he replied.

Come, then, and let us think of something to say to him. Shall we begin by assuring him that he is welcome to any knowledge which he may have, and that we are rejoiced at his having it? But we should like to ask him a question: Does he who has knowledge know something or nothing? (You must answer for him.)

I answer that he knows something. Something that is or is not? Something that is; for how can that which is not ever be known?

And are we assured, after looking at the matter from many points of view, that absolute being is or may be absolutely known, but that the utterly non-existent is utterly unknown?

Nothing can be more certain.¹¹

Plato has this to say, in *Parmanides*:

But may not the ideas, asked Socrates, be thoughts only, and have no proper existence except in our minds, Parmenides? For in that case each idea may still be one, and not experience this infinite multiplication.

And can there be individual thoughts which are thoughts of nothing?

Impossible, he said. The thought must be of something? Yes. Of something which is or which is not? Of something which is. Must it not be of a single something, which the thought recognizes as attaching to all, being a single form or nature?

Yes.

¹¹ Plato, *Complete Works*, 476 E.

And will not the something which is apprehended as one and the same in all, be an idea?

From that, again, there is no escape.¹²

And happily, this thought must be thought of as something real.

We can think of many weird and wonderful things, right? Our mind can imagine adding a Narwhal horn to the forehead of a white horse, creating a unicorn. But, we do not believe that unicorns are real: we know our imagination has confounded two parts of reality and merged it into one thought. We can distinguish between what is real and what is not. The question is: does God fit into the unicorn-fantasy-creating part of our mind, or the reality-thinking-and-observing part of our mind?

In mathematics, we know that what we think of as the number two is an abstraction and not real, in the sense that the chair I sit on is real. However, when you think of overlapping forms – for example, goodness, justice, mercy, forgiveness – you are committed to thinking of something real, as is the case for all philosophical concepts.¹³

When we think of all those philosophical overlapping forms, and keep in mind the most extreme opposition – that of good and that of evil – and if you conclude, with me, that evil is a lack of degree of goodness, then you can start to realistically think that all forms of goodness in some way fit up and down on this scale. They are all parts of reality. Justice, fairness, duty, altruism will all fit on the scale of goodness at some point, overlapping with other forms on the scale. When we think of a ‘good life’ and further reflect on the ‘perfectly good life’, we might arrive at what it would mean to be a perfect being who could live a perfectly good life. This does not break down into contradictions, unlike the concept of perfect evil. The perfect being of God must exist *necessarily* to be perfectly good; to not exist would compromise it. From this substrate, all the overlapping forms of goodness pour forth as part of pure goodness, pure being, or as part of God. Any time we reflect on goodness, or one of the sub-species that form part of the genus, we are affirming God and asserting his existence; or the existence of pure being, if you wish to avoid using the word God.

¹² Plato, *Complete Works*, 132 B.

¹³ In contrast, concepts such as the unicorn are figments of our imagination and do not commit us to thinking about something real.

This forms the proof for the ontological argument, which we will explore in depth in the next chapter.

If we now know that pure goodness exists, as a rational thought, we can see that what we label as God is pure goodness, and it exists. Collingwood adds:

Reflection on the history of the Ontological Proof thus offers us a view of philosophy as a form of thought in which essence and existence, however clearly distinguished, are conceived as inseparable. On this view, unlike mathematics or empirical science, philosophy stands committed to maintaining that its subject-matter is not mere hypothesis, but something actually existing.¹⁴

If you are not yet convinced, it is worth considering that it is impossible to study logic or ethics without thinking you are studying something real. Logic is concerned with thought as its subject matter: both how we actually think and how we ought to think. Logic is also about itself: its rules must accord to anything on which it pronounces. It is never indifferent to itself, as are mathematics and science. And, unlike mathematics, logic is about existing subject matter. The essence of this thought regarding the subject matter of thought itself must also imply its existence, otherwise it would be illogical:

Logic, therefore, stands committed to the principle of the Ontological Proof. Its subject-matter, namely thought, affords an instance of something which cannot be conceived except as actual, something whose essence involves existence.¹⁵

So, to be clear: when we conceive the concept of pure being, we are conceiving something that is uniquely real. Of course, if this concept can be pulled apart by logic, if it can be shown to be contradictory, then it is not real. But, if it satisfies logic's criteria, then it is real. In thinking of perfect goodness with all the positive predicates that are contained within it, I do not believe that I am contradicting myself. This is the one and, I believe, only instance of a philosophical concept with no opposition in it, as it is indeed encompassing all that is real. When we think of the good life or a life well lived and identify this as good, we are identifying part of that supreme being and gaining some understanding of God, or pure being.

Postscript to pure being

¹⁴ Collingwood, *Philosophical Method*, p. 127.

¹⁵ *Ibid.*, p. 131.

Taking this further, if God contains all the positive predicates, he contains everything. We are all ultimately part of the concept of God. The concept of God also implies being infinite; if we try to make him finite, he ceases to be. We occupy our particular spot in him in the physical world he has created. Our scientist friends are beginning to step back and get a sense of this unity of reality.

This recognition of our oneness has a long, uninterrupted history in the Judeo-Christian tradition, and it is exemplified in the classical conception of Hellenistic philosophy. This is demonstrated in the apostle Paul's address to the Athenians:¹⁶

Then Paul stood in the midst of the Areopagus and said, 'Men of Athens, I perceive that in all things you are very religious; for as I was passing through and considering the objects of your worship, I even found an altar with this inscription:

TO THE UNKNOWN GOD.

Therefore, the One whom you worship without knowing, Him I proclaim to you: God, who made the world and everything in it, since He is Lord of heaven and earth, does not dwell in temples made with hands. Nor is He worshiped with men's hands, as though He needed anything, since He gives to all life, breath, and all things. And He has made from one blood every nation of men to dwell on all the face of the earth, and has determined their pre-appointed times and the boundaries of their dwellings, so that they should seek the Lord, in the hope that they might grope for Him and find Him, though He is not far from each one of us; for in Him we live and move and have our being, as also some of your own poets have said, 'For we are also His offspring.' Therefore, since we are the offspring of God, we ought not to think that the Divine Nature is like gold or silver or stone, something shaped by art and man's devising. Truly, these times of ignorance God overlooked, but now commands all men everywhere to repent, because He has appointed a day on which He will judge the world in righteousness by the Man whom He has ordained. He has given assurance of this to all by raising Him from the dead' (Acts 17:22–31).

I find Paul's speech fascinating, as our atheist friends would argue that the religious mind always perceives God as being a bigger man or grandfather-like figure, living

¹⁶ Prior to this, Paul had been accused of being a σ π ε ρ μ ο λ ό γ ο ς or 'seed-picker,' translated to us as a 'babbler.' This is the charge that led to the execution of Athens' most famous and wisest son, Socrates. I find a profound symbolism here.

variously in a temple, up a mountain, above the clouds. When we cannot find the God we are looking for, we assume their location is further away:

But as practical knowledge and understanding of nature increased, these agencies were thought of in more and more remote terms – they were shifted off mountain tops, into the sun, into the sky, finally beyond space and time itself.¹⁷

Thus says A. C. Grayling.

In his speech to the Athenians just under two thousand years ago, the apostle Paul argued that God cannot be contained in any man-made building. He cited 1 Kings 8:27, written in the sixth century BC: ‘But will God indeed dwell on the earth? Behold, heaven and the heaven of heavens cannot contain You. How much less this temple which I have built!’ And again in the Bible in 1 Chronicles 29:14: ‘But who am I, and who are my people, that we should be able to offer so willingly as this? For all things come from You, And of Your own we have given You.’

That God needs nothing from humans and, indeed, that all creation is his, was taught in King David’s time, some one thousand years before Paul’s speech. This is reflected in Psalm 50:9–12:

I will not take a bull from your house,
Nor goats out of your folds.
For every beast of the forest is Mine,
And the cattle on a thousand hills.
I know all the birds of the mountains,
And the wild beasts of the field are Mine.
If I were hungry, I would not tell you;
For the world is Mine, and all its fullness.

Indeed, between 100 BC and 200 BC the Jews were teaching that God needed nothing from humans: ‘O Lord of all, though you have need of nothing, you were pleased that there should be a temple for your habitation among us’ (2 Maccabees 14:35, NRSV). And in 3 Maccabees 2:9:

You, O King, when you had created the boundless and immeasurable earth, chose this city and sanctified this place for your name, though you have no need of anything; and when you had glorified it by your magnificent manifestation, you made it a firm foundation for the glory of your great and honored name (NRSV).

¹⁷ Grayling, *To Set Prometheus Free*, p. 22.

God needs nothing from his creatures as he is not a finite thing. He is, rather, *everything*, and *we are part of that oneness*. Paul reminded his audience that according to their traditions, this, too, is what many Athenians believed. He quotes the seventh-century BC Cretan poet, Epimenides, from the Cretica: ‘They fashioned a tomb for you, holy and high one, Cretans, always liars, evil beasts, idle bellies. But you are not dead: you live and abide forever, For in you we live and move and have our being.’¹⁸

And Aratus, in *Phaenomena* 1–5: ‘From Zeus let us begin; him do we mortals never leave unnamed; full of Zeus are all the streets and all the market-places of men; full is the sea and the havens thereof; always we all have need of Zeus. For we are also his offspring.’¹⁹

Also, Cleanthes, in his *Hymn to Zeus*:

Most glorious of Immortals, mighty God,
 Invoked by many a name, O sovran King
 Of universal Nature, piloting
 This world in harmony with Law, — all hail!
 Thee it is meet that mortals should invoke,
 For we Thine offspring are, and sole of all
 Created things that live and move on earth
 Receive from Thee the image of the One.
 Therefore I praise Thee, and shall hymn Thy power
 Unceasingly.²⁰

So, if you are a modern scientist observing that the universe and everything in it is just a lot of vibrating force fields, all producing what we observe as material things in our universe although deep down, it is all one great big chain of inter-connectedness – then this observation is approximately 3,000 years old and has a tradition: it is the oneness of reality, in Jewish, Greek and Christian thought. If you restrict yourself to doing science, you will leave it there, as it is not for you – according to your discipline and its methodology – to report on the non-finite. If you are a philosopher contemplating *theoria*, or theology, you are more than likely to reach the conclusion that there *is* oneness of reality. When you think of all those

¹⁸ ‘Epimenides’ (2017, April 21). In *Wikipedia, The Free Encyclopedia*. Accessed 28 May 2017 from <https://en.wikipedia.org/w/index.php?title=Epimenides&oldid=776578136>.

¹⁹ Mair, ‘Aratus, *Phaenomena*.’

²⁰ Blakeney, *The Hymn of Cleanthes*, p. 8.

overlapping forms, and everything ultimately being contained in the one master form of pure goodness, or when you think of all physical connectedness, you cannot escape from concluding the oneness of reality. The atheist straw man of a God located inside a temple, as finite as you and I, is just that: a straw man, whom they can blow down as much as they like.

Chapter 8

Dawkins' Delusion and Anselm's Prayer

Faith seeks, but understanding finds.¹

The apostle Paul, before his conversion, was recognised as one of the most zealous persecutors of Christians.

And I thank Christ Jesus our Lord who has enabled me, because He counted me faithful, putting me into the ministry, although I was formerly a blasphemer, a persecutor, and an insolent man; but I obtained mercy because I did it ignorantly in unbelief. And the grace of our Lord was exceedingly abundant, with faith and love which are in Christ Jesus. This is a faithful saying and worthy of all acceptance, that Christ Jesus came into the world to save sinners, of whom I am chief. However, for this reason I obtained mercy, that in me first Jesus Christ might show all longsuffering, as a pattern to those who are going to believe on Him for everlasting life. Now to the King eternal, immortal, invisible, to God who alone is wise, be honor and glory forever and ever. Amen (1 Timothy 12–17).

In modern times, there is none more vocal than Richard Dawkins – the twenty-first-century version of Saul, I might suggest, tongue-in-cheek?

This following quote from Anselm of Canterbury's *Proslogion* is also somewhat tongue-in-cheek:

Thanks be to you, my good Lord, thanks be to you. For what I once believed through your grace, I now understand through your illumination, so that even if I did not want to believe that you exist, I could not fail to understand that you exist.²

Since, then, it is so readily clear to a rational mind that You exist most greatly of all, why did the Fool say in his heart that God does not exist? – why [indeed] except because [he is] foolish and a fool!³

Dawkins is without doubt no fool, but I will seek to expose his ignorance on certain matters which I hope will blunt the thrust of his arguments. I will do so by discussing Anselm's prayer and how it relates to the ontological argument.

¹ Augustine, *On the Trinity*.

² Anselm, *Proslogion*, p. 1.

³ *Ibid.*, p. 8.

Dawkins' delusion

In Chapter 2 of his book, *The God Delusion*, entitled 'The God Hypothesis', Dawkins discusses attempts to prove the existence of God. He does not start out with a correct metaphysic of God, or pure being, instead setting his God up as a straw man, a pseudo-metaphysical proposition which he can then shoot down. In fairness, many of our muddle-headed ancestors have helped to build the image of the straw-man God that Dawkins attacks. In attacking such an image, he does theologians a great service by tearing down faulty images of God. But we must be clear that Scripture itself does not present God in the light Dawkins does. However, he also attacks some of the wiser views about God, exposing his lack of knowledge on the matter. Dawkins fails to hit the real target of God, or the fundamental ground for being, quite spectacularly. In fact, his target gets off very lightly indeed and in the end remains completely intact.

As part of his case in *The God Delusion*, Dawkins takes on the ontological argument, as put forth by Anselm of Canterbury in his *Proslogion*. His understanding of Anselm's argument is found in chapter 3 of his book, 'The Ontological Argument and Other A Priori Arguments':⁴

An odd aspect of Anselm's argument is that it was originally addressed not to humans but to God himself, in a form of a prayer (you'd think that any entity capable of listening to a prayer would need no convincing of his own existence).⁵

It is often the case that two people can interpret the same wording quite differently. Dawkins has read the prologue to the *Proslogion*, when Anselm refers to two of his works: 'I named the first Monologion, which means a speech made to oneself, and the second Proslogion, which means a speech made to another.'⁶ One can understand Dawkins' confusion. So, who *is* the other person? While the *Proslogion* certainly is a prayer to God, it also gives an account of Anselm's awakening to an understanding of God. It may even be considered a personal confession – not anything designed to make God believe in his existence!

⁴ In 2007, I had a closer look at his attempted disposal of the cosmological argument, which again I thought missed the mark due to faulty logical reasoning on his part (Toby Baxendale, 'The Richard Dawkins Delusion,' Toby Baxendale, January 9, 2007, <http://tobybaxendale.com/the-richard-dawkins-delusion/>).

⁵ Dawkins, *The God Delusion*, p. 80.

⁶ Anselm, *Proslogion*, p. 3.

Anselm's ontological argument

Anselm's ontological argument has its antecedents in two key thoughts in philosophy. The first is outlined by Plato in *The Republic* who, according to Collingwood, 'long ago laid it down that to be, and to be knowable, are the same.'⁷ The relevant section of *The Republic* is 476, where he says: 'Tell us, does the person who knows know something or nothing? You answer for him. He knows something. Something that is something or something that is not? Something that is for how could something that is not be known?'⁸ The second is found in *De Trinitate* by Boethius, who describes a being who is: 'that which is beautiful and stable'⁹ (*est id pulcherrimum fortissimumque*) – a unity of existence and essence, or a perfect being (*nihil deo melius excogitari queat*). Better than God, nothing can be imagined: a metaphysical conception of the absolute perfect being.

Anselm brought these two streams of thought together to reach an understanding of the perfectness of absolute reality, or in the vernacular, his conception of God as that maximally perfect being.

The main thrust of Anselm's argument, which has confounded many for centuries now, is found primarily in Chapter 2 of *Proslogion*:

Now we believe that you are something than which nothing greater can be thought. So can it be that no such being exists, since 'The fool has said in his heart, "There is no God"'? (Psalm 14:1; 53:1)¹⁰ But when this same fool hears me say 'something than which nothing greater can be thought,' he surely understands what he hears; and what he understands exists in his understanding, even if he does not understand that it exists (in reality). For it is one thing for an object to exist in the understanding and quite another to understand that the object exists (in reality) ... So even the fool must admit that something than that which nothing greater can be thought exists at least in his understanding, since he understands this when he hears it, and whatever is understood exists in the understanding. And surely than that which is greater cannot be thought cannot exist only in the understanding. For if it exists only in the understanding, it can be thought to exist in reality as well, which

⁷ Collingwood, *Philosophical Method*, p. 124.

⁸ Plato, *Complete Works*.

⁹ Kenyon, *Boethius*, p. 4.

¹⁰ This quote from Psalm 14, written around 1000 BC by King David, is similar to Proverbs 1:7, written by his son, King Solomon: 'The fear of the Lord is the beginning of knowledge, But fools despise wisdom and instruction.' Anselm's much later use of a similar psalm shows that the fundamental ground for knowing anything is still in dispute.

is greater. So if that than which a greater cannot be thought exists only in the understanding, then that than which a greater cannot be thought is that than which a greater can be thought. But that is clearly impossible. Therefore, there is no doubt that something than which a greater cannot be thought exists both in the understanding and in reality.¹¹

Anselm argues that if you understand the concept, you cannot deny it; if you do, you are the fool. While it may be harsh to say you are a fool, you could certainly be called remiss! I believe it would be more fruitful to ask this question: ‘OK, I understand the concept of a supreme perfect being existing in reality; in fact, it is the ground of being. I can’t deny it, but what does it actually *mean*?’ And, in the case of Anselm: ‘Why should it mean the God of Christianity?’

Objections to the ontological argument

To counter the ontological argument, Kant argued that existence is not a predicate. In the third chapter of *Proslogion*, Anselm refutes such an attack by establishing the actual necessity of God’s existence.¹² And, by establishing this necessity, this fundamental ground for being, we can then reflect upon what a truly existing, necessary concept of pure being could mean to us:

This [being] exists so truly that it cannot be thought not to exist. For it is possible to think that something exists that cannot be thought not to exist, and such a being is greater than one that can be thought not to exist. Therefore, if that than which a greater cannot be thought can be thought not to exist, then that than which greater cannot be thought is not than that which a greater cannot be thought; and this is a contradiction. So that than which a greater cannot be thought exists so truly that it cannot be thought not to exist.

Indeed, everything that exists, except for you alone, can be thought not to exist. So you alone among all things have existence most truly, and therefore most greatly. Whatever else exists has existence less truly, and therefore less greatly.¹³

¹¹ Anselm, *Proslogion*, p. 7.

¹² I am grateful for Daniel Dombrowski (a process theologian from the school of Alfred Whitehead and Charles Hartshorne, which holds that God is not an absolute, but processing – changing – through space-time as we do) and his book *Rethinking the Ontological Argument* for bringing this point to my attention.

¹³ Anselm, *Proslogion*, p. 8.

In other words, we can think of everything not existing – with the exception of being. To think of being as not existing is a performative contradiction.

The reasoning is as follows. I exist, and I know that I do not need to exist. So, my very being and that of the universe have to exist because of some prior cause. This prior cause cannot be a physical cause, as it would need its own prior physical cause to exist. As I cannot exist without being caused and as I demonstrably do exist (I cannot deny this without asserting my own existence), there must be a cause that is not physical that is a ‘thing in and of itself’ – a thing that has no cause, is immaterial and is what we call God. God is the foundation of being: if you do away with God, you have no being. And if you deny being, you contradict yourself. Therefore, by acknowledging being, you acknowledge God even if you do not realise you are doing this.

It would seem to me the case for God, or pure being, is looking pretty watertight. In my opinion, just as the absolute presuppositions of all of science are watertight, so the uniformity of the universe and the laws that allow us to access the secrets of the universe are unquestionable; and so is the logic of Anselm’s argument.

