

Science and belief: The big issues

Stannard, R. (2012). Lion Hudson, Oxford.

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The subject of this book originally appeared as a twelve-episode series for the BBC. The author, Russell Stannard, is a physicist and licensed lay minister in the Church of England who, although finding no conflict between science and belief himself, allows the reader to make up their own mind after a stimulating discussion of the questions raised.

There are eight major issues raised in the book—that relating to Genesis and Evolution, Intelligent Design, Morality, Creation, Anthropic Principle, Extraterrestrial Intelligence, Psychology, and Miracles. Broadly speaking the author's approach is one that demonstrates an intimate knowledge of modern physics, which is not surprising, and one that is prepared to accept the major tenets of evolutionary theory. In fact the impression is left with the reader that scientific theory and practice can provide insight into Christian belief. Conservative Christians may find the book rather challenging from this perspective but the book does now represent the orientation of a significant proportion of the Christian church to the question of science and belief. However, regardless of one's particular profession of belief, the book provides valuable information for contemplation.

The chapter on Genesis and Evolution focuses on how a large proportion of biblical scholarship understands the language of Genesis. The author introduces the reader to the concept of 'myth' in a positive sense, to the concept of story or narrative, to the difference between the 'how-type' and the 'why-type' questions, and to some historical information that links the literal interpretation of Genesis with the Protestant Reformation.

Changes in the Roman Catholic understanding of biblical inspiration from the time of the Council of Trent (1540's) to Vatican II in 1962 are also briefly outlined. The point of this chapter is to show, in the author's opinion, that Genesis and Evolution are not on a collision course if properly understood.

The Intelligent Design (ID) chapter amounts largely to a discussion of the arguments for and against evolution. While suggesting that ID is essentially a "God of the Gaps" type of argument, Stannard claims that, "ID is at least a step on the way towards acknowledging that evolution has taken place". While some ID adherents might agree, others would disagree with this statement. Some common misconceptions of evolution such as the wholly unpredictable nature of evolution are discussed in terms of the emergence of complexity by a process known as 'convergence' which seems to be endemic to evolution. The author acknowledges the basic unfairness associated with evolutionary process, but also recognises that "the deep mystery of premature death, and indeed the other manifestations of life being unfair, has always been with us". In this regard, an interesting observation is made that there appears to be an "indissoluble link between love and suffering...an example set by God himself". The chapter concludes by pondering on the spiritual nature of human beings. Did this emerge through a process of evolution like that supposed to have occurred for our physical nature? Or was some other process involved?

Here are some commonly held opinions on the question of morality that the author uses to begin a discussion of the topic:

Opinion 1: Our sense of morality comes from God.

Opinion 2: Morality comes from society and our parents and it's ridiculous to say that if you're not religious then you can't be moral.

Opinion 3: I think the sole reason that humans behave altruistically is because it's an evolutionary advantage.

Opinion 4: I think that science has nothing to do with morality. If it wasn't given morality from religion then humanity would have no limits.

Stannard proposes that the Genesis account and the evolutionary account of human beginnings both point to the inherent selfishness of the human character. "Thus Genesis sets the scene for all that is to follow: namely our need to repent and, by an act of the conscious will, re-centre our lives on God. But being naturally selfish is the same sort of conclusion one comes to from evolutionary theory. Far from discrediting the Adam and Eve story, in this respect at least, evolution serves to throw fresh light on an ancient insight into the intrinsic nature of the human character". Altruism is discussed from the point of view of reciprocal altruism or enlightened self-interest and altruism on behalf of close kin, that is, on behalf of those who share the same genetic material. The author then challenges us to think about a higher form of altruism such as helping those who are not of close kin and who cannot pay you back, that is, where there is neither a genetic advantage nor a self-interest advantage. The question is then asked: "Is this where religion comes in?"

Creation is discussed in the light of modern cosmological ideas. This chapter gives the reader some interesting insights. If space-time originated at the Big Bang an interesting scenario arises as to the question about the cause of the Big Bang. Stannard expresses the scenario this way: "Now, for those seeking a cause of the Big Bang, this raises a problem. As we have seen, cause is followed by effect. But where the Big Bang was concerned, there was no before. Thus we cannot have a "cause". Although the question, "What caused the Big Bang?" strikes us as a perfectly reasonable thing to ask, it is not. Our line of argument appears to lead to the conclusion that the question is meaningless".