A later Scholastic, Thomas Aquinas, would not question the soundness of the logic contained in the argument, but being Aristotelian, he preferred to reason God via the senses, or *a posteriori*. For Aquinas, the abstract nature of the thought did not flesh out a full understanding of God. His preferred route would be the Fourth Way of his Five Ways to God, which is the argument from degrees of perfection. If you look at any sentient object, such as a statue, and compare it with another, there will be differences in degrees of beauty, perfection and form. You can grade, in degrees of perfection, all things, right up to the most perfect standard. Whether you come to God from a top-down or a bottom-up perspective, you can still get there.

In his *Dialogues Concerning Natural Religion*, Hume states the following objection to the ontological argument: evidence of evil in the world means the omnipotent and perfect power is compromised and therefore cannot exist.¹⁴ So we have Hume not denying the necessary existence of God, but saying, via his empirical observation of evil in the world, that he cannot possibly exist. Yet, as we have established, empirics can never wholly affirm anything. As I believe we all have good grounds to deduce things from analytical proofs – such as the truths of

¹⁴ The problem of natural evil and the existence of God is dealt with in chapter 6.

geometry, economics and evolution – I cannot agree with Hume. I agree with this assessment by Daniel Dombrowski, a leading process theologian:

One of the features of the Ontological argument that continues to make it interesting is that, even if Hume is correct that one cannot prove the existence of something *a priori* unless the contrary implies a contradiction,¹⁵ he has still not thereby disproved the argument. This is because, according to the defenders of the argument, the denial of God's necessary existence does imply a contradiction. Thus Hume's criticisms do not in themselves destroy the modalized version of the argument.¹⁶

Here is another great observation by Dombrowski:

There are statements regarding existence whose negation it is impossible to conceive, contra Hume. For example, there is the statement that 'Something exists.' There seems to be no experienceable alternative to the existence of something in that the very experience of the alternative would exist.¹⁷

What God is and is not

In *Proslogion*, Anselm also makes some subtle points that say much about what he thinks God is and is not. First of all, God is immaterial, therefore not bounded by time or place: 'Everything that is at all enclosed in a place or a time is less than that which is subject to no law of place or time. Therefore, since nothing is greater than you, you are not confined to any place or time; you exist everywhere and always.'¹⁸ Uniquely unbounded, the Lord is the oneness of reality.

God is the 'inaccessible light where he dwells'.¹⁹ Understanding him is not possible: like looking at the sun's direct light, the Lord's light is blinding. You also cannot divide the Lord into parts to understand him, as that would diminish his perfection: 'Instead you exist as a whole in every place, and your eternity exists as a whole always.'²⁰ In addition, if God becomes finite, he ceases to be the perfect

¹⁵ Later, I will put forward the case that you can prove something *a priori* from a notion of its existence, when we look at the foundation of economics, geometry and evolutionary biology, which are all grounded on the *a priori* axioms that have a meaning in reality. They are Kantian elusive synthetic *a priori* judgments, as we will shall come to see.

¹⁶ Dombrowski, *Rethinking the Ontological Argument*, pp. 27–28.

¹⁷ *Ibid.*, p. 30.

¹⁸ Anselm, *Proslogion*, ch. 13.

¹⁹ *Ibid.*, ch. 16.

²⁰ *Ibid.*, ch. 18.

ground for being. An unbounded God implies that all experience of anything is part of him:

So it is not the case that yesterday you were and tomorrow you will be; rather, yesterday, today and tomorrow you are. In fact, it is not even the case that yesterday, today and tomorrow you are; rather, you are simply outside time altogether. Yesterday, today, and tomorrow are merely in time. But you, although nothing exists without you, do not exist in a place or a time; rather, all things exist in you. For nothing contains you, but you contain all things.²¹

So is this ‘the age of the age’ or the age of the ages? For just as an age of time contains all temporal things, so your eternity contains the very ages of time. This eternity is indeed ‘an age’ because of its indivisible unity, but it is ‘ages’ because of its boundless greatness. And although you are so great, Lord, that all things are full of you and are in you, nonetheless you have no special extension, so that there is no middle or half or any other part in you.²²

A reply on behalf of a fool

The Benedictine monk Gaunilo also objected to Anselm’s ontological argument, expressing his views in his *Reply on Behalf of the Fool*. At this juncture, a quote from A. C. Grayling, comes to mind, from his ‘Book of Wisdom’:

No one came to be wise who did not know how to revise an opinion.

The wise change their minds when facts and experience so demand. The fool either does not hear or does not heed.

But the wise man knows that even a fool can speak truth.²³

Gaunilo argued that he could understand a lot of false things, but this did not make them real:

Unless perhaps it is established that this being is such that it cannot be had in thought in the same way that any false or doubtful thing can, and so I am not said to think of what I have heard or to have thought, but to understand it and to have it in my understanding, since I cannot think of it in any other way except by understanding it.²⁴

²¹ Ibid., ch. 19.

²² Ibid., ch. 21.

²³ Grayling, *The Good Book*, ch. 4, p. 14.

²⁴ In Anselm, *Proslogion*, p. 28.

For Gaunilo, this argument or proof is only for someone who already believes in the existence of God.

He continues:

And one can seldom or never think of any truth solely on the basis of a word. For thinking of something solely on the basis of a word, one does not think so much of the word itself (which is at least a real thing: the sound of letters or syllables) as of the meaning of the word that is heard.²⁵

Gaunilo is searching for a fact, in reality:

First I must become certain that this thing truly exists somewhere, and only then will the fact that it is greater than everything else show clearly that it also subsists in itself.

For example, there are those who say that somewhere in the ocean is an island, which because of the difficulty – or rather, impossibility – of finding what does not exist, some call ‘the Lost Island.’ This island (so the story goes) is more plentifully endowed than even the Isles of the Blessed with an indescribable abundance of all sorts of riches and delights. And because it has neither owner or inhabitant, it is everywhere superior in its abundant riches to all other lands that human beings inhabit. Suppose that someone tells me this. The story is easily told and involves no difficulty, and so I understand it. But if this person went on to draw a conclusion, and say, ‘You cannot any longer doubt that this island, more excellent than all others on earth, truly exists somewhere in reality. For you do not doubt that this island exists in your understanding, and since it is more excellent to exist not merely in the understanding, but also in reality, this island must exist in reality. For if it did not, any land that exists in reality would be greater than it. And so this excellent thing that you have understood would not in fact be more excellent.’ – If, I say, he should try to convince me by this argument that I should no longer doubt whether the island truly exists, either I would think he was joking, or I would not know whom I ought to think more foolish: myself, if I grant him his conclusion, or him, if he thinks he can establish the existence of that island with any degree of certainty, without first showing that its excellence exists in my understanding as a thing that truly and undoubtedly exists and not in any way like something false or uncertain.²⁶

²⁵ Ibid., p. 30.

²⁶ Ibid., pp. 31–32.

We see now a veering away from the tight path Anselm suggested. In trying to make God a finite being, he ceases to exist. Anselm and Gaunilo are talking at cross purposes. The God of Anselm is not a big man in the sky or up some mountain, but pure being itself, the ground for our existence and everything finite in experience, *the oneness of reality*.

In 'Anselm's Reply to Gaunilo', Anselm argues that the act of thinking of a perfect being means that a perfect being exists: 'But I say with certainty that if it can be so much as thought to exist, it must necessarily exist.'²⁷ He then reiterates that you must be a fool if you do not then accept what is suggested. Gaunilo argues that you can understand the words and symbols expressed, but this does not necessarily mean you have understood the words. Anselm points out the contradiction in this: if you understand, you understand. Anselm also deals with Gaunilo's example of the lost island by pointing out that concept of absolute perfection only applies to the argument for God and nothing else:

But you say, that this is just the same as if someone were to claim that it cannot be doubted that a certain island in the ocean, surpassing all other lands in fertility (which, from the difficulty – or rather impossibility of finding what does not exist, is called 'the Lost Island'), exists in reality, because someone can easily understand it when it is described to him in words. I say quite confidently that if anyone can find for me something existing either in reality or only in thought to which he can apply this inference in my argument, besides that than which a greater cannot be thought, I will find and give to him that Lost Island, never to be lost again.²⁸

Like the monk Gaunilo, Dawkins is well aware he can think of such a concept as the perfect being, and that it exists in his mind, but for Dawkins it is 'infantile' word play and such 'logomachist trickery' that it offends him aesthetically. He argues that we may understand the words 'Lost Island', most perfect and 'surpassing all others', but put them together and think about them and you tie yourself up in contradictions. Is the Most Perfect Island a random shape, any shape? Does it have all the resources of the world, or some? If some, which ones? Does what it excludes make it less perfect? Could there therefore be a more perfect one? Being finite, it ends up as a hopeless contradiction – it is mere words.

²⁷ Ibid., p. 36.

²⁸ Ibid., p. 39.

Dawkins draws to his readers' attention to an 'ironic proof' by the Australian philosopher Douglas Gasking that 'God does not exist', adding that 'Anselm's contemporary Gaunilo had suggested a somewhat similar reduction.'²⁹ I, myself, cannot find this in Gaunilo's work. Dawkins continues:

1. The creation of the world is the most marvellous achievement imaginable.
2. The merit of the achievement is the product of (a) its intrinsic quality, and (b) the ability of its creator.
3. The greater the disability (or handicap) of the creator, the more impressive the achievement.
4. The most formidable handicap for a creator would be non-existence.
5. Therefore if we suppose that the universe is the product of an existent creator we can conceive a greater being – namely, one who created everything while not existing.
6. An existing God therefore would not be a being greater than which a greater cannot be conceived because an even more formidable and incredible creator would be a God which did not exist.

Ergo:

7. God does not exist.³⁰

I find this *reductio* quite absurd: 4 would put an end to creation; 5 is contradictory, as something non-existent cannot create anything at all; 6 is illogical and 7 therefore cannot follow.

Dawkins draws to our attention to website called 'Atheists of Silicon Valley',³¹ the content of which represents the height of infantile discussion on what is the most important question to confront us: 'Is there a God?' It is surprising that such an eminent scientist should be prepared to endorse such a site when he could instead cite Kant and Hume's impressive attacks on the argument of Anselm. Really, Dawkins is scraping the bottom of the barrel.

In the next chapter we will examine the Kantian argument against the ontological proof, along with Hegel's refutation of it.

²⁹ Dawkins, *The God Delusion*, p. 83.

³⁰ Ibid., p. 83.

³¹ Ibid., p. 85. See <http://www.godlessgeeks.com/>, accessed January 26, 2017.

Chapter 9

The Collingwood Versus Ryle Debate

The great philosopher Gilbert Ryle succeeded R. G. Collingwood as the Waynflete Chair of Metaphysical Philosophy at Oxford. Both men wrote extensively on the ontological argument, with Ryle launching a scathing attack on Collingwood most notably in the journal *Mind* in the mid-1930s. Another noted philosopher, Harris, rebutted Ryle, with a final word on the matter coming from Ryle. As far as I am aware, Collingwood remained silent on this occasion. Ryle's article, 'Mr Collingwood and the Ontological Argument', was written to refute Collingwood's views stated in his *Essay on Philosophical Method*, with special reference to his chapter on 'Philosophy as Categorical Thinking'. Here Ryle suggests:

that philosophical propositions are in a peculiarly close way connected with what exists; in a way, indeed, in which the empirical sciences are remoter from what exists than philosophy is. And a part of his theory is that philosophy can by the Ontological Argument establish the existence of a very important somewhat and that philosophy in general aims at discovering – and not other sort of enquiry can discover – the nature of the somewhat. So that, if Mr Collingwood is right, constructive metaphysics is the proper business of philosophy, and Hume and Kant were wrong in so far as they maintained that a priori arguments cannot establish particular matters of fact.¹

Collingwood, like Plato and Kant before him, would argue that philosophy cannot start with hypotheticals; hypotheticals belong in the empirical world of fact where they can be tested and verified. Philosophy is in the business of its own suicide: it identifies entire subject areas of knowledge which eventually move into the realm of science so that they can be tested. For example, economics grew out of the study of the political economy, which grew out of the study of politics, which grew out of the study of political philosophy, which grew out of philosophy. Starting with an absolute presupposition, such as 'the universe has uniform laws' or 'God is that than which nothing greater can be thought', would therefore pose no problems for Collingwood.

¹ Ryle, 'Mr Collingwood and the Ontological Argument', p. 137.

Before we delve into Collingwood's argument in more detail, I will establish the whole body of economics from an *a priori* proposition – just to show that it can be done in the far lesser matter of economics than the matter of God's existence!

The a priori method

First of all, how do you correctly reason using the *a priori* method rather than the induction method of the scientists?

Aristotle worked out that there were three laws of logic, and the formal explanation is as follows:

1. $A=A$: The Law of Identity. A table is a table because it just is so.
2. Not (A and not A): The Law of Non-Contradiction. If I am being boring, then it is not the case that this book is not boring.
3. A or not A : The Law of the Excluded Middle. If you have two contradictory properties – that is, green and not green, all things are either one of the two, green or not green, and certainly not both.

Any argument that contradicts the above needs to be discarded.²

A great example of how you can use logic to reason correctly is in mathematics. For instance, we all know that if $2 \times X = 20$, X must be 10; if you tried to argue it any other way, you would be in conflict with the laws of logic. However, any which way you manipulate the equation, as far as a logical argument is concerned, it will always lead to a truthful answer as the premise is correct.

Synthetic a priori

This is a powerful method for establishing truthful propositions in logic that can only be refuted should their premise or the deductions from them fall foul of one of Aristotle's *a priori* laws of logic. Not only are the truths of mathematics rooted in the *a priori*, so also are the truths of the human sciences. For example, the Austrian polymath Ludwig von Mises shows in his masterful book *Human Action* how all the laws of economics can be deduced from the axiom that *humans act purposefully*. As Mises shows, in order to be, we act purposefully. Not being, we would not act; indeed, we would not exist. We act to satisfy our most urgent needs first, then our second most urgent needs, and so on. Preferences are ranked in a hierarchy, with the

² See, for example, 'Laws of thought', *Encyclopedia Britannica*, accessed 28 May 2017, www.britannica.com/topic/laws-of-thought.

most urgent needs being satisfied first. According to this hierarchy of wants, we see a downward-sloping demand curve for each and every choice we make: we always want to do what we are doing in the now, more so than the thing we are going to do later.³ The downward-sloping demand curve, which forms one of the key laws of economics, is solely derived from this axiom – that humans always have to act purposefully. A body of other laws can then be deduced from this axiom. So, an analytic *a priori* thought is the foundation of the laws of economics. Ryle was clearly unaware that this is possible.

Lord Lionel Robbins, in his 1932 book *An Essay on the Nature and Significance of Economic Science*, shows in very clear terms how all the laws of economics are derived from the *a priori* thought process. No data is needed to establish that a demand curve is always downward sloping. This is what Kant called a synthetic *a priori* proposition. *A priori* knowledge, for economics and for mathematics itself, contains real truths.

Just as Pythagoras's Theorem is implied via the concept of a right-angled triangle – and we knew about the concept of the right-angled triangle before Pythagoras 'discovered' his theorem – so, too, do the laws of economics flow from the one irrefutable axiom that humans act purposefully. It is a bit like saying Darwin 'discovered' the Theory of Evolution, when what he actually did was articulate it and find plausible data sets to help explain it to the skeptical mind.

Back to Collingwood vs Ryle

Although Ryle makes the bold claim that 'a priori arguments cannot establish particular matters of fact',⁴ I have just shown that the foundation of economics does just that. This is also the case for Euclidian engineering, mathematics and the algorithm of evolution. So, Ryle would appear to be on a sticky wicket.

Collingwood says:

thought when it follows its own bent most completely and sets itself the task of thinking out the idea of an object that shall completely satisfy the demands of

³ Ludwig von Mises, *Human Action* (New Haven CT: Yale University Press, 1949), ch 7, accessed January 26, 2017, <http://www.mises.org/humanaction/chap7sec1.asp>.

⁴ Ryle, 'Mr Collingwood and the Ontological Argument', p. 137.

reason may appear to be constructing a mere ens rationis,⁵ but in fact is never devoid of objective or ontological reference.⁶

For Collingwood, the ontological argument of Anselm fails because you need to have faith to hold it, as you do with all absolute presuppositions. Nevertheless, 'the substance of his thought survives all objections.'⁷

The ontological argument states that in the case of an ultimate being, its 'perfectness' necessitates existence. There is a contradiction in denying it, as it would not be perfect or necessary, as we have discussed. Ryle passionately disagrees:

There is no way of arguing validly to the existence of something of a certain description from the non-empirical premises, namely from premises about the characters combination of which is symbolised by the description. There is no way of demonstrating a priori particular matter of fact. Inferences to the existence of something, if there are any, must be causal inferences and inferences from the existence of something else. Nor are there any 'demand of reason' which can make us accept as proofs of existence combinations of propositions which contain an overt fallacy.⁸

I cannot see how Ryle's position holds in the light of the proof from the case of economics: you can take a thought, in all its *a priori* glory, and apply it to reality. Take the evolutionary algorithm, a splendid thought that has direct application to reality. Collingwood, as we have seen in my discussion of the oneness of reality, shows how philosophy ends up totally committed to the fundamental ground of being, that which a theologian would call 'God', and a philosopher 'being'. God, or being, is unqualified by anything finite, as we have seen in the previous chapter in our look at the thoughts of Anselm as expressed in his *Proslogion*.

Ryle denies that the role of philosophy is to eject propositions that can be subjected to testing to science, so that all you are left with is the study of matters for which there is no proof either way. He does not give his reasons, other than to say:

⁵ Ens rationis: an abstract logical entity usually having no positive existence outside the mind (Merriam Webster online, accessed 28 May 2017, <https://www.merriam-webster.com/dictionary/ens%20rationis>).

⁶ Quoted by Ryle, 'Mr Collingwood', pp. 141–42.

⁷ Ryle, 'Mr Collingwood', p. 142.

⁸ Ibid., p. 147.

‘I see no force in the argument that philosophy would have no subject matter unless it had access to a special entity, I do not find myself alarmed by this threat.’⁹

A year later, in the same journal, *Mind*, E. E. Harris¹⁰ defended Collingwood’s version of the ontological argument, tracing it to Hegel’s refutation of Kant on the matter. Harris believes Ryle misses the point of Hegel’s ontological argument.¹¹ This all rests on the Kantian observation that existence cannot be made a ‘predicate’, which supposes existence is not part of the character of the subject which is asserted to exist.¹² Harris repeats Ryle’s question: ‘How can particular matters of fact be deduced from *a priori* or non-empirical premises?’ And he concludes, as we did when discussing economics, that you can derive a matter of fact from *a priori* premises.

Harris says:

I should be unwilling to agree that it is entirely and finally true, but so much may be admitted to say, in bare abstraction, that X exists adds nothing to our conception of X. Hence Hegel is led to remark, ‘if we look at the thought it holds, nothing can be more insignificant than being.’¹³

Simply put, proof of God’s existence is of no philosophical importance; it is an empty concept. Many a theologian, I suspect, is minded to accept this line of argument of Hegel’s. Alternatively, they would spell out revelation and the evidence of Scripture as giving us an understanding of God. I would not disagree, but rather say the two play their role and are not mutually exclusive: the ontological argument gives you a rational argument as to why you should hold your beliefs, while the argument from Scripture is evidential.

⁹ Ibid., p. 146.

¹⁰ A twentieth-century, South African-born philosophy professor who taught in the RSA, UK and USA.

¹¹ I have not read sufficient Hegel to know if this is a correct rendition of his ontological argument; I only know of Hegel’s refutation via Harris.

¹² Harris’s view is not a popular one. Noted philosopher-theologians, like Richard Swinburne (a leading Christian apologist), say: ‘It is not incoherent to claim that God does not exist. Contra the ontological argument the word, “God” and “exist” do not suggest a true proposition by just what they say. What makes it true, if it is true, is something else, “how things are”’ (Swinburne, *The Coherence of Theism*). Noted philosopher-theologian David Conway says: ‘I do not regard the Ontological Argument as being anywhere near as formidable an argument for God as, so I shall argue, are each of the two other arguments for God [cosmological and design arguments] on which proponents of the classical conception of philosophy have always been principally reliant’ (Conway, *The Rediscovery of Wisdom*).

¹³ Harris, ‘Mr Ryle’, p. 475.

In response to Ryle's argument that 'matters of fact' cannot be deduced from 'non empirical' premises, Harris replies: 'I shall assume, therefore (I hope without doing violence to his view) that Mr Ryle is prepared to admit to a proper proof of existence the sort of premises which states a fact given in sense-perception.'¹⁴

Harris asks us to ponder the existence of the pen he is writing with. You can feel it, you can see the marks on the paper and so on and so forth. None of these factors prove the existence of the pen in isolation, only when taken together as a whole:

The fact of the existence of the pen is proved by the mutual corroboration of several perceptions which together provide a body of evidence.

The establishment of a fact, then, depends first on a body of evidence, and secondly on the ordered system of the experienced world. To prove the existence of a thing we must show on sufficient evidence that the thing is a part of the system of things in space and time. The evidence is sufficient when to deny the conclusion to which it leads would disorganize the system.¹⁵

He then makes the following point, attributed to the philosopher Bernard Bosanquet in *Implications and Linear Inference*: 'The necessity of the inference is due to the system, and lies ultimately in the impossibility of rejecting the system in its entirety.'¹⁶

Harris continues:

1. Mere sense-perception cannot prove the existence of anything other than momentary consciousness.
2. No judgment of perception by itself can prove a matter of fact; nor can any number of such judgments, except by demonstrating a body of evidence from which we can infer to the fact question.
3. This is true even when the matter to be proved is the existence of something at the time present to the senses.¹⁷

So, it is *not* the empirical character of the premises, 'but the systematic character of the evidence which they contain.'¹⁸ When you are faced with choosing this fact or nothing, you commit 'intellectual suicide': 'In other words, whatever particular

¹⁴ Ibid., p. 475.

¹⁵ Ibid., p. 476.

¹⁶ Ibid., pp. 476–77.

¹⁷ Ibid.

¹⁸ Ibid.

facts we may deny or doubt, what we cannot possibly deny or doubt is the whole world of fact, for upon it any denial must depend for its validity and any doubt for its justification.’¹⁹

Hegelians maintain that there is just one absolute whole reality, which encompasses both physical and non-physical things – observed or otherwise.²⁰ To deny a finite part of this whole is one thing, but to deny the whole is far more serious matter. This is the crux of the ontological argument. If God is the most perfect being, he is the whole of reality, ‘and the existence of that whole our intellect demands as the logical condition of intelligibility of all our experience.’²¹ The essence of God is a total all-inclusiveness. There can be no denial of the existence of God, ‘for there is nothing on which such a denial could rest.’²²

Ryle may counter: just because the intellect demands a complete system does not mean there *is* a complete system. But then you would be left with a system of incoherent chaos: ‘our intellect demands an absolutely whole system of reality and if the satisfactions of this demand is the sine qua non of the validity of all arguments, including proofs of existence of finite things, then the absolutely complete system of reality must be.’²³

Harris is arguing much like Collingwood and Anselm (but is not understood by Gaunilo, Kant and Dawkins): if we conceive of God in finite terms, then Ryle’s claim has plausibility. However, the conception of the whole is a reality whose existence cannot be doubted. This is a truth that both Kant and Ryle overlook.

Whilst Anselm’s argument establishes a proof of God, who must not be finite (i.e. infinite, or as Hegel calls it, the Absolute, that is also everything), Hegel holds that

¹⁹ Ibid.

²⁰ Hegel was an early nineteenth-century German Idealist. For the purposes of this book, we are only concerned with one part of his enormous body of work. He thought that truth could only be coherently grasped when the whole entirety of reality was taken into consideration. Everything is relational in this reality, and there is just one thing, the whole of reality, of which we are parts. In this respect, he was a Monist. Whilst Kant thought that your mind influenced your understanding of what you observed in everyday existence – all those contingent things that have a prior cause – he thought that it was impossible to think of anything existing with no prior cause, like God for example. Hegel would assert that this is pure being, the absolute or God, and you could know about it as you were one part of this great big set of relationships that encompasses all of us to form this one (Monist) reality. God was not transcendent to reality, but reality itself. A good summary can be found here: <https://plato.stanford.edu/entries/hegel/>.

²¹ Harris, ‘Mr Ryle’, p. 447.

²² Ibid., p. 478.

²³ Ibid., p. 478.

this understanding of God is empty of any meaning. God is indeed everything, and that is what we really need to be discussing to gain a fuller understanding of him. According to Hegel, 'Existence is ... a term too low for the Absolute Idea, and unworthy of God.'²⁴

Harris concludes, much as Anselm did, with: 'God is not in existence so much as existence is in God.'²⁵

A year later, once more in *Mind*, Ryle responds and accepts he was attacking a version of the ontological argument that was not Collingwood's – indeed, it was the same attack launched by Kant and it was off the mark. He then goes on to claim that Harris believes Collingwood is arguing 'a variant of the Cosmological Argument or the argument *a contingentia mundi*':

The difference is that the Cosmological Argument is not a scientist's argument but a philosophical argument. And, as Kant saw, it presupposes the Ontological Argument (in the form which I tried to refute it). True, it covers its tracks by reassuringly introducing an empirical premises about the whole world of fact or the world of finite experience. But this enters into the argument only in this way, that there is now alleged to be a contradiction not just in the denial of the existence of the Absolute but in the conjunction of this denial with the affirmation of the existence of our world of fact logically implies the existence of the Absolute. The former is a part, or an aspect, or an appearance of the latter.²⁶

Ryle continues:

existence propositions are synthetic, and are never logically necessary. So no existence-proposition is philosophically intelligible, if this is what it means to call something philosophically intelligible.²⁷

That which Ryle calls philosophically intelligible 'will have to be consistent with the admission that no existence-proposition can be logically necessary or demonstrable from *a priori* premises or such that its denial involves a contradiction'. However, I believe we have demonstrated, using the example of economics, that you can have something that is empirical and matter of fact, and also have its laws entirely deduced from an *a priori* axiom – the axiom that humans act and they act

²⁴ Ibid., p. 479.

²⁵ Ibid., p. 479.

²⁶ Ryle, 'Back to the Ontological Argument', p. 54.

²⁷ Ibid., p. 55.

purposefully, as we have already discussed. It is a true synthetic *a priori* proposition.

Ryle continues:

There can be no proof from a priori premises that there exists something of which the world of finite experience is an aspect, part or appearance.

To summarize: A philosophical argument for the existence or reality of something must be one of two forms.

1. Either it argues that there is a contradiction in the denial of existence or reality of such things, which is the Ontological Argument proper.
2. Or it argues that something is empirically known to exist but that it is logically impossible for anything to exist unless either its existence is logically necessary or its existence logically implies that something else exists of logical necessity.

Neither holds water if ‘there exists a so and so’ is a synthetic proposition or one the negation of which contains no contradiction and so is logically possible.

If I were to succeed in making only one contribution to this debate, it would be to establish the point that what is at stake in it, as indeed in every debate about any subject matter other than logic and mathematics, is not knowledge but rationality, and that ‘proof’ outside formal systems of logic and mathematics means ‘test’; so that the only proposition we are entitled to accept as premises for action and further thought are those that it is rational to accept because they have passed the test for reason or observation or both.²⁸

At the end of the day, perhaps Ryle was not aware that the foundations of mathematics, Euclidian geometry, economics or evolutionary biology were *a priori*, which then moved to fact.

The straw man

Our most impressive academic high priest of atheism, A. C. Grayling, opines in a similar tone.²⁹ Theists hold that since you cannot prove a negative, there is a chance that God exists. Grayling describes proof as the formal deductive proof of the syllogism:

²⁸ Ibid., p. 57.

²⁹ Grayling, *Thinking of Answers*, pp. 32–34.

Demonstrative proof, as just explained, is watertight and conclusive. It is a mechanical matter; computers do it best. Change the rules or axioms of a formal system, and you change the results. Such proof is only to be found in mathematics and logic.

Proof in all other spheres of reasoning consists in adducing evidence of the kind and in the quantity that makes it irrational, absurd, irresponsible or even lunatic to reject the conclusion thus being supported.³⁰

Then, enter the great Straw Man analogy:

For a simple case of proving a negative, by the way, consider how you prove the absence of pennies in a piggy-bank. You break it open and look inside: it is empty. On what grounds would you assert nevertheless that there might possibly still be pennies in there, only you cannot see or hear or feel or spend them?³¹

At this point Grayling, the committed atheist, will trot out this little vignette from Carl Sagan in *The Demon-Haunted World: Science as a Candle in the Dark*:

‘A fire-breathing dragon lives in my garage.’ Suppose (I’m following a group therapy approach by the psychologist Richard Franklin) I seriously make such an assertion to you. Surely you’d want to check it out, see for yourself. There have been innumerable stories of dragons over the centuries, but no real evidence. What an opportunity!

‘Show me,’ you say. I lead you to my garage. You look inside and see a ladder, empty paint cans, an old tricycle – but no dragon.

‘Where’s the dragon?’ you ask.

‘Oh, she’s right here,’ I reply, waving vaguely. ‘I neglected to mention that she’s an invisible dragon.’

You propose spreading flour on the floor of the garage to capture the dragon’s footprints.

‘Good idea,’ I say, ‘but this dragon floats in the air.’

Then you’ll use an infrared sensor to detect the invisible fire.

‘Good idea, but the invisible fire is also heatless.’

You’ll spray-paint the dragon and make her visible.

³⁰ Ibid., p. 33.

³¹ Ibid., p. 34.

‘Good idea, but she’s an incorporeal dragon and the paint won’t stick.’ And so on. I counter every physical test you propose with a special explanation of why it won’t work.

Now, what’s the difference between an invisible, incorporeal, floating dragon who spits heatless fire and no dragon at all? If there’s no way to disprove my contention, no conceivable experiment that would count against it, what does it mean to say that my dragon exists? Your inability to invalidate my hypothesis is not at all the same thing as proving it true. Claims that cannot be tested, assertions immune to disproof are veridically worthless, whatever value they may have in inspiring us or in exciting our sense of wonder. What I’m asking you to do comes down to believing, in the absence of evidence, on my say-so.³²

The dragon is God, the garage owner the ignorant theist, and the questioner the great rational atheist, champion of reason. But, interestingly, if you strip this allegory of all its religious and theological connotations, it is clear Sagan is committed to the ontological argument. He presupposes an orderliness in his whole world of fact to be able to even concoct his story. The underlying fundamental ground for being that Sagan is part of and cannot remove himself from is not taken into account in this allegory. The God he should be looking for is not found in some finite place like a garage, but is the undeniable fundamental ground for being that gives coherence to the world. Theologians of the monotheistic religions have never presented God as a finite thing like a dragon in a garage. Rather, for many monotheists, God is an *a priori* thought whose demonstration is borne out by the very thought of it itself, as we have discussed – just like the foundations of economics, geometry and the evolutionary process. Sagan should be focusing on the cosmological and design arguments if he is looking for empirical proofs or not-proofs, rather than postulating mythical dragons to prove they are mythical on all tests of demonstrative proof that you can apply to a finite thing. This is a classic straw-man argument that does not advance the debate further at a serious level concerning the cause of the creation of the universe.

Another example of a straw man diversion is ‘The great unicorn hunt’ hosted by Camp Quest:

³² I quote from the RationalWiki website (‘The Dragon in My Garage, last modified December 28, 2016, http://rationalwiki.org/wiki/The_Dragon_in_My_Garage#cite_note-3).

Astronomy, critical thinking, [philosophy](#) and pseudo-science are covered at Camp Quest.

One of the most popular exercises is the invisible unicom challenge. The children are told there are two invisible unicorns who live at Camp Quest but that they cannot be seen, heard, felt or smelt, and do not leave a trace. A book about them has been handed down through the ages but it is too precious for anyone to see.

All counsellors – as the adults are called – are said to be staunch believers in these unicorns.

Any child who can successfully prove that the invisible unicorns do not exist is rewarded with a prize: a £10 note with a picture of Charles Darwin on it signed by Richard Dawkins, or a ‘godless’ \$100 bill, printed before 1957 when ‘In God We Trust’ was added to paper currency in the US.

Since this challenge began in 1996, the prize has been unclaimed.

The camp’s director, Samantha Stein, said that the exercise had elicited all sorts of interesting responses from the children about the burden of proof. One child had insisted that it was up to the counsellors to prove the unicorns did exist. Another said it was just impossible to prove.

Stein said that the exercise was not about trying to bash the idea of God – just to make the children think critically and rationally.³³

Here we have another straw man diversion. Using all the demonstrative proofs of logic and science, you can argue that there are no grounds for holding a belief in a mythical, finite and invisible pair of unicorns. However, the analogy of a pair of unicorns being like God is as false as Sagan’s dragon. They are finite, not infinite. If they were infinite, they would permeate all of reality, as God does and is our underlying fundamental ground for being. If you do away with God, you do away with the whole body of fact, the whole of reality itself.

Some final thoughts on the ontological argument

As we have just seen, the rationality of the atheist is considered to be near sacred in status. The fact that this rationality lies on a firm bedrock of faith has passed the atheist by. A. C. Grayling applies his penetrating rationality to what he calls the

³³ Morris, ‘Richard Dawkins: “The Great Unicorn Hunt”.’

God Argument, and we will now take a closer look at his understanding of the Ontological Argument.

The proposition ‘god exists’, if it means anything, has a ‘gap left by the point-millions-of-zeros-one probability’³⁴ to allow religious views to squeeze through. A. C. Grayling says those who argue religion is not testable essentially should accept that religion and the belief in God are meaningless. What Grayling is doing is applying Popper’s falsification theory, which is used in science, to the non-scientific arena. Popper argued that if a proposition is not potentially refutable, it is not a meaningful proposition. However, God is not studied via the tools of science, but via reason. He is untestable in that respect, for sure. However, the large body of evidence of the Bible stories, especially concerning the resurrection, and the many hundreds of prophetic sayings contained in the Bible, cannot be dismissed so easily as they are eminently testable. I personally believe that much of this documentation would be considered good evidence, good witness testimony, in any court. Whether you choose to believe it or not is up to you, but it is just as empirically based, just as testable as any other slice of our history.

Meanwhile, the rational ontological argument, in my opinion, survives very much intact. I am satisfied that the debate in *Mind* demonstrates that we can have a rationally thought-out concept of the perfect being, and that it exists in both mind and reality. What this being is, is of course another question. The idea of God can be rationally obtained via the mind with the knowledge that he has reality in our experience of the world/universe around us. It can also be said with the same certainty that a scientist assumes conformity in the universe. All of these ideas are ultimately presupposed by reason, which you can only hold, in the final analysis, on faith. Like the action axiom, the foundation of economics, as with the ontological argument: you have a performative contradiction if you attempt to deny it.

In the final analysis, when we are being most reasonable, we know deep down that we hold our views by reason, and what it discovers for us. However, this reason, when contemplative, even at its most mysterious and engaged in serious reflection, terminates in faith. Anselm had faith in order to understand. I thought I had reason in order to understand, but I now understand that it is faith that has given me reason to understand. As with all the so-called ‘proofs’ of God, I prefer to phrase it

³⁴ Grayling, *The God Argument*, p. 53.

differently and say that you can hold this God view with enough certainty, and be humble enough to accept your ignorance, and know it is held on faith which reason reassures you of. Like Aquinas and his Five Ways, this is another way to God.

A. C. Grayling has an interesting perspective on the ontological argument. He believes the argument needs to have a comparative element to it, so that its perfection can be assured to be the most perfect.³⁵ If we go back to the core part of Anselm's proposition, 'a being than that which no greater can be conceived', Grayling challenges us to carry out a mental comparison of things and climb up the ladder from where we stand to the level of divine perfection. He then asks: which is more perfect? What compares with what? This is an attempt to understand perfection as a finite comparable. Grayling says the Anselm type of argument fails as it seeks degrees of perfectness, with God being the most perfect of potentially non-perfect things. There is, of course, nothing remarkable about being the most perfect of imperfect things. I believe Grayling is saying that in the case of the thought of absolute perfection, even if we did accept perfection as an absolute, with imperfection as its opposite, we only know degrees of imperfection. He then proceeds to dispose of the Anselm-style arguments, noting that there is nothing in our world, even in our minds, that can make us observe an example of unqualified perfection. This is an empirical way of disposing of this argument.

As we have seen in my discussion of the ontological argument above, I think, unlike Grayling, that you *can* conceive of absolute perfection; it is a coherent analytical statement. If it also tells us something in addition to what is contained in its coherent concept, then it becomes a meaningful analytic/synthetic proposition. Anselm never invokes the thought of comparing *this* level of perfection with *that*. For, as we have seen in *Proslogion*, an angel, as a created being, or a saint, assumed as created, is finite and thus limited in their perfection. The absolute standard of perfection has no limitations; it is perfect.

Grayling would argue that there are contradictions in the term 'omnipotent': 'Could an omnipotent being eat itself.'³⁶ I would argue it is never possible to do impossible things; this is not a restriction on omnipotence, but a function of reality. There is no qualification to omnipotence, just a better understanding of what that term contains: the ability to do anything possible is, by definition, not an ability to

³⁵ Ibid., p. 85.

³⁶ Ibid., p. 86.

do impossible things, as they are just that – impossible. In the words of the philosopher and theologian, Swinburne: ‘A logically impossible action is not an action. It is what is described by a form of words which purport to describe an action, but do not describe anything which is coherent to suppose could be done.’³⁷

Another atheists’ favourite is the paradox of the stone analogy. The argument runs like this: if God makes the biggest stone that becomes too heavy to lift, his power is compromised by that and the fact that he cannot then make a bigger one.

Swinburn answers:

True, if an omnipotent being actually exercises (as opposed to merely possessing) his ability to bring about the existence of a stone too heavy for him subsequently to bring about its rising, then he will cease to be omnipotent ... But the omnipotence of a person at a certain time includes the ability to make himself no longer omnipotent, an ability which he may or may not choose to exercise. A person may remain omnipotent for ever because he never exercises his power to create stones too heavy to lift, forces too strong to resist, or universes too wayward to control.³⁸

I view this slightly differently. I would say this being is not physical in nature, so he does not do lifting; if you engage in trying to make God a physical human, with bulging muscles, you have missed the nature of God entirely. And, this being can unmake as well as make: this is ultimate power. I would argue too that this being can change whatever laws he sets up in our reality. This is true omnipotence. Any being that can create the entire cosmos, with all its coherent structure, can truly do anything, any which way, over and over again, by changing his creation.

Grayling finishes his discussion of the ontological argument with a reference to Plantinga’s conception of it, going on to suggest that:

1. the contention that theism is more consistent than atheism, as an orderly universe is assured by the latter and a disorderly one assumed by the latter, is a bizarre view
2. Ockham’s razor should be applied to Plantinga’s conception as the laws of conformity just *are*, and you do not need to insert a deity into the picture.

So, Grayling would be perfectly happy to delete the God part. leaving the assumed external, mind-independent world and the laws of nature just as they are. I find this ability to bin God, as it were, and insert some placeholders as just given, never

³⁷ Swinburne, *The Coherence of Theism*, p. 149.

³⁸ *Ibid.*, pp. 157–158.

questioning why they are there, to be positively mysterious for a rationalist like Grayling. These placeholders, then, become his Gods – the things he asserts as just given and never change, like the laws of logic. To me, this would seem an intellectual surrender in order to avoid assuming God.

Chapter 10

Richard Dawkins, Daniel Dennett and A. C. Grayling

While the New Atheists are described as ‘New’, their beliefs are as old as the theist/atheist debate itself. And, like the many atheists before them, they see it as part of their mission to expel, or at least seriously diminish, any theistic thought that has any influence in the public square. They view this theistic influence on life, especially public life, to be, on balance, so negative, that it justifies taking a very assertive, some would say aggressive, stance against it.

This body of thought has been steadily growing since the 1970s, but its popularity stepped up a gear after the 9/11 terrorist bombing, by Islamists, of the Twin Towers in New York. In this chapter, I will look at three prominent figures in this movement, of whom Richard Dawkins is the most celebrated. I have touched upon some aspects of his scientific work already, but in this chapter I will discuss his views in more detail.