Stannard distinguishes between the words "origin" and "creation" in attempting to understand God's part in what came to be. "Origin" has to do with the methodologies and discoveries of science in relation to how things came into existence. "Creation", the province of theology, is concerned with the question, "Why is there something rather than nothing?", and this has to do with the past as well as the present. The question of creation has to do with God

as sustainer coupled with God as the source. Stannard puts it nicely this way: "If God is to create a physical world—a block universe in which all instants of time are on an equal footing—why should he take a particular interest in the instant marking one end of the worldlines—namely that representing the Big Bang? It could be argued that that instant is no more significant than any other. It has to be the whole ensemble, or nothing. It is in this sense we say that God is the answer to the question of why there is something rather than nothing, and how the world is sustained in existence". The discussion on time includes the role of consciousness, and the meaning of 'transcendence' as opposed to 'immanence'. God is both transcendent, out of or beyond space-time, and he is immanent or within space-time. Finally the author sees no problem for Christian belief if our universe is shown to be part of a multiverse. The lack of a beginning or origin to the multiverse would not impinge at all, according to the author, on the creation question.

The Anthropic Principle deals with the interesting situation where the physical and chemical properties of the universe appear to be just right for the emergence of life. Stannard chooses to discuss eleven of these properties, including the fortuitous occurrence of the nuclear resonance that facilitated the formation of carbon, and while they do not prove the existence of God, "the idea that God designed the universe primarily as a home for life is certainly one possibility". The book points out that physically we are insignificant. Our death has no effect on the Sun but the Sun's death would have a major impact on us. The author concludes, however, that, "once we bring to mind the whole question of consciousness, that surely alters the situation. Recall the words of Blaise Pascal: *Man is the feeblest reed in existence, but he is a thinking reed...though the universe were to destroy him, man would know that he was dying. While the universe would know nothing of its own achievement*".

The chapter on Extraterrestrial Intelligence (ETI) is an interesting one as it is not commonly featured in books on science and belief to my knowledge. The position is taken that, "faced

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with the knowledge we now have of the mind-bogglingly vast number of different habitable locations there are in the universe...it is more likely that ETI does indeed exist". Many conjectures are drawn about how beings of ETI might relate to God. For example, what would be the significance of Christ's death and resurrection for such beings? Equally unusual, but nonetheless informative, is a chapter on psychology. This chapter examines the notion that everyone has within them a religious drive and the author discusses at some length the concepts of free will and determinism. One of the problems outlined by the author is the question relating to the extent to which an individual can be held responsible for their choices and actions if determinism holds. That is, how can we be held responsible for our actions if we really had no alternative but to choose as we did?

In the chapter on miracles the author makes the following conclusions: that Jesus was against the unjustified use of miraculous power; for God's followers faith preceded the experience of a miracle; and one of the things that distinguishes the miracle accounts in the Bible from those in the writings excluded from the canon is that most of them appear to have some deep spiritual connection. Although there may be a modern scientific explanation or challenge for some of the miracles recorded in the gospels, this would appear not to be the case with the resurrection of Christ. Stannard, on comparing the accounts of the gospels, concludes that the "testimony has come down to us in this form presumably because this is what actually happened. It is the imperfect, incomplete account of a historical event...It is when each of the witnesses comes out with exactly the same story that we begin to suspect that they have previously got together to ensure they are all singing from the same hymn sheet". The authenticity of the resurrection account adds to its credibility.

In the final chapter Stannard describes the relationship between science and belief in four different ways: conflict, independence, interaction, and integration. His own preference is for the integration model but acknowledges that other models have certain strengths. The author's own approach is described as follows: "...the only

intellectually honest position is to fully embrace everything that both science and religion are trying to teach us. This in turn means we have to examine how the two domains of understanding relate to each other".

The paperback edition is 176 pages in length. Each chapter begins with a small collection of statements on the topic made by a diverse group of individuals and each chapter concludes with a small number of probing questions. While the book appears to have been written as a response to the atheistic orientation of the books by Richard Dawkins and Stephen Hawking its aim is not to make converts but to present background information as impartially as possible and allow the reader to make up their own mind on the issues presented. It is understood that readers may disagree with some of the author's conclusions or approaches but the book is a useful guide to current thinking on the topic. [TEACH](#)