Dawkins and his creedal statements

Dawkins does not have a lot of time for those who suggest that evolution is God’s preferred method of operation in his creation. He writes:

This is a transparently feeble argument, indeed it is obviously self-defeating. Organized complexity is the thing we are having difficulty explaining. Once we are allowed to simply postulate organized complexity, if only the organized complexity of the DNA/protein replicating engine, it is relatively easy to invoke it as a generator of yet more organized complexity ... But of course any God capable of intelligently designing something so complex as the DNA/protein replicating machine must have been at least as complex and organized as the machine itself.¹

One thing that makes evolution such a neat theory is that it explains how organized complexity can arise out of primeval simplicity.²

In the first quote, I suggest replacing the word ‘postulate’ with ‘speculate’, as this is a more accurate description of Dawkins’ pseudo-metaphysical approach. His

¹ Dawkins, *The Blind Watchmaker*, p. 141.

² *Ibid.*, p. 316.

unquestioning belief in his own pseudo-metaphysics can be likened to the very worst kind of religious thinking – for example, his supposition that a self-replicating DNA engine existing in a primordial soup gave rise to life on this planet.

Concerning the second quote, I would argue that we have no way of knowing whether the complexity we observe today arose out of a creation event characterised by simplicity. As we have established, you cannot sustain a world of physicality that is created by a physical thing, as this necessitates the explanation of another physical thing, and so on. As we observe physical things every day and believe they are real, to give them a rational grounding we must assume a God who is an immaterial being. If we do not, we have a causeless physical cause which, since cause is a property of being physical, means it would be lacking its cause and therefore not be physical. For that ‘being’ to create life as we know it, in that first cell, with all to come implied in it (the whole of life, past, present and future): this is an event of immense complexity. As there is nothing in our intelligence that can explain such an event in all its detail, the implication is that this creator is more intelligent than us and beyond our reach of explanation or even comprehension.

If he were to rethink his position, like another well-known professor from Oxford, Flew, we may see Dawkins abandoning his atheistic world view as it has no rational grounding. Then he could satisfy his religious yearnings by returning to the religion of his youth, with the rhythm, rituals, comfort and joy it clearly gave him in the past. ‘Richard Dawkins, the atheist scientist, admitted he is a “secular Christian” because he hankers after the nostalgia and traditions of the church,’ reported the *Telegraph* in 2014.³ Dawkins himself adds: ‘I would describe myself as a secular Christian in the same sense as secular Jews have a feeling for nostalgia and ceremonies.’

Daniel Dennett and his bizarre statements

Dennett is another of the high priests of atheism, often referred to as one of the ‘Four Horsemen of the New Atheism’ along with Richard Dawkins. Like Dawkins, Dennett is fond of hyperbole:

The philosopher Ronald de Sousa once memorably described philosophical theology as ‘intellectual tennis without a net,’ and I will readily allow that I have indeed been assuming without comment or question up to now that the net of

³ Knapton, ‘Richard Dawkins: “I am a Secular Christian”.’

rational judgment was up. We can lower it if you really want to. It's your serve. Whatever you serve, suppose I rudely return service as follows; 'What you say implies that God is a ham sandwich wrapped in tin foil. That's not much of a God to worship!'⁴

Before you appeal to faith when reason has you backed into a corner, think about whether you really want to abandon reason when reason is on your side ... Would you be willing to be operated on by a surgeon who tells you that whenever a little voice in him tells him to disregard his medical training, he listens to the little voice?⁵

That he holds his reason purely as a matter of faith does not seem to register with him, despite being a philosopher of distinction (and also a student of Ryle).

Dennett asserts that the God idea in humans is, in fact, parasitic:

Now Lancet Flukes (*Dicrocoelium dendriticum*), in order to complete their life cycle, have to get into the belly of a ruminant cow or sheep by commandeering a passing ant, climbing into its brain, and driving it up a blade of grass like all terrain vehicle, there the more likely to be eaten by a cow or a sheep. Incredibly smart. Of course the lancet fluke is stupid, but the strategy is brilliant. The lancet fluke doesn't even have a brain, really. It has the IQ of a carrot, roughly, I'd say. But the strategy that it engages in is very devious and very clever, and it's sort of spooky. Here we have a hijacker. We have a parasite that infects the brain and induces suicidal behaviour on behalf of a cause other than one's own genetic fitness. Spooky. Gee, I wonder if anything like that happens to us!⁶

Dennett envisions a parasite, virus or gene that infects us with God. He clarifies that it is not a 'worm' that infects us, but an idea, a meme jumping from one infected human to another one. In a spectacular piece of pseudo-metaphysics, he suggests:

wild memes of religion were fortunate to get themselves domesticated because they acquired stewards-people who were prepared to devote their lives to the health and spreading of those very ideas.⁷

Religion, to Dennett, might be metaphorically like the common cold. He suggests that just as you can rid yourself of the common cold, so also the God idea, and you need to do so if you are going to objectively study this matter scientifically. The

⁴ Dennett, *Darwin's Dangerous Idea*, p. 154.

⁵ Ibid.

⁶ Stewart, *McGrath and Dennett in Dialogue*, p. 22.

⁷ Ibid., p. 25.

meme concept was floated by Dawkins in 1976⁸ and has gained traction as a way of expressing how an idea travels, but no meme has ever been observed, to my knowledge. Yet this unobserved entity has become a core component of atheistic, naturalist propositions. Like all propositions, it should be tested, and as it does not exist, it should be discarded.

Dennett's blind, unreasoning faith in the atheistic meme is never discussed or explored: it is just assumed to be self-evidently true. Yet Dennett believes he is a true dispassionate, objective, reason-based observer. In an appeal for a full and proper discussion on religion, Dennett has declared: 'Don't play the faith card, but join the conversation.'⁹ But, I really wonder whether he will ever seriously question his faith in his objective-rationality-only model of the world? He represents his religion at its worst – an unthinking, unquestioning, blind faith in given, brute facts. Oh, how the (un)rationalist mind of Dennett lets himself down.

The Brights

I cannot finish this section without discussing Dennett's association with the Brights movement. Anyone can sign up and become a 'Bright', a person who has accepted the naturalistic world view and therefore, by definition, has no residual supernatural views lurking in their minds. Those who do are called 'Supers'. The following is an excerpt from the Brights website:

Why the international Brights movement?

- Way too much supernatural hokum in society.
(*Brights usually spot it quickly.*)
- Prevalence of nonsensical ideas.
(Brights care when we see absurdities given priority over reasonable real world facts.)
- Unjust privileging in society of people who embrace or tout groundless beliefs
(Brights are mindful of how institutions that have been organized around

⁸ Dawkins, *The Selfish Gene*, 1976.

⁹ Stewart, *McGrath and Dennett in Dialogue*.

these beliefs, particularly in the name of religion, are given unwarranted advantage.)¹⁰

It is clear that Brights who advocate random chance turning lifeless matter into consciousness, universes popping into existence out of nothing, multiple universes, endless universes, points of singularity of no density with all density compacted within, to no space at all, infinite existence and so on, have in their possession a large bag of diplomatic immunity into which they can place all their pseudo-metaphysical supernatural mumbo-jumbo. Not surprisingly, Dennett, Dawkins and Grayling are all listed on this website as ‘Enthusiastic Brights’.¹¹

When they are not attacking straw men, Brights talk about an egalitarian ‘civic vision’. I hope it is not the egalitarianism of their atheistic, socialist fellow travellers, which has resulted in the death of millions, as we will see in a later chapter. Rather, I hope it is like all the good religions, based on a belief that the Golden Rule – to treat others as you wish to be treated – runs through the DNA of everything you do in every aspect of your life, private and public.

What inflammatory nonsense to call yourself a ‘Bright’, anyway, as though everyone else is not bright. This smacks of eugenics, social Darwinism, and general supremacist views. Much as I put no blame on Darwin himself for eugenics, he did say the following:

With savages, the weak in body or mind are soon eliminated; and those that survive commonly exhibit a vigorous state of health. We civilised men, on the other hand, do our utmost to check the process of elimination; we build asylums for the imbecile, the maimed, and the sick; we institute poor-laws; and our medical men exert their utmost skill to save the life of every one to the last moment. There is reason to believe that vaccination has preserved thousands, who from a weak constitution would formerly have succumbed to small-pox. Thus the weak members of civilised societies propagate their kind. No one who has attended to the breeding of domestic animals will doubt that this must be highly injurious to the race of man. It is surprising how soon a want of care, or care wrongly directed, leads to the degeneration of a domestic race; but excepting in the case of man himself, hardly any one is so ignorant as to allow his worst animals to breed.

¹⁰ ‘Why the International Brights Movement?’, The Brights, accessed January 26, 2017, <http://www.the-brights.net/movement/reasons.html>.

¹¹ ‘Enthusiastic Brights (Page 1)’, The Brights, accessed January 26, 2017, <http://www.the-brights.net/people/enthusiastic/index.html>.

The surgeon may harden himself whilst performing an operation, for he knows that he is acting for the good of his patient; but if we were intentionally to neglect the weak and helpless, it could only be for a contingent benefit, with a certain and great present evil. Hence we must bear without complaining the undoubtedly bad effects of the weak surviving and propagating their kind; but there appears to be at least one check in steady action, namely the weaker and inferior members of society not marrying so freely as the sound; and this check might be indefinitely increased, though this is more to be hoped for than expected, by the weak in body or mind refraining from marriage.¹²

From Darwin's suggestion of preventing marriage between the weak and the inferior, you ultimately come to the perverse genetic experiments of Dr Mengele in Hitler's death camps and the ideology of a master race trying to cling to scientific respectability. The warning shots are there for all to see.

Grayling, the philosophical atheist

A. C. Grayling argues that in the absence of religion, we must subscribe to 'a naturalistic world-view, that is, a view to the effect that what exists is the realm of nature, describable by natural law. This is accordingly a world-view premised on observation, reason and science, and excludes any kind of faith-loving element.'¹³ For a philosopher of such calibre, it is surprising that he does not consider whether he holds all these matters as an article of blind faith.

He then goes on to define what he means by 'faith':

By 'faith' this is meant belief held independently of whether there is testable evidence in its favour, or indeed even in the face of counter-evidence. This latter is regarded as a virtue in most religion; in Christianity the case of Doubting Thomas is held out as illustrating the point.¹⁴

¹² Darwin, *The Descent of Man*, p. 161.

¹³ Grayling, *The God Argument*, p. 19.

¹⁴ Ibid. The passage from John 20:24–29 is as follows:

'Now Thomas, called the Twin, one of the twelve, was not with them when Jesus came. The other disciples therefore said to him, "We have seen the Lord."

So he said to them, "Unless I see in His hands the print of the nails, and put my finger into the print of the nails, and put my hand into His side, I will not believe."

And after eight days His disciples were again inside, and Thomas with them. Jesus came, the doors being shut, and stood in the midst, and said, "Peace to you!" Then He said to Thomas, "Reach your finger here, and look at My hands; and reach your hand here, and put it into My side. Do not be unbelieving, but believing."

Curiously, Grayling has misunderstood the story of Doubting Thomas. That Thomas doubts is not in doubt. Jesus provides him with empirical evidence of his resurrection by presenting his physical body for inspection by Thomas, whose doubt ceases when such evidence is presented. I suggest Grayling reads John 20:24–29.

He holds a belief in the mind-independent world (which I also do, but take on faith), the fundamental constants of which (the orderly nature of the universe, rationality and logic itself) are never testable. He is as religious and as faith-based as you can get, according to his own definitions.

Throughout his works, Grayling prefers to use ‘g’ as opposed to ‘G’ to signify God as he does not believe God exists but acknowledges ‘it’ as a sociological phenomenon. Substitute the word ‘Fred’ for ‘God’ and they have the same explanatory power, according to Grayling. Fred created the universe enters the same category as a Christian asserting that God created the universe.

The Good Book: Aping religion in literature

A. C. Grayling has written a secular bible.¹⁵ It is a fantastic testimony to a lifetime’s work and well worth a read. For this alone, he is the archbishop of atheism and its chief theologian. Concerning his book, he states: ‘Anyone who rises above his daily concerns in hope of finding and following truth, will discover it here.’¹⁶

I partly agree – there is much in the way of truth packed in there. But as to following truth, that is too grand a claim. In the discussion that follows, I will draw attention to some of his metaphysical propositions, which I think are flawed.

His opening section – naturally, if somewhat plagiaristically, called Genesis – has no beginning moment as, for Grayling, there always was something, so no beginning is required. How this something came into being is just assumed as ... being. Wonderful! A spectacular bit of pseudo-metaphysics. Newton is mentioned in verse 7 of Chapter 1 as the critical moment of advancement in humanity. I guess the 1687 publication of *Principia Mathematica* was the start of civilisation. In Chapter 2 verse 1 he praises those courageous men of science, those religious men like Newton and all the others before him whom we have mentioned here, as well as

And Thomas answered and said to Him, “My Lord and my God!”

Jesus said to him, “Thomas, because you have seen Me, you have believed. Blessed are those who have not seen and yet have believed.”

¹⁵ Grayling, *The Good Book*.

¹⁶ Ibid., ‘Epistle to the Reader.’

some since Newton. Somehow, I suspect his praise is not so generous when it comes to their religious faith. Verse 8 restates his view that nothing comes from nothing. In Chapter 3 we find the closest thing to a creation moment in verses 1–2, which indicate that he favours our life coming into being from the depths of the sea. Verse 5 evokes the power of change through time, or evolution, while in verse 7, nature mysteriously orders herself. Chapters 4 and 5 assume nature’s laws are a given. Chapter 5 spins out a circle-of-life view of existence with no beginning or end, all very charming and quaint. In the following chapters, a story unfolds in which atoms live by their own powers. From whence these came, nobody cares: Grayling holds it on faith alone that nature needs no causes. This faith of Grayling’s is particularly evident in chapters 11–13, where he offers no explanation of the origin of nature. He glorifies induction and the scientific method, with the gospel of science fully poured out in chapter 15.

The sections on Wisdom and Parables chapters are excellent:

And though you are not yet a Socrates, you ought to live as one desirous of becoming a Socrates, who said, ‘The life most worth living is the life considered and chosen.’

9. The question to be asked at the end of each day is, ‘How long will you delay to be wise?’

10. And the great lesson that the end of each day teaches is that wisdom and the freedom it brings must daily be won anew.¹⁷

Great words.

On my favourite subject, one I call ‘Informed’ – or ‘Learned Ignorance’, after Cusa’s book on the matter¹⁸ – Grayling writes: ‘if anyone tells you that you know nothing, and you are not angered by what he says, you may be sure that you have begun to be wise.’¹⁹ And: ‘Aristotle says, “He who says, I do not know, has already attained the half of all knowledge.”’²⁰

I find little to disagree with in the Concord section and much to positively affirm. Lamentations is – well, no surprises, gloomy. Topics covered include the insignificance of our individual lives and the fact that we are all fellow sufferers in

¹⁷ Ibid., ‘Wisdom’, chapter 22, verses 9–11.

¹⁸ Nicholas of Cusa, *De docta ignorantia* [*On Learned Ignorance*], 1440.

¹⁹ Grayling, *The Good Book*, ‘Wisdom’, chapter 19, verse 16.

²⁰ Ibid., ‘Wisdom’, chapter 19, verse 12.

life. Much of this section forms a sharp contrast with the message of good news in the Gospels and much of the New Testament – which I suspect Grayling wishes to replace as a core book of guidance for the secular life.

His chapter on Consolations shows how reason can be your ally in times of grief. Time heals all. Much is made of the fulfillment of life by getting old, and the awareness and active appreciation of culture, and how death is a most natural thing. A. C. Grayling is like a truly religious man: he does not fear death as it the final act of a natural life. Only in truly religious believers do you observe such a lack of fear.

There is no God of Abraham, Brahmin or Tao for Grayling, but nature herself:

1. That end of life is the best, when, without the intellect or senses being impaired, nature herself takes to pieces her own handiwork which she also put together.
2. Just as the builder of a ship or a house can break them up more easily than anyone else, so nature, which knitted together the human frame, can also best unfasten it.

...

21. For nature puts a limit to living as to everything else,
22. And we are the sons and daughters of nature, and for us therefore the sleep of nature is nature's final kindness.²¹

Shades of mysticism abound when Grayling's vision of the final earthly act is presented in a chapter titled 'The Consolation of the End':

25. It is a wonderful thing to learn thoroughly how to die. You may deem it superfluous to learn a text that can be used only once;
26. But that is just the reason why we ought to think on a thing.
27. When we can never prove whether we really know a thing, we must always be learning it.
28. 'Think on death.' In saying this, we are bidding ourselves to think on freedom.
29. He who has learned to die has unlearned slavery;
30. He is beyond any external power, or, at any rate, he is it. What terrors has any experience of life for him?

²¹ Ibid., 'Consolations', chapter 22, verses 1–2, 20–21.

31. This is the final consolation: that we will sleep at evening, and be free for ever.²²

Grayling knows that each of us needs a little bit of the mystery of the unknowable to keep us moving forward through life, which is something all religions that survive the test of time tend to adhere to. His religion of atheism knows this. More of this in my next chapter on the philosophy of Alain de Botton.

Grayling's section on Sages is also interesting. He writes as if it is the master talking to his pupil, passing on advice about what is good, what is evil, and what are the right values to be practised. None of these values are defined, so I can only presume the author views them to be self-evident. That said, this section is relevant to all sentient beings who want to improve their lives.

Grayling includes fragments of poetry in his Songs section, indicating he is aware of the human need to put the rational into the irrational of verse. No poet am I, but I have to say this section did not move me as Song of Songs in the Hebrew Bible does, which must count as one of the most beautiful poems ever composed.

The Histories section seems to be a heavily edited version of Herodotus's account of the Greco-Persian Wars. Best, I would think, to read them in the original rather than in a Grayling-redacted version. Especially as Herodotus was the first historian to account for events in a systematic style that would pass as history. Essentially Grayling's version follows a West = Good, East = Bad plot line.

The Proverbs section is organised into 145 chapters, each with a single-word heading, starting with 'Action' and ending with 'Youth' in which wise words are uttered on all subjects. 'Reason' is covered, but there is nothing on its master: Faith. 'Death' is the longest chapter, at 47 verses. 'Evil' is covered, although nothing is said about its origin. There is nothing written concerning 'good,' although the last section of *The Good Book* is 'The Good'. There is a rather chapter on Goodness,²³ which for someone of Grayling's stature, is wishy-washy in the extreme. No comparison can be made with the Bible's Book of Proverbs.

This same section includes more information about Grayling's God of Nature:

To know nature, consult nature.

1. It cannot be nature, if it is not sense.

²² Ibid., 'Consolations', chapter 26, verses 25–31.

²³ Ibid., 'Proverbs', chapter 78, verses 1–12.

2. Nature is the true law.
3. Nature obeys necessity.
4. Nature pardons no mistakes.
5. To command nature one must obey it.
6. The volume of nature is the book of knowledge.
7. Wisdom and nature never say different things.
8. Nature always returns.
9. Nature does nothing in vain.²⁴

According to verse 10, it would appear that Grayling is going so far as to say that nature has a mystical purpose.

Later in the same section, in the chapter on ‘Truth’, Grayling makes a bizarre assertion: ‘All great truths begin as blasphemies.’²⁵ His prejudice against God is so extreme that he believes all great truths develop from insults to God. Tell that to humanity’s greatest minds who have discovered profound truths throughout history! Grayling lets himself down here. But other than a few such oddities, I found reading Grayling’s Proverbs to be deeply satisfying.

In his section on ‘The Lawgiver’, Grayling outlines a political philosophy that I would describe as natural-rights based, promoting the great scope of human liberty. He does not discuss the source of these natural rights, other than to say that all who participate agreed to cede some of their rights to the state to allow it to adjudicate peaceful cooperation, which in turn strengthens their natural right of freedom as they can live free of fear. These sentiments are found within the social contract tradition. Maximum liberty is the aim, we read, and the state should aim its policies at the good. ‘The good’ is not defined. Concerning his favoured system of democracy, which for Grayling is the least imperfect mode of existence for civil society, its governing should only be done by wise and aged people. We see here an extensive use of the Greek preference for aged and wise leaders, and much which is descriptive of that happy state.

²⁴ Ibid., ‘Proverbs’, chapter 108, verses 1–10.

²⁵ Ibid., ‘Proverbs’, chapter 141, verse 4.

Like *Histories*, *Acts* is better read un-redacted, in its original source. *Epistles* is based on the eighteenth-century Earl of Chesterfield's *Letters to His Son*, and the content has much to offer in its advice about leading a wise and selfless life.

He ends with his own form of the Ten Commandments: 'Love well, seek the good in all things, harm no others, think for yourself, take responsibility, respect nature, do your utmost, be informed, be kind, be courageous: at least, sincerely try.'²⁶ Not much to disagree with there. Note that unlike the Ten Commandments of Moses, where disobeying the 'thou shall not ...' commands has dire consequences, Grayling's Ten Commandments seem to be advisory at best. Or maybe he just presumes that anyone rational will automatically conclude that these indeed are the laws by which we should govern our lives.

Finally, he reveals the main authors from whom he has cribbed. I note that they are overwhelmingly theist writers, just like him, albeit his God is nature; they are followers of the whole pantheon of gods or God. Still, it is impressive for one man to write a Bible for his followers. For my money, he is the founding priest, the Apostle Peter of atheism, on whom his church will be built, as well as the Apostle Paul-like teacher of the theology and doctrine of his new religion.

The extreme intolerance of atheism

Despite his liberal political philosophy, if *The Good Book* is anything to go by, Grayling is most illiberal in matters of how a parent should bring up their child:

It would, though, be far better if religious doctrines and systems were not taught to people until they had attained maturity. If this were the case, how many would subscribe to a religion? Without being given a predisposition through childhood indoctrination to think there might be something in one of the many and conflicting religious beliefs on offer, the likely answer would surely be: not very many.²⁷

When I first read this I paused, thinking to myself: is he advocating a ban, or suggesting it should be thought of as a serious proposal? Either way, he is suggesting we consider this as a serious option. To support his case, Grayling equates faith schools in Northern Ireland with conflict.²⁸ In response, I would agree that yes, these schools are regarded by some as at least partly responsible for

²⁶ Ibid., 'The Good', chapter 8, verse 11.

²⁷ Ibid., p. 39.

²⁸ See Dinwoodie, 'Argument Against Faith Schools.'

polarising the community. The majority of that country's citizens want this separation (though it is not state mandated), although I would argue that few who send their children to a faith school will have much of a clue as to the key differences in the doctrines and teaching of the two branches of the Christian faith concerned: Anglican and Roman Catholic. The salient point running under all of this is, importantly, that one is associated with being the nationalist community's school and the other the loyalist: one Irish, one British in cultural outlook. Behind most 'religious' disputes lies human interest – for example, how the various pieces of the economic cake are cut or not cut as the case may be.

If Grayling's religion gains traction, I wonder what we will teach children when they keep asking to know why the universe came into being. Do we trot out: 'well, scientists say it was the Big Bang, caused when the seemingly impossible happened ... there was a point of singularity that had the infinite density stuffed into one volume. Yes, yes, it's one great bundle of contradiction, but we must believe it because it is the height of scientific rationality to do so.' Or: 'in the primeval soup, the complex building blocks of life happened to coincide all at once so they could then kick off evolution of all life as we know it and due to the long time span of a couple of billion years or so, we can expect this to happen.' Or: 'it just is, don't ask any more questions, something has always existed.' Or: 'for you to exist, the universe could only be this way because, as we know, one micro per cent of difference in this chemical structure here and one micro per cent of difference there just means that is the actual miracle of it – but it just is, as are the laws of nature, logic, math, reason. Now stop asking questions!' Or: 'there are many universes – not that we have observed anything to tell us there are, but this is the cause behind ours: it just goes on and on to infinity, despite the contradictory notion of infinity, but let's ignore that.' Or: 'just as our universe inflates, science tells us it will contract so we are to presume that at some point it will just auto kick off again. We don't have any evidence of this as well, but the best science tells us it is so, and it is intellectually respectable to believe it.' That child would be quite rightly puzzled, indeed mystified at the incoherence of such adult mentors.

The elegance of a God, or fundamental ground of being, which reason tells us must be eternal, and God starting the whole conception of the universe, may well be the ultimate Ockham's razor argument. It is far simpler to absolutely presuppose the

one immaterial cause that reason requires of us than all the great unfounded schemes of science.

I think discouraging or banning the teaching of religion until a person turns 18 or whenever they are deemed 'rational' will just encourage young minds to ask more questions and tempt them find out what their parents or the 'system' is hiding! In China, an atheist state, there are now living almost more practising Christians than in the whole of Western Europe. Curiosity is awakened when something is banned.

No doubt Grayling will promote humanism rather than a prime mover of the universe, but it has no special claim to warrant a first place in a people's belief system. I was hoping to read that Grayling's liberal tolerance would necessitate the teaching of a whole raft of belief systems, encouraging the enquiring mind and allowing people to come to their own conclusions, much as his *Good Book* advises (apart from when he advocates the avoidance of belief in a god or Gods). However, this cannot be achieved if you are bent on banning the teaching and active promotion of belief systems held by billions of people on planet earth.

I maintain that Grayling's beliefs are, in reality, fully faith based, and fully religious. He worships nature. He worships a material world with no beginning. His religion, at its core, is therefore one of the more primitive varieties knocking around, despite the great edifice he has built for it.

Chapter 11

Alain de Botton and His Atheist Church

In his book *Religion for Atheists*, the philosopher Alain de Botton describes his plan to create an alternative religion by selectively picking the ‘best bits’ from the old religions and applying them to his new, godless one. He believes anyone holding a god-based religious view is unwarranted in doing so, and he enjoys debating and gaining pleasure from some believers’ incoherently expressed views – to the point of using hostile and dismissive language to attack believers in God:

Attempting to prove the non-existence of God can be an entertaining activity for atheists. Tough-minded critics of religion have found much pleasure in laying bare the idiocy of believers in remorseless detail, finishing only when they felt they had shown up their enemies as thorough-going simpletons or maniacs.¹

That said, he is very much in tune with the pulse of his theistic religious interlocutor and may well understand what certain aspects of religion are about:

The premise of this book is that it must be possible to remain a committed atheist and nevertheless find religions sporadically useful, interesting and consoling – and be curious as to the possibilities of importing certain of their ideas and practices into the secular realm. One can be left cold by the doctrines of the Christian Trinity and the Buddhist Eightfold Path and yet at the same time be interested in the ways in which religions deliver sermons, promote morality, engender a spirit of community, make use of art and architecture, inspire travels, train minds and encourage gratitude at the beauty of spring. In a world beset by fundamentalists of both believing and secular varieties, it must be possible to balance a rejection of religious faith with a selective/ reverence for religious rituals and concepts.²

God may be dead, but the urgent issues which impelled us to make him up still stir and demand resolutions which do not go away when we have been nudged to perceive some scientific inaccuracies in the tale of the seven loaves and fishes.

God is dead! Well, that is news to billions of believers around the globe. Yet I suspect he fully believes it:

¹ De Botton, *Religion for Atheists*, p. 11.

² Ibid.

I recognized that my continuing resistance to theories of an afterlife or of heavenly residents was no justification for giving up on the music, buildings, prayers, rituals, feasts, shrines, pilgrimages, communal meals and illuminated manuscripts of the faiths.³

The challenge facing atheists is how to reverse the process of religious colonization: how to separate ideas and rituals from the religious institutions which have laid claim to them but don't truly own them.⁴

The Eucharist

De Botton is fascinated by the Christian service of Mass, the central framework of the church family for most Christian denominations. Also known as the Eucharist, it follows the pattern of the Last Supper of Jesus by inviting Jesus' followers to re-enact their commitment to breaking bread with each other, just as Jesus did with his apostles during their final meal together before his crucifixion.

He sees this coming together in worship as an opportunity for believers to put aside their egoism and immerse themselves in a collective gathering, entering the spirit of the church family and experiencing a sense of extended community. This diffuses a sense of aloneness, he suggests, that all of us possess. However, his knowledge of the Christian history of the Eucharistic feast is pretty shaky, at best:

In honour of the most important Christian virtue, these gatherings hence became known as agape (meaning 'love' in Greek) feasts and were regularly held by Christian communities in the period between Jesus's death and the Council of Laodicea in AD 364. It was only complaints about the excessive exuberance of some of these meals that eventually led the early Church to the regrettable decision to ban agape feasts and suggest that the faithful should eat at home with their families instead – and only thereafter gather for the spiritual banquet that we know today as the Eucharist.⁵

Eucharist means 'thanksgiving' in Greek. By the 50s AD, it was a regular Christian spiritual practice. The historical backdrop is as follows: Before becoming Christians, many gentiles (non-Jews) had participated in pagan worship at various altars in

³ Ibid., p. 14.

⁴ Ibid., p. 15.

⁵ Ibid., p. 39.

various temples. They were to desist from these practices, wrote the apostle Paul, and instead adopt the practice instituted some twenty years earlier by Jesus himself:

Therefore, my beloved, flee from idolatry. I speak as to wise men; judge for yourselves what I say. The cup of blessing which we bless, is it not the communion of the blood of Christ? The bread which we break, is it not the communion of the body of Christ? For we, though many, are one bread and one body; for we all partake of that one bread. Observe Israel after the flesh: Are not those who eat of the sacrifices partakers of the altar? What am I saying then? That an idol is anything, or what is offered to idols is anything? Rather, that the things which the Gentiles sacrifice they sacrifice to demons and not to God, and I do not want you to have fellowship with demons. You cannot drink the cup of the Lord and the cup of demons; you cannot partake of the Lord's table and of the table of demons. Or do we provoke the Lord to jealousy? Are we stronger than He? (1 Corinthians 10:14–22).

Paul continues:

For I received from the Lord that which I also delivered to you: that the Lord Jesus on the same night in which He was betrayed took bread; and when He had given thanks, He broke it and said, 'Take, eat; this is My body which is broken for you; do this in remembrance of Me.' In the same manner He also took the cup after supper, saying, 'This cup is the new covenant in My blood. This do, as often as you drink it, in remembrance of Me.'

For as often as you eat this bread and drink this cup, you proclaim the Lord's death till He comes (1 Corinthians 11:23–27).

Details about the original Lord's Supper are found in Luke's Gospel:

And He took bread, gave thanks and broke it, and gave it to them, saying, 'This is My body which is given for you; do this in remembrance of Me.' Likewise He also took the cup after supper, saying, 'This cup is the new covenant in My blood, which is shed for you' (Luke 22:19–21).

You can also compare the accounts of other apostolic witnesses some 20–25 years previously who wrote in a similar vein (see Matthew 26:26–29 and Mark 14:22–24). The Gospel of John includes more detail about the events of that night, including Jesus washing the disciples' feet and his betrayal by Judas.

The Acts of the Apostles, arguably compiled no later than AD 62, reports on the Eucharist as an established tradition of the early church taking place on Sunday to celebrate the resurrection and therefore the start of the Christian week.

And they continued steadfastly in the apostles' doctrine and fellowship, in the breaking of bread, and in prayers (Acts 2:42).

So continuing daily with one accord in the temple, and breaking bread from house to house, they ate their food with gladness and simplicity of heart (Acts 2:47).

Now on the first day of the week, when the disciples came together to break bread, Paul, ready to depart the next day, spoke to them and continued his message until midnight (Acts 20:7).

Now when he had come up, had broken bread and eaten, and talked a long while, even till daybreak, he departed (Acts 20:11).

And when he had said these things, he took bread and gave thanks to God in the presence of them all; and when he had broken it he began to eat (Acts 27:35).

For many ancient societies, food was associated with spiritual matters. For example, if you suffered adverse side effects from eating a certain food, you might have been possessed by demons. It was therefore important for Paul to distinguish between the historic association of demonic possession with certain foods and the significance of participating in the Eucharist, which he considered to be the spiritual representation of Christ's blood (wine) and his body (bread) (1 Corinthians 10:20).

Paul also emphasised that the Eucharist enabled Christians to participate in the true divine nature as opposed to the false nature of idols. This practice contrasted with those of cults like the Eleusinian Mysteries, whose participants believed they became one with the Greek god Dionysus.

Nevertheless, in the first couple of centuries, there were some who were called Christians who also participated in these pagan practices, as Justin Martyr testifies:

By the help of the demons he has made many in every race of men to blaspheme and to deny God the Maker of the universe, professing that there is another who is greater and has done greater things than he. As we said, all who derive [their opinions] from these men are called Christians, just as men who do not share the same teachings with the philosophers still have in common with them the name of philosophy, thus brought into disrepute. Whether they commit the shameful deeds about which stories are told – the upsetting of the lamp, promiscuous intercourse,

and the meals of human flesh, we do not know; but we are sure that they are neither persecuted nor killed by you, on account of their teachings anyway. I have compiled and have on hand a treatise against all the heresies which have arisen, which I will give you if you would like to consult it.⁶

The apostle Peter warns about ‘spots and blemishes’ – people who feasted with the early Christians, but were false teachers infiltrating the Asia Minor church (2 Peter 13–16). Jude, the half-brother of Christ, wrote the following: ‘These are spots in your love feasts, while they feast with you without fear, serving only themselves. They are clouds without water, carried about by the winds; late autumn trees without fruit, twice dead, pulled up by the roots’ (Jude 1:12). Sharing in the love of Christ in a feast, worshiping and receiving charity was one thing, but doing it with false prophets and evildoers was quite another. Fifty-odd years later, *The Didache*⁷ describes the Eucharistic feast in a similar vein to the traditional thanksgiving we know today, around the same time as Ignatius of Antioch⁸ and Justin Martyr.⁹

You can understand why I question de Botton’s understanding of the Eucharist. The spiritual banquet that we know as the Eucharist was with us and practised by the apostles and their followers right from the very dawn of Christianity – not from 364 AD, as suggested by de Botton.

This is not to deny that agape feasts were took place. St Clement of Alexandria, writing in the late Second Century,¹⁰ clearly viewed the agape feast, moderate and geared towards expressing love for the Almighty and each other, as a separate feast to the Eucharist, both in nature and purpose. He also makes reference to Paul’s chastising of the Corinthians in 1 Corinthians 11:20 and reminds his readers ‘always must we conduct ourselves as in the Lord’s presence’,¹¹ suggesting that some agape feasts were getting out of hand and losing their purpose.

⁶ Justin Martyr, *First Apology*, ch. 26. This is a reference to the charges of incest (facilitated by darkness) and cannibalism which other Apologists (Athenagoras, Tertullian, Minucius Felix) discuss at length.

⁷ *The Didache* are dated around AD50–150, and are also known as *The Teachings of the Twelve Apostles*.

⁸ Ignatius, *To the Philadelphians*, ch. 4. Ignatius was Bishop of Antioch in AD 67 and a student of the Apostle John.

⁹ ‘The First Apology’, New Advent, accessed January 26, 2017, <http://www.newadvent.org/fathers/0126.htm>, ch. 66.

¹⁰ *Paedagogus* (The Instructor), Book 2, ch. 12.

¹¹ Clement of Alexandria, *Paedagogus* (*The Instructor*), Bk II, Ch. 1.

The roots of the Eucharist lie in a 3,500-year history dating back to the Jewish Passover, modified by the followers of Christ to be a remembrance for the ultimate Passover sacrifice of Christ in a one-off exchange for the forgiveness of our sins. And so it continues to this day.

Communal restaurants

De Botton suggests the establishment of communal restaurants for atheists ('churches?'), where people can gather together and break bread, just as the Christians and Jews do. As a co-owner of restaurants myself, I agree that communal tables facilitate conversation between people who are looking for company. If I could be totally non-commercial and still survive, I would love to create a huge, communal restaurant as I am sure it would get people talking and partaking in a whole host of things together. If de Botton is braver than I, we may well see him set up his own church get his own communal vibe happening in the restaurant scene, and good luck to him. He will be practising what he preaches.

He also comments on the inviting and friendly 'sign of peace' that takes place in a traditional church service.¹² This reflects Christ's command to enter into his house, as the cornerstone of the church, with all arguments either left outside the door, but better still forgiven, resolved and surpassed.¹³ For de Botton, his restaurants would embrace a slightly different practice, though one based on this notion:

Such a restaurant would have an open door, a modest entrance fee and an attractively designed interior. In its seating arrangements, the groups and ethnicities into which we commonly segregate ourselves would be broken up; family members and couples would be spaced apart, and kith favoured over kin. Everyone would be safe to approach and address, without fear of rebuff or reproach. By simple virtue of occupying the same space, guests would – as in a church – be signalling their allegiance to a spirit of community and friendship.¹⁴

Just as what happens in hundreds of thousands of churches across the world each week, in de Botton's restaurants we would observe the following:

¹² Or 'holy kiss'. Paul mentions this in Romans 16:16, 1 Corinthians 16:20, 2 Corinthians 13:12, and 1 Thessalonians 5:26; and Peter mentions it in 1 Peter 5:14.

¹³ See John 14:27.

¹⁴ De Botton, *Religion for Atheists*, p. 43.

Thanks to the Agape Restaurant, our fear of strangers would recede. The poor would eat with the rich, the black with the white, the orthodox with the secular, the bipolar with the balanced, workers with managers, scientists with artists. The claustrophobic pressure to derive all of our satisfactions from our existing relationships would ease, as would our desire to gain status by accessing so-called elite circles.

Ideal friends

De Botton also suggests ‘ideal friends’ to replace saints, noting that Catholics draw great comfort, particularly in times of distress, from praying to these figures. In the de Botton religion, there would be no harm in creating your own, who you could reflect upon in times of trouble and apparently receive answers from. But in reality, you would be drawing on what you already know. He misses the point, as the Catholic prays to the saint because (a) it is held that saints exist in an immaterial spiritual world, and (b) their intervention in the material world may assist the petitioner’s cause. Replacing traditional Christian saints with, not only film stars and singers, but brave and generously spirited types – for example, Abraham Lincoln, Walt Whitman, Winston Churchill, Warren Buffet or Paul Smith – will surely not evoke the same kind of reverence. Surely, his hard-headed atheist chums would consider a statute of one of these figures in the corner of the room to consult with in times of need as quite batty.

Teaching and preaching

De Botton also wants to change our universities. Out go the old subjects, history and literature, to be replaced by material that will ‘torment and attract our souls’:

The redesigned universities of the future would draw upon the same rich catalogue of culture treated by their traditional counterparts, likewise promoting the study of novels, histories plays and paintings, but they would teach this material with a view to illuminating students’ lives rather than merely prodding at academic goals. Anna Karenina and Madame Bovary I would thus be assigned in a course on understanding the tensions of marriage instead of in one focused on narrative trends in nineteenth-century fiction, just as the recommendations of Epicurus and

Seneca would appear in the syllabus for a course about dying rather than in a survey of Hellenistic philosophy.¹⁵

One thing is for sure: de Botton is disruptive. I view this as potentially a good thing, shaking up academia to bring it more in line with some of the deeper needs of humanity rather than being, as it often is, a way to tick the boxes to get a pass, a certificate, a job. Universities should be cultivating a life-long love of learning in all of us as their end product, whilst our job should be a by-product. I fear the pendulum has swung too much in recent years towards functionality at the expense of learning and loving the free pursuit of knowledge of all kinds, and de Botton is right to seek to revolutionise this sector. He has a slightly wider vision than I, though we would view these institutions somewhat similarly as they are explored by lay elements of the church today, topics like:

being alone, reconsidering work, improving relationships with children, reconnecting with nature and facing illness. A university alive to the true responsibilities of cultural artefacts within a secular age would establish a Department for Relationships, an Institute of Dying and a Centre for Self-Knowledge.¹⁶

The role of the preacher/teacher would then be very much like that of the ‘African-American Pentecostal Preachers,’ as he says in a great quote: ‘Secular education will never succeed in reaching its potential until humanities lecturers are sent to be trained by African-American Pentecostal preachers.’¹⁷

Maybe the atheist preachers could be equally engaging and animated, but one believes they are inspired by God, the other by the ‘fact’ that we are randomly created assemblies of atoms. I cannot see any atheist being driven to such heights by such a world view. Of course, it is always possible, but I suspect de Botton is beating a dead horse here. He goes on to ape the metaphysical poet, John Donne:

The preaching of John Donne, the Jacobean poet and dean of St Paul’s Cathedral, was comparably persuasive, treating complex ideas with an impression/of effortless lucidity. Forestalling the possibility of boredom/during his sermons, Donne would pause every few paragraphs to sum up his thoughts in phrases designed to engrave themselves on his listeners’ skittish minds (‘Age is a sickness, and youth is an

¹⁵ Ibid., p. 121.

¹⁶ Ibid., pp. 121–22.

¹⁷ Ibid., p. 131.

ambush’). Like all compelling aphorists, he had a keen command of binary oppositions (‘If you take away due fear, you take away true love’), in his case married to a lyrical sensibility which enabled him to soar along contrails of rare adjectives before bringing his congregation up short with a maxim of homespun simplicity (‘Never send to know for whom the bell tolls; it tolls for thee’).¹⁸

The quote in the last line issued from Donne’s sick bed, not a sermon, as far as I am aware. I get the point though: he wants his preachers to move his congregation.

Wisdom

But truly, de Botton has almost surely never read the Gospels. Take this quote: ‘There is arguably as much wisdom to be found in the stories of Anton Chekhov as in the Gospels, but collections of the former are not bound with calendars reminding readers to schedule a regular review of their insights.’¹⁹

Even if you strip the Gospels of supernatural events, they remain an outstanding source of wisdom, recording and explaining the parables Jesus used to teach, and illustrating how to live a good life. Atheists might profit by reading the Gospels just for these teachings and get much good out of them, arguably far more than from reading Chekov – just as religiously minded people can read Grayling’s secular Bible and get much good out of it. But as to his church, or the new religion for atheists that he purports to be building, I suggest they would do better to stick to readings with key meanings, repeat key readings with key learning, and get a rhythm going – then he might have a chance of having a flourishing religion: feed the needs of your congregation.

Temples to tenderness

De Botton contrasts the Benedictine monks and their monasteries, which focus on care of the body, spirit and mind, with the spiritually void modern spa, with its emphasis on plush toiletries and massages. In his religion, architects would build ‘Temples to Tenderness’, where we could contemplate great works of art:

Like universities, museums promise to fill the gaps left by the ebbing of faith; they too stand to give us meaning without superstition. Just as secular books hold out a

¹⁸ Ibid., p. 127.

¹⁹ Ibid., p. 135.

hope that they can replace the Gospels, so museums may be able to take over the aesthetic responsibilities of churches.²⁰

Christianity, by contrast, never leaves us in any doubt about what art is for: it is a medium to remind us about what matters. It exists to guide us to what we should worship and revile if we wish to be sane, good people in possession of well-ordered souls. It is a mechanism whereby our memories are forcibly jogged about what we have to love and to be grateful for, as well as what we should draw away from and be afraid of.²¹

The challenge is to rewrite the agendas for our museums so that art can begin to serve the needs of psychology as effectively as, for centuries, it has served those of theology. Curators should dare to reinvent their spaces so that they can be more than dead libraries for the creations of the past. These curators should co-opt works of art to the direct task of helping us to live: to achieve self-knowledge, to remember forgiveness and love and to stay sensitive to the pains suffered by our ever troubled species and its urgently imperilled planet. Museums must be more than places for displaying beautiful objects. They should be places that use beautiful objects in order to try to make us good and wise. Only then will museums be able to claim that they have properly fulfilled the noble but still elusive ambition of becoming our new churches.²²

He has some very radical ideas concerning museums, and I think his proposed changes have much to say for themselves.

The School of Life

The School of Life is the name of de Botton's church. Here is a man who practises what he preaches, and I take my hat off to him for that. An article by Daisy Waugh in *The Sunday Times* makes this clear.²³ She announces to the world that she is fully free from the last embraces of Catholicism and has fully taken up the atheist world view, or religion. At their Bloomsbury Sunday gathering, there is a sing-song saying, something uplifting, and a reading by someone preaching something morally meaningful or thought provoking. But, this puzzles me: if you need the soothing rhythms of religion, why not get the real thing and get down to your local

²⁰ Ibid., p. 209.

²¹ Ibid., p. 215.

²² Ibid., p. 2440.

²³ Waugh, 'Sing It Loud and Sing It Proud: Hallelujah! I'm an Atheist.'

synagogue/church/mosque/temple? Even if you reject the belief in any supernatural God or gods, you still get all of the things that Daisy went looking for and more – at the meeting places of the established religions.

The School has a website, The Philosophers' Mail,²⁴ where you will find a range of articles to help you live a better and more contented life – without God. It will be very interesting to see how de Botton's alternative religion and its School develops in years to come. I hope for him that his movement gains more traction than the 30,000-member British Humanist Association, which has been promoting a 'no God' alternative for 120 years. A similar organisation called The Sunday Assembly has also been recently established²⁵ – time will tell if this succeeds or not.

The philosopher de Botton is a modern religious practitioner who has created his own 'church', then. Other than that, he is an atheist who does not believe any of the arguments in favour of God stack up. I do not know what his metaphysical or pseudo-metaphysical presuppositions are – they are not revealed in this book. No doubt he will say none of the above, preferring to believe that reason and reason alone is guiding him: this is my speculation.

²⁴ See <http://www.philosophersmail.com>.

²⁵ Wikipedia contributors, 'Sunday Assembly,' *Wikipedia, The Free Encyclopedia*, https://en.wikipedia.org/w/index.php?title=Sunday_Assembly&oldid=755131338 (accessed January 26, 2017).

Chapter 12

Secular versus Religious Murder: A Silly Debate

All wars are created by religious conflict.¹

Atheists are fond of blaming ‘religion’ for wars and the practice of ritual murder. In response, I will first examine two cases involving Christianity and then look at major conflicts for which there is no evidence of religious motivation.

The Crusades

What was that all about? I turned to Runciman’s three-volume *History of the Crusades*² to find out what the best of scholarship says on the matter. I soon discovered that rather than describe this 200-year series of events as a religious war, it could better be described as undertaken *in the name of religion*, involving all the usual human weaknesses of greed, envy, jealousy, pride and misunderstanding.

For the first three hundred years, the Christian religion grew through the large-scale voluntary conversion of Jews and Gentiles in the face of Roman persecution. Emperor Constantine’s conversion to Christianity saw the new religion become mainstream. The lands of the Roman Empire became Christian lands, by default. From the mid-600s, Christian lands in the modern-day Middle East were attacked by Muslims, and of the five great Christian cities – Jerusalem, Antioch, Alexandria, Constantinople and Rome – all bar Rome fell to Islam. Mass murder, forced conversions and heavy taxation were levied on native inhabitants who chose to remain Christian, strictures set by the Qur’an. Islam wiped Christianity out of its ancestral lands in North Africa, except Ethiopia, reaching to the doors of Rome and occupying Sicily, Spain and parts of France. It was against 400 years of Islam’s sustained acts of intolerance towards Christians that the Crusaders fought back.

The trigger for the First Crusade was this 400-year build-up of sustained abuse of the native Christian population by the Muslims, the closing of the pilgrimage routes into Jerusalem and the fact that the Eastern Christian Empire in Constantinople was under attack from the Seljuk Muslims. Pope Urban II requested a military campaign

¹ A standard quote trotted out by anyone truly ignorant on matters of history, politics and religion.

² Runciman, *A History of the Crusades*.

to assist the Eastern (Christian) Empire and reclaim the Holy Land for Christendom. The effect of the Crusades was to weaken the hereditary Caliphate as non-descendants of Muhammad came to lead it, notably Saladin and Nureddin.

The Crusades eventually came to an end after a series of military losses by the Frankish warlords exhausted the crusading states' coffers. Unfortunately, the Christians who remained in the East were now exposed to the might of Islamic expansion into their territory.

The harm done by the crusades to Islam was small in comparison with that done to them by Eastern Christendom. Pope Urban II had bidden the Crusades go forth that the Christians of the East might be helped and rescued. It was a strange rescue; for when the work was over, Eastern Christendom lay under infidel domination and the Crusaders themselves had done all they could to prevent its recovery. When they set themselves up in the East they treated their Christian subjects no better than the Caliph had done before them. Indeed, they were sterner, for they interfered in the religious practices of the local churches. When they were ejected they left the local Christians unprotected to bear the wrath of the Moslem conquerors.³

It was the Crusaders themselves who wilfully broke down the defense of Christendom and thus allowed the infidel to cross the Straits and penetrate into the heart of Europe. The true martyrs of the Crusade were not the gallant knights who fell fighting at the Horns of Hattin or before the towers of Acre, but the innocent Christians of the Balkans, as well as of Anatolia and Syria, who were handed over to persecution and slavery.⁴

The Frankish princes, originally motivated by faith, were soon overcome by baser human motives: 'genuine faith was often combined with unashamed greed.'⁵ Material advantages, power and the enslavement of native Christians (whose traditions and practices they could not understand) became the drivers for conquest:

The triumphs of the Crusade were the triumphs of faith. But faith without wisdom is a dangerous thing. By the inexorable laws of history the whole world pays for the crimes and follies of each of its citizens. In the long sequence of interaction and fusion between Orient and Occident out of which our civilisation has grown, the Crusades were a tragic and destructive episode. The historian as he gazes back across the centuries at their gallant story must find his admiration overcast by

³ Ibid., vol. 3, Summary, p. 474.

⁴ Ibid., p. 477.

⁵ Ibid., p. 478.

sorrow at the witness that bears to the limitations of human nature. There was so much courage and so little honour, so much devotion and so little understanding. High ideals were besmirched by cruelty and greed, enterprise and endurance by a blind and narrow self-righteousness; and the Holy War itself was nothing more than a long act of intolerance in the name of God.⁶

What can we conclude from this? That God is not the problem: man was, and still is.

The Spanish Inquisition

The Spanish Inquisition was used by Spanish monarchs to force Muslims and Jews to convert to Christianity in a newly unified Spanish kingdom, following liberation from Muslim occupiers. It is considered one of the bloodiest periods in Christian history, with estimates of deaths ranging from the low thousands to several hundreds of thousands over 350 years (see the Appendix for a list of key scholars' estimates). But, while there is no doubt that the Inquisition amounted to religious persecution, it pales into insignificance compared with deaths from secular causes.

A website called Necrometrics,⁷ which lists death tolls from man-made atrocities, lists the Crusade's death toll at 3 million. What is clear from this website is that the overwhelming majority of deaths result from wars over territories and resources. A minority are attributed specifically to religiously driven wars. The popular refrain that we tend to hear – 'all wars are religious wars', or variations of this theme – is simply not supported by the evidence (see the Appendix).

Wars led by atheists

Another frequently cited example of religiously inspired conflict is Northern Ireland, which we are told is a case of Catholics versus Protestants. But, having spent some time there,⁸ I cannot recall anyone saying they were carrying out bombings to force people to believe in the Eucharist as an act of remembrance or as the enactment of the presence of Christ. The division between the Christian West and the Christian East (two branches of Christianity) is also cited: atheists would have you believe

⁶ Ibid., p. 480.

⁷ Matthew White, www.necrometrics.com, October 2010.

⁸ The common language in Northern Ireland to discuss the 'Troubles' is conducted in the form of Nationalist (pro Irish) versus Loyalist (pro British) viewpoints. This is witnessed by the fact that many people labelled 'Catholic' vote for parties labeled 'Protestant', when in fact they are voting to remain economically tied to Britain rather than Ireland.

that the battle cry was something along the lines of: ‘kill these schismatics – they don’t believe the Son proceeds from the Father but that he follows from the Father.’

The schism between the Eastern and Western church dates officially from 1054, although there was alienation as far back as the 800s when the Spanish branch of the church added the phrase ‘and the Son’ (known as the Filioque clause) to the Nicene Creed. However, no war was ever held over this addition to the Nicene Creed.

Dawkins makes the following comment:

Religious wars really are fought in the name of religion, and they have been horribly frequent in history. I cannot think of any war that has been fought in the name of atheism. Why should it? A war might be motivated by economic greed, by political ambition, by ethnic or racial prejudice, by deep grievance or revenge, or by patriotic belief in the destiny of a nation. Even more plausible as a motive for war is an unshakeable faith that one’s own religion is the only true one, reinforced by a holy book that explicitly condemns all heretics and followers of rival religions to death, and explicitly promises that the soldiers of God will go straight to a martyrs’ heaven. Sam Harris, as so often, hits the bullseye, in *The End of Faith*: The danger of religious faith is that it allows otherwise normal human beings to reap the fruits of madness and consider them holy. Because each new generation of children is taught that religious propositions need not be justified in the way that all others must, civilization is still besieged by the armies of the preposterous. We are, even now, killing ourselves over ancient literature. Who would have thought something so tragically absurd could be possible? By contrast, why would anyone go to war for the sake of an absence of belief?⁹

Like Dawkins, I cannot think of a war that has been motivated by a purely atheistic world view. But, I attest that atheism is a religion because it is not free of belief. It has its pre-suppositions, some of which we have explored, just like any other system of beliefs. I use the word atheist in the next section to make the point that just as the atheist can label all manner of wars religious, even though few actually are, so a theist, on those same terms, can label many, many worse atrocities atheist.

⁹ Dawkins, *The God Delusion*, p. 278.

In fact, atheist secular socialists managed to kill over 140,000,000 people in the last century alone.¹⁰ The commonality in their ideology was their atheism – their belief in social Darwinism in the cases of Hitler and Stalin, and their belief in the ownership of the means of production, distribution and exchange by ‘the people’, communally, for the benefit of all. Alone among them, Hitler favoured the corporatist version of socialism, with a strongly nationalist bent; ownership of private property was permitted, as long as it was in the interest of the state.

Hitler

If there was any doubt about Hitler’s views on religion, read the Nuremberg Trial documents from 6 July 1945:

Throughout the period of National Socialist rule, religious liberties in Germany and in the occupied areas were seriously impaired. The various Christian Churches were systematically cut off from effective communication with the people. They were confined as far as possible to the performance of narrowly religious functions, and even within this narrow sphere were subjected to a many hindrances as the Nazis dared to impose. These results were accomplished partly by legal and partly by illegal and terroristic means.

National Socialism by its very nature was hostile to Christianity and the Christian churches. The purpose of the National Socialist movement was to convert the German people into a homogeneous racial group united in all its energies for [the] prosecution of aggressive warfare.

Innumerable indications of this fact are to be found in the speeches and writing[s] of Hitler and other responsible Nazi leaders.¹¹

At first Hitler tolerated Christianity, controlling and marshalling it in the interest of the Reich. Later, after cleansing the Reich of Jews, he used legal restrictions and thuggery to engineer a total destruction of the Christian churches. Obsessed with his

¹⁰ Bullock in his Appendices (Bullock, *Hitler and Stalin*) puts the figure of losses caused by the atheist socialists during World War 2 at 40 million in Europe and the US; this is additional to the 100 million specifically socialism-caused wars mentioned by Courtois in *The Black Book of Communism*. World War 1 caused 7.7 million deaths, the Russian Civil War 10 million, and the Spanish Civil War 600,000. The Chinese losses are estimated at anywhere between 10 million and 22 million deaths during World War 2.

¹¹ ‘Annex 4: The Persecution Of The Christian Churches’, in ‘The Nazi Master Plan’, transcribed and annotated by Richard Bonney, accessed January 26, 2017, http://www.leics.gov.uk/the_nazi_master_plan.pdf.

own religiously styled belief in 'Providence',¹² his goal was a 1000-year paradise of national socialist racial purity.

Hitler's own myth ... led him like Napoleon, to speak frequently of Providence, as a necessary if unconscious projection of his sense of destiny which provided him with both justification and absolution. 'The Russians', he remarked on one occasion,¹³ 'were entitled to attack their priests, but they had no right to assail the idea of a supreme force. It's a fact that we're feeble creatures and that a creative force exists.'¹⁴

Hitler believed that he was being propelled by forces of nature, but this should not be confused with the nature worship we see in Grayling's *Good Book*. Hitler's promotion of his myth is well documented, through his use of film, with the acclaimed director Leni Riefenstahl, and architecture, via the work of Albert Speer.

The earliest challenge to Hitler's indoctrination came from the church:

Resistance took the form of a call for a Confessional Church 'independent of the state and the pressure of political power', led by two Berlin pastors Martin Niemöller, a former U-boat captain, and the young Dietrich Bonhoeffer, with the backing of the leading Lutheran theologian Karl Barth.¹⁵

The Confessional Church's Barmen Declaration of May 1934 rejected the false teaching by which the state is equated with the sole total order of human life. It also attacked persecution of the Jews, the cult of the Führer and unlawful actions of the Gestapo.¹⁶ Nevertheless, a minority within the church formed the Nazi Movement of German Christians, who sought to abolish all church councils and elect a bishop who would work for the advancement of the Reich.

Hitler was committed to advancing his race, over and above any other. This is a socialist, Darwinian war of all against all. For the record, I am in no way suggesting

¹² This belief in Providence is remarkably similar, but should not be confused with the atheist nature worship of Dawkins and Grayling. The latter evokes mystery in the purpose of nature in his *Good Book*. I suspect Hitler's was a much more personal providential mysterious guidance than the general guidance of nature suggested by Grayling.

¹³ See *Hitler's Table Talk 1941–1944: His Private Conversations*, translated by Norman Cameron and R.H. Stevens (New York: Enigma Books, 2000 [1953]), accessed January 26, 2017, <http://vho.org/aaargh/fran/livres10/HTableTalk.pdf>.

¹⁴ Bullock, *Hitler and Stalin*, p. 382.

¹⁵ *Ibid.*, pp. 360–61.

¹⁶ The murders of the likes of Pastor Paul Schneider, The Blessed Otto Neururer, Pastor Dietrich Bonhoeffer, Friar Maximilian Kolbe, Nun Edith Stein come to mind as tragic testimony to the anti-theistic, atheist stance of the National Socialist German Workers Party – The Nazi Party, that atheist killing machine.

Darwin would have agreed with this, or any other atheist— just that this is what Hitler believed. A reading of Hitler's 1925 *Mein Kampf* clearly demonstrates this. Devoid of religious belief, he was undeniably a secular mass murderer.

Stalin

Stalin was also a great admirer of Darwin, although his own form of social Darwinism lay more at the class-struggle end of the spectrum. Instead of selecting on the basis of race, he selected on the basis of party politics and exterminated anyone who did not agree with him. The historian Paul Johnson comments:

Stalin had Darwin's 'struggle' and 'survival of the fittest' in mind when dealing with the Kulaks and when relocating the minorities of Greater Russia: extermination of groups was a natural event if the party, redefined as the politically 'fit,' was to survive.¹⁷

In his early life, Stalin had wanted to be a priest. However, after reading *On the Origin of Species*, a godless, atheistic world view took hold:

If he coveted a volume, he was happy to steal it from another schoolboy ... he paid a 5 kopeck subscription and borrowed a book that was probably Darwin's *Origin of Species*. Stalin read it all night, forgetting to sleep, until Keke found him. 'Time to go to bed,' she said. 'Go to sleep – dawn is breaking.' 'I loved the book so much, Mummy, I couldn't stop reading ...' As his reading intensified, his piety wavered. One day Sos and some friends, including Grisha Glurjidze, lay on the grass in town talking about the injustice of there being rich and poor when he amazed all of them by suddenly saying: 'God's not unjust, he doesn't actually exist. We've been deceived. If God existed, he'd have made the world more just.'¹⁸

By 1930, the collectivisation of farms was gathering pace. Now it was time to enlighten the backward peasantry on the modernity of socialism. A 'fierce campaign against the Orthodox Church'¹⁹ began, as this church was:

the centre of traditional peasant culture, which was seen by the Stalinist leadership as one of the main obstacles to collectivization. In village after village, not only was the church closed, but the cross was knocked from the cupola, the bells removed and icons burned. Historic Russian churches were the object of

¹⁷ Johnson, *Darwin*, p. 136.

¹⁸ Sebag Montefiore, *Young Stalin*, p. 47.

¹⁹ Bullock, *Hitler and Stalin*, p. 261.

destruction and many priests were arrested. The monasteries were closed ... and thousands of monks and nuns were deported to Siberia. By the end of 1930, roughly 80 per cent of village churches are said to have been closed.²⁰

In 1943, when he found himself in need of all the support he could get, Stalin cynically reconciled with the church in order to foster increased nationalism during what he termed ‘The Great Patriotic War’ against Hitler:

The invasion and the terrible casualties awakened a strong tide of religious feeling in the country and the Metropolitan Sergei issued an appeal to all believers, calling on them to defend the country. In September 1943 – four months after he abolished the Communist International – Stalin received the three metropolitans and concluded what amounted to a concordat with them, allowing them for the first time since the revolution to elect a patriarch of Moscow and all Russia as well as a holy synod, and to open a theological institute.²¹

Mass secular murder

Concerning the other mass murdering secular killers of the brutal twentieth century – Mao and Pol Pot – I could not establish whether they were or were not influenced by Darwin. However, I am not aware of it being disputed that they were atheists. A must-read book which lists these secular killings is *The Black Book of Communism*, which tracks the murderous deeds of the socialist pioneers:

The following rough approximation, based on unofficial estimates, gives some sense of the scale and gravity of these crimes:

U.S.S.R.: 20 million deaths

China: 65 million deaths

Vietnam: 1 million deaths

North Korea: 2 million deaths

Cambodia: 1 million deaths

Eastern Europe: 1 million deaths

Latin America: 150,000 deaths

Africa: 1.7 million deaths

Afghanistan: 1.5 million deaths

²⁰ Ibid., p. 261.

²¹ Ibid., pp. 998–99.

The international Communist movement and Communist parties not in power:
about 10,000 deaths

The total approaches 100 million people killed.²²

The authors of this book do not include the socialism of Hitler in their calculations. But I make no such distinction between socialist, national, or international varieties of motivation. The Nazis killed 6 million Jews, and another 20 million people were killed in World War 2; Round it off at 125 million deaths, give or take *a few million souls* here and there, and you won't be far off.

Is it correct to call these atheist-inspired or Darwin-inspired deaths? I don't think so. They are neither. Just tragic, human bloodletting on political, cultural or ethnic grounds. I write this to goad my holier-than-thou humanist, rationalist, atheist friends who seem to think their world view produces harmony whereas religion does not. I also use it to illustrate that the problem is not the ideas themselves, but people and their employment of them. Socialism – national or international, with its secular anchorage – was a therefore bad idea from the outset.

It is not acceptable to say you are a Nazi today, as the racial element in the socialist program of Hitler is universally deemed odious. But I have noticed that you can be accepted as a former supporter of these communist regimes because they were, after all, trying to 'do it for the poor'. A noble cause, then, and we can politely gloss over the gulags, prison camps and dissident murder programs.

Today, the 'religious' wars – the Crusades and the Inquisition, the wars of the Protestant Reformation and so on – attract opprobrium almost equal to the genocide caused by Hitler, despite causing a fraction of the fatalities. Yet, all is apparently forgiven as far as the atheistic, socialistic, intellectual apologists are concerned. These are double standards I truly detest. An enforced death – whether it be religious, political, ideological or fanatical – is to be condemned and resisted.

Let us now move on very briefly to another atheist monster.

Mao

The policies of Mao were responsible for the deaths of 65 million people. He was an atheist, motivated by the ideology of socialism. His views on religion can be seen in this selection of his poems.

²² Courtois, *The Black Book of Communism*, p. 4.

Excerpt from The Foolish Old Man Who Removed the Mountains

Today, two big mountains lie like a dead weight on the Chinese people. One is imperialism, the other is feudalism. The Chinese Communist Party has long made up its mind to dig them up. We must preserve and work unceasingly, and we, too, will touch God's heart. Our God is none other than the masses of the Chinese people. If they stand up and dig together with us, why can't these two mountains be cleared away.²³

Saying Good-bye to the God of Disease (1)

Mauve waters and green mountains are nothing
when the great ancient doctor Hua Tuo
could not defeat a tiny worm.
A thousand villages collapsed, were choked with weeds,
men were lost arrows.
Ghosts sang in the doorway of a few desolate houses.
Yet now in a day we leap around the earth
or explore a thousand Milky Ways.
And if the cowherd who lives on a star
asks about the god of plagues,
tell him, happy or sad, the god is gone,
washed away in the waters.²⁴

Saying Good-bye to the God of Disease (2)

Thousands of willow branches in a spring wind.
Six hundred million of China, land of the gods,
and exemplary like the emperors Shun and Yao.
A scarlet rain of peach blossoms turned into waves
and emerald mountains into bridges.

²³ Tsetung, 'The Foolish Old Man Who Removed the Mountains,' p. 321.

²⁴ Zedong, 'Saying Good-bye to the God of Disease (1),' p. 89. Mao Zedong's note: 'After reading in the *People's Daily* of June 30, 1958, that in Yukiang county the parasitic leech the schistosome had been eliminated, my head was so filled with thoughts that I could not sleep. As a slight breeze came and blew in the dawn, and early morning sun came and knocked at the window, I looked at the distant southern skies and happily guided my pen into composing a poem ... This poem and the one following are separate yet related poems, each on the subject of eliminating disease. Schistosomiasis, found also in Egypt and North Africa, had plagued many districts south of the Yangzi. A commission was set up in 1956 and in June 1958 it was reported that the parasites and the disease had been eradicated in Yujiang county in Jiangxi, as a result of filling in infected ponds, irrigation projects, and a new cure which shortened the disease's duration from months to a few days. The reference to southern skies is to the areas most troubled by the disease' (p. 145).

Summits touch the sky.
We dig with silver shovels
and iron arms shake the earth and the Three Rivers.
God of plagues, where are you going?
We burn paper boats and bright candles
to light his way to heaven.²⁵

Ironically, since the demise of Mao, China has experienced an explosion in the growth of Christianity, which was illegal until recently. Currently there is a minimum of 70 million practising members of churches in China. By 2030, following the current growth pattern, it will be the largest Christian country in the world.²⁶ This Christianity business just will not go away!

In the face of such damning statistics about the destruction of lives brought about by these atheist mad men of the twentieth century, today's atheists will argue that the Bible's account of the attempted sacrifice of Abraham's son, Isaac, is a great example of how the God of the monotheistic faiths is a bloodthirsty tyrant. This story is mentioned in many atheist blogs if you are minded to search the internet. In response, I will take a closer look at this story.

Child sacrifice and the Bible

The Bible contains 58 verses condemning child sacrifice.²⁷ We may not sacrifice children on the altar, like the Canaanites in the Bible, but the sacrificing of children is still taking place in modern warfare in all sorts of ways – whether they are counted as collateral damage or forced into slavery as child soldiers.

In Genesis 22:1–9 we come across a story that on the surface would seem at odds with the Bible's condemnation of child sacrifice. The story begins with God telling Abraham to go to a particular mountain where he must sacrifice his son, Isaac. Abraham obeys God, taking Isaac to the mountain, in faith that they will both return (verse 5). Hebrews 11:17–19 explains that Abraham knew he would return home with the boy because he trusted God's promises that through Isaac, he would have many descendants. At the last minute, God provides a ram for Abraham to sacrifice

²⁵ Ibid, 'Saying Good-bye to the God of Disease (2),' p. 91.

²⁶ Phillips, 'China On Course To Become "World's Most Christian Nation" Within 15 Years.' I am grateful for Alan McCormick of The Legatum Foundation for pointing out this article.

²⁷ '62 Verses About Child Sacrifice.'

in Isaac's place. What this story foretells is the death of God's only Son, Jesus, in a one-off sacrifice for all of humanity.

We have not learnt much in the 4000-odd years since Abraham and Isaac. We witness countless deaths of our sons and daughters at the hand of non-religious wars. The claim that religion is responsible for most wars is simply untenable.

Conclusion

Undoubtedly, I have to conclude that the secular juggernaut is in the ascendancy. The atheists lead the charge, sowing the seeds of doubt wherever they can. Nevertheless, I hope I have demonstrated that it is still rational to hold faith in the most perfect being: God. I hope also that I have shown that there is no real conflict between faith and science – indeed, both support each other. More to the point, I hope I have sown a few of my own seeds of faith by show that these leading high priests of atheism – what is actually a deeply religious belief system – hold their views on blind faith, and they don't even know it. They are sophisticated, patronising pagan mystics who should be recognised as such. Those of us who acknowledge the Deity should have the complete confidence to cede no ground to them.

In Book Two of my series, 'Against Atheism: The Case for Christ', I will offer some of the empirical evidence in Scripture that supports the Jewish and then the Christian view of God. Once again, this information is for the rational believer. It is not a spiritual investigation into the Godhead. It might help people, in the midst of this secular nothingness where every value is as good as the next one, to acquire more secure footings – *reasonable* ones – for them to stand on as they embark upon their spiritual journey of becoming.

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Appendix 1

The Body Count

The following information is a direct quote taken from the website Necrometrics, www.necrometrics.com.¹

4. Crusades (1095–1291) 3,000,000

- Estimated totals:
 - Robertson, John M., *A Short History of Christianity* (1902) p.278: 9,000,000
 - Aletheia, *The Rationalist's Manual*: 5,000,000
 - Henry William Elson, *Modern Times and the Living Past*, (1921) p. 261: 5,000,000
 - Om Prakesh Jaggi, *Religion, Practice and Science of Non-violence*, (1974) p. 40:
 - 'The crusades cost Europe five million young men'
 - Fielding Hudson Garrison, *Notes on the History of Military Medicine*, Association of Military Surgeons, (1922) p. 106: 3,000,000 total, incl. 2,000,000 Europeans
 - MEDIAN: 3 million
 - Philip Alexander Prince, *Parallel universal history, an outline of the history and biography of the world divided into ...* (1838) p.207: 'Although two million souls perished in the Crusades...'
 - Charles Mackay, *Memoirs of Extraordinary Popular Delusions and the Madness of Crowds* (1841): 2,000,000 Europeans killed. [<http://www.bootlegbooks.com/NonFiction/Mackay/PopDelusions/chap09.html>]
 - Wertham: 1,000,000
 - John Shertzer Hittell, *A Brief History of Culture* (1874) p.137: 'In the two centuries of this warfare one million persons had been slain...'

¹ 'Selected Death Tolls for Wars, Massacres and Atrocities Before the 20th Century', January 2012, accessed 5 June 2017 at <http://www.necrometrics.com/pre1700a.htm#European>.

- NOTE: No scholar has ever published a death toll of less than one million or more than nine million, so the order of magnitude is generally accepted even if the precise number is unknown.
- Individual Events:
 - Davies: Crusaders killed up to 8,000 Jews in Rhineland
 - Paul Johnson *A History of the Jews* (1987): 1,000 Jewish women in Rhineland comm. suicide to avoid the mob, 1096.
 - Gibbon, *Decline and Fall of the Roman Empire*, v.5, 6
 - 1st Crusade: 300,000 Eur. k at Battle of Nice [Nicea].
 - Crusaders vs. Solimon of Roum: 4,000 Christians, 3,000 Moslems
 - 1098, Fall of Antioch: 100,000 Moslems massacred.
 - 50,000 Pilgrims died of disease.
 - 1099, Fall of Jerusalem: 70,000 Moslems massacred.
 - Siege of Tiberias: 30,000 Christians k.
 - Siege of Tyre: 1,000 Turks
 - Richard the Lionhearted executes 3,000 Moslem POWs.
 - 1291: 100,000 Christians k after fall of Acre.
 - Fall of Christian Antioch: 17,000 massacred.
 - [TOTAL: 677,000 listed in these episodes here.]
 - Catholic Encyclopedia (1910) [<http://www.newadvent.org/cathen/>]
 - Jaffa: 20,000 Christians massacred, 1197
 - Sorokin estimates that French, English & Imperial German Crusaders lost a total of 3,600 in battle.
 - 1st C (1096–99): 400
 - 2nd C (1147–49): 750
 - 3rd C (1189–91): 930
 - 4th C (1202–04): 120
 - 5th C (1228–29): 600
 - 7th C (1248–54): 700
 - James Trager, *The People's Chronology* (1992)
 - 1099: Crusaders slaughter 40,000 inhabs of Jerusalem. Dis/starv reduced Crusaders from 300,000 to 60,000.
 - 1147: 2nd Crusades begins with 500,000. 'Most' lost to starv./disease/battle.
 - 1190: 500 Jews massacred in York.

- 1192: 3rd Crusade reduced from 100,000 to 5,000 through famine, plagues and desertions in campaign vs Antioch.
- 1212: Children's Crusade loses some 50,000.
- [TOTAL: Just in these incidents, it appears the Europeans lost around 650,000.]

5. Albigensian Crusade (1208–49) 1,000,000

- The traditional death toll given for the war against the Cathars is one million, which is repeated in these:
 - John M. Robertson, *A Short History of Christianity*, London: Watts, 1902, p.254 ('It has been reckoned that a million of all ages and both sexes were slain.')
 - Christopher Brookmyre, *Not the End of the World* (New York: Grove Press, 1998) p.39
 - Max Dimont, *Jews, God, and History*, (New York: Penguin, 1994) p.225: 1,000,000 Frenchmen suspected of being Albigensians slain
 - Dizerega Gus, *Pagans & Christians: The Personal Spiritual Experience* (St. Paul, MN: Llewellyn, 2001) p.195
 - Helen Ellerbe, *The Dark Side of Christian History* (Orlando, FL: Morningstar & Lark, 1995) p.74
 - Michael Newton, *Holy Homicide* (Port Townsend, WA: Loompanics Unlimited, 1998) p.117
- Rummel: 200,000 democides
- Individual incidents:
 - Flexner, *Pessimist's Guide to History*: 20,000 massacred in Beziers.
 - Ellerbe:
 - Beziers: 20–100,000
 - St. Nazair: 12,000
 - Tolouse: 10,000
 - Newton: 20–100,000 massacred in Beziers.
 - Sumption, *Albigensian Crusade* (1978): <5,000 k. by Inquisition [ca. 1229–1279]

...

18. Spanish Inquisition (1478–1834)

- Cited in Will Durant, *The Reformation* (1957):

- Juan Antonio Llorente, General Secretary of the Inquisition from 1789 to 1801, estimated that 31,912 were executed, 1480–1808.
- In contrast to the high estimate cited above, Durant tosses his support to the following low estimates:
 - Hernando de Pagar, secretary to Queen Isabella, estimated 2,000 burned before 1490.
 - An unnamed ‘Catholic historian’ estimated 2,000 burned, 1480–1504, and 2,000 burned, 1504–1758.
- Flexner, *Pessimist’s Guide to History*: 8,800 deaths by burning, 1478–1496
- Philip Schaff, *History of the Christian Church* (1910): 8,800 burnt in 18 years of Torquemada. (acc2 Buckle and Friedländer)
- Motley, *Rise of the Dutch Republic*: 10,220 burnt in 18 years of Torquemada
- Britannica: 2,000
- Aletheia, *The Rationalist’s Manual*: 35,534 burned.
- Fox’s *Book of Martyrs*, Ch.IV: 32,000 burned
- Paul Johnson *A History of the Jews* (1987): 32,000 k. by burning; 20,226 k. before 1540
- Wertham: 250,000
- Rummel: 350,000 deaths overall.
- MEDIAN: 8,800 under Torq.; 32,000 all told.
- Punished by all means, not death.
 - Fox: 309,000
 - P. Johnson: 341,000
 - Motley: 114,401

Appendix 2

A Great Misunderstanding in the Bible: Homosexuality

A.C. Grayling argues that

Religions have often been cruel in their effects, and remain so today: homosexuals are hanged in Iran, adulterous women are beheaded in Afghanistan and stoned to death in Saudi Arabia.¹

As homosexuality is very much on the agenda of world religions today as well as that of secular critics, I thought I would take a closer look at this issue. Atheists use the condemnation of homosexual practises by the Christian church to attack the church as being unreasonable, and another nail in the coffin of its need to exist. This is not a direct attack on Jesus Christ, as he says nothing on the matter, but by attacking his church, atheists attack *his legitimacy*. I believe the church has misunderstood the Bible on this matter, so here I attempt to provide a way forward for the church to navigate through this issue and bring all of us to a better place.

Is the Bible against homosexuals?

Concerning Christian identity, Oakeshott² points out that Christianity is not a static set of ideas; it is a living belief system that has changed throughout history. Changing with the times keeps Christianity relevant, alive to the unfolding of social, political and cultural developments. The symbols and the traditions may stay the same, but it cannot allow itself to become an intellectual abstraction. It seems that some fluidity on issues of practice can be flexibly interpreted and reinterpreted differently by subsequent generations. This is the strength of an enduring religion.

It is clear either both male and female bodies are implied in God as he creates both in his image. This would mean you cannot define God as either male or female, in contradiction to the traditional pronoun we use for God: 'He'.

¹ Grayling, *The God Argument*, pp. 1–2.

² Oakeshott, *Religion, Politics and the Moral Life*.

Then God said, ‘Let Us make man in Our image, according to Our likeness; let them have dominion over the fish of the sea, over the birds of the air, and over the cattle, over all the earth and over every creeping thing that creeps on the earth’. So God created man in His own image; in the image of God He created him; male and female He created them. Then God blessed them, and God said to them, ‘Be fruitful and multiply; fill the earth and subdue it; have dominion over the fish of the sea, over the birds of the air, and over every living thing that moves on the earth’ (Genesis 1:26–28).

Following my line-by-line reading of the Bible, and taking a *reasoned* approach, I conclude that on balance the Bible is not against homosexuality – if we understand a homosexual relationship to mean an erotic attraction between two consenting males (or two females) who, controversially, want to be married. However, the act of anal penetration in the case of rape or male prostitution most certainly *is* condemned, as this amounts to extramarital sex (fornication).

The gay marriage laws that are now in force in the UK and US are, paradoxically, extremely conservative in their effect, because they encourage marriage and discourage fornication.

I should make it clear at this point that *Holy Matrimony* can never be between two people of the same sex. The only type of marriage ever mentioned in the Bible is between a man and a woman, and Jesus only endorses marriage between man and wife (Mark 10:7–9, Matthew 19:3–6). This is the only clear teaching in the Bible on this matter (Genesis 2:24). The secular authorities can consider same-sex marriage to be marriage, but it is never Holy Matrimony. I do not endorse such attempts.

The word ‘homosexual’ was only introduced into most modern Bible translations after World War 2. More widely, the fact of consenting males living openly together as a couple does not seem to have been either an option or on the agenda of any actor in society until more recent times. So, it is hard to find out what the Bible thought of such a relationship to the Bible when it did not even acknowledge it. Let us examine this further.

The apparent bad news first

Sections in Leviticus would seem to argue against homosexuality.

You shall not lie with a male as with a woman. It is an abomination. Nor shall you mate with any animal, to defile yourself with it. Nor shall any woman stand before an animal to mate with it. It is perversion (Leviticus 18:22–23).

If you read the previous verse (Leviticus 18:21), this is said in reference to worship of the false Semitic God, Molech, whose followers practised child sacrifice and the like. Male-on-male sex practised in these temples was regarded as sacred – it was called ‘Holy’ or ‘set apart’ prostitution.³ In this context, male-on-female sex was also practised, so it is possible to link the two acts and relate this condemnation to the broader malpractice of idolatry. Herodotus also confirms the practice of sacred or cultic prostitution:

The foulest Babylonian custom is that which compels every woman of the land to sit in the temple of Aphrodite and have intercourse with some stranger once in her life. Many women who are rich and proud and disdain to mingle with the rest, drive to the temple in covered carriages drawn by teams, and stand there with a great retinue of attendants. But most sit down in the sacred plot of Aphrodite, with crowns of cord on their heads; there is a great multitude of women coming and going; passages marked by line run every way through the crowd, by which the men pass and make their choice. Once a woman has taken her place there, she does not go away to her home before some stranger has cast money into her lap, and had intercourse with her outside the temple; but while he casts the money, he must say, ‘I invite you in the name of Mylitta’ (that is the Assyrian name for Aphrodite). It does not matter what sum the money is; the woman will never refuse, for that would be a sin, the money being by this act made sacred. So she follows the first man who casts it and rejects no one. After their intercourse, having discharged her sacred duty to the goddess, she goes away to her home; and thereafter there is no bribe however great that will get her. So then the women that are fair and tall are soon free to depart, but the uncomely have long to wait because they cannot fulfill the law; for some of them remain for three years, or four. There is a custom like this in some parts of Cyprus.⁴

In the Book of the Wisdom of Solomon, it is idolatry and the practice of anal sex at pagan temples that is condemned:

³ In the Old Testament, ‘set apart’ and ‘holy prostitution’ are mentioned in Deuteronomy 23:17, 1 Kings 14:24, 1 Kings 15:12, 1 Kings 22:46, 2 Kings 23:7, Job 36:14 and Hosea 4:14. This word ultimately morphs into ‘sodomite’ at some unknown point.

⁴ Herodotus, *Histories*, 1.199.

For the idea of making idols was the beginning of fornication, and the invention of them was the corruption of life, for neither have they existed from the beginning nor will they exist for ever. For through the vanity of men they entered the world, and therefore their speedy end has been planned. Afterward it was not enough for them to err about the knowledge of God, but they live in great strife due to ignorance, and they call such great evils peace ... For whether they kill children in their initiations, or celebrate secret mysteries, or hold frenzied revels with strange customs, they no longer keep either their lives or their marriages pure, but they either treacherously kill one another, or grieve one another by adultery, and all is a raging riot of blood and murder, theft and deceit, corruption, faithlessness, tumult, perjury, confusion over what is good, forgetfulness of favors, pollution of souls, sex perversion, disorder in marriage, adultery, and debauchery. For the worship of idols not to be named is the beginning and cause and end of every evil.⁵

In the God's Word Translation of the Bible, homosexuality is added to the list of evil acts,⁶ but it is absent in the King James Version of the Bible and or translations prior to it.

However, I am aware this view goes against current thinking regarding this section of text in the Bible, so suffice it to say that an 'abomination' is not a sin of the Decalogue. Clearly, if you behaved in this way, you ran the risk of being cut off from your people. However, what cannot be ignored later is the following text:

If a man lies with a male as he lies with a woman, both of them have committed an abomination. They shall surely be put to death. Their blood shall be upon them (Leviticus 20:13).

Strictly speaking, this verse is condemning adulterous acts of sex outside marriage. Paradoxically, it might well be that the most sensible thing to do is to allow a gay man to marry a gay man, allowing their erotic relationship to exist *within marriage* and within the lawful scope of the seventh commandment: 'thou shalt not commit adultery.'

More promising news

⁵ Wisdom of Solomon 14:12–14, 22–27 (<https://www.kingjamesbibleonline.org/Wisdom-of-Solomon-Chapter-14/>, accessed 12 June 2017).

⁶ Wisdom of Solomon 14:26 (ibid.).

So why do I think you can argue that the Bible does not condemn male-to-male *married* consenting love (as opposed to male sexual intercourse, consensual or otherwise) between two men? Well, male rape is not between two consenting adults: this is quite clearly condemned in the story of Sodom and Gomorrah. I don't think any homosexual man of reason would *not* also condemn such acts, just as they would male-on-female rape. Rape is rape and is rightly condemned by all civilised people. Looking at the following passages, I believe what we are looking at is a condemnation of rape condemnation rather than homosexuality:

Now before they lay down, the men of the city, the men of Sodom, both old and young, all the people from every quarter, surrounded the house. And they called to Lot and said to him, 'Where are the men who came to you tonight? Bring them out to us that we may know them carnally'. So Lot went out to them through the doorway, shut the door behind him, and said, 'Please, my brethren, do not do so wickedly! See now, I have two daughters who have not known a man; please, let me bring them out to you, and you may do to them as you wish; only do nothing to these men, since this is the reason they have come under the shadow of my roof'. And they said, 'Stand back!' Then they said, 'This one came in to stay here, and he keeps acting as a judge; now we will deal worse with you than with them'. So they pressed hard against the man Lot, and came near to break down the door. But the men reached out their hands and pulled Lot into the house with them, and shut the door. And they struck the men who were at the doorway of the house with blindness, both small and great, so that they became weary trying to find the door (Genesis 19:4–11).

To know someone 'carnally' is a euphemism for anal penetration without consent. Lot's weakness is that he suggests what he considers to be a less wicked act by offering his daughters to replace the men. Or perhaps, knowing they were homosexual rapists, he guessed they would not be interested, so it seemed a safe suggestion. The male rapist crowd were not interested in Lot's offer, and it looks like his guests (God's angels) had to then save him from being attacked by the gang of rapists. Either way, this does not place Lot in a positive light. Yet God graciously saves him and his family from the terrible destruction of the city, which was filled with corruption.

In the New Testament, Peter picks up on this story, arguing that God will condemn anyone who is driven by promiscuous sexual lust. According to Peter, God,

turning the cities of Sodom and Gomorrah into ashes, condemned them to destruction, making them an example to those who afterward would live ungodly; and delivered righteous Lot, who was oppressed by the filthy conduct of the wicked (for that righteous man, dwelling among them, tormented his righteous soul from day to day by seeing and hearing their lawless deeds) – then the Lord knows how to deliver the godly out of temptations and to reserve the unjust under punishment for the day of judgment, and especially those who walk according to the flesh in the lust of uncleanness and despise authority. They are presumptuous, self-willed. They are not afraid to speak evil of dignitaries, whereas angels, who are greater in power and might, do not bring a reviling accusation against them before the Lord (2 Peter 2:6–11).

Paul made similar points in Romans, where the normal love of two people is not disputed, but what *is* disputed is the love of either man or woman that becomes deprived, lustful, promiscuous, debased and so on. What he does not do is condemn consenting love between two adults in marriage. Also, it is important to note that this is said in reference to practices in pagan temples and in relation to idolatry:

For since the creation of the world His invisible attributes are clearly seen, being understood by the things that are made, even His eternal power and Godhead, so that they are without excuse, because, although they knew God, they did not glorify Him as God, nor were thankful, but became futile in their thoughts, and their foolish hearts were darkened. Professing to be wise, they became fools, and changed the glory of the incorruptible God into an image made like corruptible man—and birds and four-footed animals and creeping things. Therefore God also gave them up to uncleanness, in the lusts of their hearts, to dishonor their bodies among themselves, who exchanged the truth of God for the lie, and worshiped and served the creature rather than the Creator, who is blessed forever. Amen. For this reason God gave them up to vile passions. For even their women exchanged the natural use for what is against nature. Likewise also the men, leaving the natural use of the woman, burned in their lust for one another, men with men committing what is shameful, and receiving in themselves the penalty of their error which was due. And even as they did not like to retain God in their knowledge, God gave them over to a debased mind, to do those things which are not fitting; being filled

with all unrighteousness, sexual immorality, wickedness, covetousness, maliciousness; full of envy, murder, strife, deceit, evil-mindedness; they are whisperers, backbiters, haters of God, violent, proud, boasters, inventors of evil things, disobedient to parents, undiscerning, untrustworthy, unloving, unforgiving, unmerciful; who, knowing the righteous judgment of God, that those who practice such things are deserving of death, not only do the same but also approve of those who practice them (Romans 1:20–32).

I suggest that Paul clearly distinguishes between male lustful rape and homosexual love. In the next passage, this distinction is maintained, but other problems arise:

Do you not know that the unrighteous will not inherit the kingdom of God? Do not be deceived. Neither fornicators, nor idolaters, nor adulterers, nor homosexuals, nor sodomites (1 Corinthians 6:9).

Paul would seem to be saying: if you choose the homosexual life, you will not inherit the kingdom of God, even if you are different from the male-rape sodomites. The Greek word used here in the Septuagint is ‘αρσενικοίτης’, which used to describe a ‘poof’, ‘queer’, ‘pansy’ or ‘effeminate man’ in contemporary English. It might therefore be better to use the word ‘metrosexual man’ in our English translations. While Septuagint could have used the Greek word ‘ομοφυλόφιλος’, which specifically refers to a homosexual, it did not. What is more, it is also the word for the male prostitutes of the pagan religions, even though in most modern translations into English it is rendered simply as ‘homosexual’:

Do you not know that your bodies are members of Christ? Shall I then take the members of Christ and make them members of a harlot? Certainly not! Or do you not know that he who is joined to a harlot is one body with her? For ‘the two,’ He says, ‘shall become one flesh’. But he who is joined to the Lord is one spirit with Him (1 Corinthians 6:15–17).

Paul’s essential claim is that if you unite your body with a prostitute, you become one with that prostitute; if you unite with Christ, you become one with Christ, and importantly, one with his Spirit.

Some notable Bible translations of 1 Corinthians 6:9

During the fourteenth century, John Wycliffe’s first Bible translations into (Middle) English were underway. Wycliffe used the word ‘lecher’, the root word for

lecherous men, seducers, womanisers and effeminate men, not the word ‘homosexual’ used in the modern English translations.

Whether ye know not, that wicked men shall not wield the kingdom of God? Do not ye err; neither lechers, neither men that serve maumets⁷ [neither men serving to idols], neither adulterers, neither lechers against kind, neither they that do lechery with men.⁸

The fourth-century Latin Vulgate translation of the Bible translates 1 Corinthians 6:9–10a as follows:

*an nescitis quia iniqui regnum Dei non possidebunt nolite errare neque fornicarii neque idolis servientes neque adulterineque molles neque masculorum.*⁹

In English, it reads: ‘Do ye not know that the unrighteous shall not inherit the kingdom of God is not deceived: neither fornicators, nor idolaters, nor adulterers, nor effeminate, nor abusers.’¹⁰

In keeping with the Vulgate and Wycliffe translations, the King James Version of the Bible of 1611 renders the same verse as:

Know ye not that the unrighteous shall not inherit the kingdom of God? Be not deceived: neither fomicators, nor idolaters, nor adulterers, nor effeminate, nor abusers of themselves with mankind.¹¹

Interestingly, in a positive move, one of our most recent translations, the New Revised Standard Version, equates much more to the original Greek of two thousand years ago:

Do you not know that wrongdoers will not inherit the kingdom of God? Do not be deceived! Fornicators, idolaters, adulterers, male prostitutes, sodomites.¹²

⁷ A false god or idol.

⁸ See

<https://www.biblegateway.com/passage/?search=1+Corinthians+6%3A9&version=WYC>, accessed 12 June 2017.

⁹ See

<https://www.biblegateway.com/passage/?search=1+Corinthians+6&version=VULGATE>, accessed 12 June 2017.

¹⁰ Author’s translation.

¹¹ See <https://www.biblegateway.com/passage/?search=1+Corinthians+6&version=KJV>, accessed 12 June 2017.

¹² See <https://www.biblegateway.com/passage/?search=1+Corinthians+6&version=NRSV>, accessed 12 June 2017.

In terms of those who breach the Mosaic law, it would appear that Paul is concerned about the behaviour of sodomites rather than homosexuals. In 1 Timothy 1:10, he clearly states that the law was set up

for fornicators, for sodomites, for kidnappers, for liars, for perjurers, and if there is any other thing that is contrary to sound doctrine ...¹³

The reason is, they are breaching the seventh commandment – ‘Thou shalt not commit adultery’ – which prohibits sexual acts outside of marriage.

Christ’s half-brother Jude (Judas) also condemns the immorality of Sodom and Gomorrah (male rape), though not the consenting love between two adults:

as Sodom and Gomorrah, and the cities around them in a similar manner to these, having given themselves over to sexual immorality and gone after strange flesh, are set forth as an example, suffering the vengeance of eternal fire (Jude 1:7).

When you look at earlier versions of the Bible and follow their translation into English, it appears that the term used by Paul and Peter was based on the word ‘*arsenokaita*’. This is translated as ‘abuser of self with mankind’, or ‘that defileth self with mankind’, and it is rooted in an older word ‘*arsenoskoiten*’, which also cannot be translated as ‘homosexual’. This suggests that these texts are not a straightforward condemnation of homosexuality, as previously thought. It is more likely that they are condemning abuse, which implies rape – or certainly non-consent – or prostitution: the abuse of one’s body for money. All fornication outside marriage, by definition, is condemned. Male rape is consistently being unequivocally condemned, as is paid-for anal penetrative sex.

A Note on Corinth

Of the Greek city of Corinth, Horace, in his *Epistles*, says the following:

It is not every man’s lot to gain Corinth.¹⁴

A twenty-first-century reader will find it quite hard, reading St Paul and his supposedly anti-homosexual passages in the New Testament, to understand the historical context for his words.

¹³ See <https://www.biblegateway.com/passage/?search=1+Timothy+1%3A9-10&version=NKJV>, accessed 12 June 2017.

¹⁴ Horace, *The Works of Horace*, Bk 1, Ch. 17, line 36. Whether it was under Roman or Greek rule, you needed a lot of money to get to Corinth, and then to spend on its prostitutes.

We know from Strabo (approx. 64 BC to 24 AD)¹⁵ that Corinth was a sailors' heaven: prostitution took place on a large scale, involving around a thousand prostitutes of the cult of Aphrodite. What credence we give to Strabo's information is now disputed by modern scholars, but it would fit in with what we read about the city's reputation among the Greeks and Romans. One small paper by Blaiklock¹⁶ has helped me understand how early Christians interacted with their Corinthian pagan neighbours. We know from the Acts of the Apostles (19:21–41) that the growing popularity of Christianity led to a downturn in trade for the local silversmiths. The sales of trinkets associated with the local pagan cult plummeted, and the silversmiths' guild tried to stop Paul and others from preaching and converting their customers who had hitherto been going to the pagan temple. The Christians were viewed as enemies of the social order. The local official did not believe they had committed a crime and was reluctant to take matters further. Blaiklock speculates, and I believe with good reason, that just as trinket sales for idols would have plummeted, so too would sales for the meat sold for the idolaters' sacrifices, thus upsetting another key guild and parts of the economy of the Greco-Roman world. Christians were disruptive because they were effecting sweeping change in the economy.

In Peter's last general letter, he urged the church to listen to Paul's wise words against the pagan practices that led to idolatry, fornication and the like (2 Peter 3:15–16). Around this time, Jude also warns against these practices and the worship of Baal (Jude 11): this was the carnal, Canaanite worship of old. It involved sacred temple prostitution, sex outside marriage, and fornication, both heterosexual and homosexual. John, in Revelation 2:14–15, also expounds the same. In the Acts of the Apostles (15:20), the consuming of meat offered as a sacrifice to idols is always mentioned in the same breath as fornication. It is clear that all this was going on, and more, in the Corinth of Paul's time.

I submit that Paul's real target in his letters is false religion and its idolatry, which involves fornication and sacred prostitution, and not the consenting love of two males. The latter would amount to adultery, but the solution is marriage of the two consenting males.

¹⁵ Strabo, *Geography*, 8.6.20–23.

¹⁶ Blaiklock, *The Christian in Pagan Society*.

Same-sex unions in the Bible?

Ruth (an ancestor of Jesus Christ) held a very deep love for her former mother-in-law, Naomi. It has been argued by some that the relationship between Ruth and Naomi was a lesbian one, although others would argue that this relationship was purely a matter of two women who were devoted to each other helping each other out:

And she said, ‘Look, your sister-in-law has gone back to her people and to her gods; return after your sister-in-law’. But Ruth said: ‘Entreat me not to leave you, Or to turn back from following after you; For wherever you go, I will go; And wherever you lodge, I will lodge; Your people shall be my people, And your God, my God. Where you die, I will die. And there will I be buried. The Lord do so to me, and more also, If anything but death parts you and me’. When she saw that she was determined to go with her, she stopped speaking to her (Ruth 1:15–18).

The same question could be asked about the love of David for Jonathan, Saul’s son. Would it be described as homosexual now? Both David and Saul were kings of Israel. In the Bible, we read the following description of their relationship:

Now when he had finished speaking to Saul, the soul of Jonathan was knit to the soul of David, and Jonathan loved him as his own soul. Saul took him that day, and would not let him go home to his father’s house anymore. Then Jonathan and David made a covenant, because he loved him as his own soul. And Jonathan took off the robe that was on him and gave it to David, with his armor, even to his sword and his bow and his belt. So David went out wherever Saul sent him, and behaved wisely. And Saul set him over the men of war, and he was accepted in the sight of all the people and also in the sight of Saul’s servants (1 Samuel 18:1–5).

In the Gospel of Luke, the Greek word that is used in the Septuagint, *pais*, refers to a younger male servant in a same-sex relationship. Jesus makes no mention of this relationship; instead, he marvels at the centurion’s faith and heals the boy:

Now when He concluded all His sayings in the hearing of the people, He entered Capernaum. And a certain centurion’s servant, who was dear to him, was sick and ready to die. So when he heard about Jesus, he sent elders of the Jews to Him, pleading with Him to come and heal his servant. And when they came to Jesus, they begged Him earnestly, saying that the one for whom He should do this was deserving, ‘for he loves our nation, and has built us a synagogue’. Then Jesus went

with them. And when He was already not far from the house, the centurion sent friends to Him, saying to Him, ‘Lord, do not trouble Yourself, for I am not worthy that You should enter under my roof. Therefore I did not even think myself worthy to come to You. But say the word, and my servant will be healed. For I also am a man placed under authority, having soldiers under me. And I say to one, ‘Go,’ and he goes; and to another, ‘Come,’ and he comes; and to my servant, ‘Do this,’ and he does it.” When Jesus heard these things, He marveled at him, and turned around and said to the crowd that followed Him, ‘I say to you, I have not found such great faith, not even in Israel!’ And those who were sent, returning to the house, found the servant well who had been sick (Luke 7:1–10).

Finally, let us consider the following two statements:

And you shall love the Lord your God with all your heart, with all your soul, with all your mind, and with all your strength.’ This is the first commandment. And the second, like it, is this: ‘You shall love your neighbor as yourself.’ There is no other commandment greater than these (Mark 12:30–31).

In short, the argument is this: religion is characterized by its power to give life and to give it abundantly; Christianity is a religion; and therefore it can properly be said to maintain its identity while continually admitting perhaps wholly new ideas and practices, so long as the modifications are effected in such a way as to cause no absolute break in the development and to comply with its general nature as a religion.¹⁷

The overriding teaching is: ‘love thy neighbour as thyself’. Male-on-male love is not condemned in the context of secular marriage but male-on-male rape is, as is lustful, rampant anal penetration, male prostitution, and lustful, rampant male-on-female fornication and adultery. I cannot add anything more than this on the matter, but I think the Bible can be read as being favourable to our homosexual (consenting and married, under the secular authorities) Christian brothers.¹⁸

¹⁷ Oakeshott, *Religion, Politics and the Moral Life*, p. 68.

¹⁸ Tim Cook, CEO of Apple, has said: ‘I believe deeply in the words of Dr. Martin Luther King, who said: “Life’s most persistent and urgent question is, ‘What are you doing for others?’” I often challenge myself with that question, and I’ve come to realize that my desire for personal privacy has been holding me back from doing something more important. That’s what has led me to today ... While I have never denied my sexuality, I haven’t publicly acknowledged it either, until now. So let me be clear: I’m proud to be gay, and I consider being gay among the greatest gifts God has given me’ (Cook, T.D. ‘I Don’t Consider Myself an Activist, but I Realize How Much I’ve Benefited from the Sacrifice of Others.’ Bloomberg, 31 October 2010, accessed 6 June 2017 at

[http://www.businessweek.com/articles/2014-10-30/tim-cook-im-proud-to-be-gay.\)](http://www.businessweek.com/articles/2014-10-30/tim-cook-im-proud-to-be-gay.)

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