

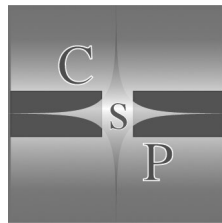
# Creation and the Abrahamic Faiths



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Edited by

Neil Spurway



Cambridge Scholars Publishing

Creation and the Abrahamic Faiths, Edited by Neil Spurway

This book first published 2008. The present binding first published 2008.

Cambridge Scholars Publishing

12 Back Chapman Street, Newcastle upon Tyne, NE6 2XX, UK

British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library

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ISBN (10): 1-84718-809-5, ISBN (13): 9781847188090

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# THE SCIENCE AND RELIGION FORUM: SEEKING BOTH INTELLIGIBILITY AND MEANING

Growing out of informal discussion meetings which began in 1972, around the key figure of Revd Dr Arthur Peacocke, the Science And Religion Forum was formally inaugurated in 1975. Its stated purpose was to enable further discussion of the issues which arise in the interaction between scientific understanding and religious thought. These issues, together with the social and ethical decisions demanded by scientific advances, have remained the subject of the Forum's meetings since that date.

In 2005 the Forum merged with the Christ and the Cosmos Initiative. This had been founded by the Revd Bill Gowland, a past President of the Methodist Conference, with the intention of bringing the latest knowledge of scientific thinking within the orbit of the enquiring layperson.

Thus enlarged, the Forum is open to all who are concerned to relate established scientific knowledge and methodology to religious faith and practice. Focusing its broader objectives, it seeks particularly to:

- 1) encourage scientists with limited knowledge of religion, and religious people with limited knowledge of science, to enhance their comprehension of one another's positions
- 2) provide an interface between academics, active in science-religion work, and public communicators – notably teachers, clerics, and those training future members of these professions.

At every point, the Forum strives to extend recognition that science and religion, properly understood, are not antagonists, but complementary in the quest for truth.

The Forum holds a regular annual conference, plus occasional smaller *ad hoc* meetings, and publishes a twice-yearly journal, *Reviews in Science and Religion*.

At the date of the present publication the Forum's President is Prof John Hedley Brooke (Oxford) and its Chairman Prof Neil Spurway (Glasgow).



# INTRODUCTION

## CREATION IN THREE FAITHS

NEIL SPURWAY

Creation! How we are here. Not *just* us, of course, but bluetits and Hereford cattle and humpback whales ... and oak trees and cabbages and mildew and *E. coli* ... and granite and sandstone and deserts and mountains and moons and suns and nebulae ... in fact, the Cosmos – all that is. Not just “Why are we here?”, therefore, but “Why is there a ‘here’ for us to inhabit?”. Or, as philosophers are inclined to put the matter, “Why there is something, rather than nothing?”

That is our theme. Inevitably we don’t answer the question in a detailed, expository sense – no-one can. A telescope cannot look at itself, and neither can an inhabitant of the Universe say how it came to be. But are there any human beings capable of formulating thoughts who have not at some time asked such questions? One may well suspect, with J.B.S Haldane, that “The Universe is not only queerer than I suppose, but queerer than I *can* suppose”. But that does not stop those questions haunting us.

So where shall we turn? To cosmology? It has made huge strides in recent decades, and the concept of an initial event, a “Big Bang”, about 14 billion years ago, is now almost universally accepted in the field. But what caused *that*? Most would feel that this is not a question science can answer. So, even though the first two contributors to this book are professional cosmologists and several of the others are well informed about the subject, scientific cosmology is only a background to this book, not its core theme. That theme is the conviction that the truly fundamental explanation for our and the Universe’s existence must be a divine Creator – and the specific formulations of that view in the three great monotheistic religions.

These are the faiths which share a common basis in the early history of the Jewish people, and so have been termed the “Abrahamic” faiths. The scriptures of all three include the book of Genesis, and the accounts of creation in its first two chapters. Each faith has added to those accounts –

in the many later books of the Jewish Bible, in the Christian New Testament, and perhaps most radically of all in the Islamic Qur'an. In each faith, too, there have been countless scholarly commentaries on the scriptures. These later developments have moved the expressions of the three faiths considerably apart, and their worship practices have followed and reinforced the dynamics of separation. However, the social and political conditions of the 21<sup>st</sup> C world make it imperative that every effort should be put into a recovery of understanding between practitioners of the three faiths; thence hopefully a reduction, if not of the differences themselves, at least of the importance placed upon them.

So far, Creation has been referred to in this introductory note as a datable event, but that is by no means the only way the theme must be considered. In the first place to do so would be injudicious, because cosmological thinking might change and the concept of an infinitely long-lasting universe return – perhaps, for instance, with the present one being seen as a single instance in a endless sequence. A truly religious view should not be deterred by this. Quite the opposite, indeed, for the sense of an eternally sustaining deity, upholding creation throughout every moment of its existence and present to every particle of its being, is of the essence for most deep believers. The theological term for this is “immanence”, and it is an immanent God, not just one who set the universe going but then withdrew from involvement, whom most people would wish to worship and attempt to serve.

As a particular aspect of service, the citizens of this world are at last waking up to the need to conserve it – to care, not only for one another but for their shared environment, animate and inanimate. To the religious temperament, this is not only a moral imperative but an aspect of worship, a corollary of belief in creation that is as powerful in logic as it is in emotion. So, while the early chapters of the present book are chiefly concerned with belief in God's creative role, as expressed in the myths and metaphors, the scriptures and theologies of the three faiths, several also consider the respective attitudes to environment, and the final chapters focus there. Reassuringly, we find that these attitudes are coming, at least in the current generation, to have a great deal in common.

## **Structure of the book**

The chapters of this book are based on talks given at a conference of the Science and Religion Forum, held in Manchester in Sept 2006. Five main papers were delivered, as plenary lectures, by invited speakers. To all but the first of these there was also a response by a comparably expert

commentator with a different viewpoint. There were also a number of rather shorter papers, contributed by participants in the conference and heard by smaller groups. The main papers, the responses, and three of the shorter papers which were judged to contribute substantially to the theme, are collected here – two short papers as stand-alone contributions, the other restructured to constitute a response to the first main paper. This had been given as an open public lecture, so did not receive a pre-arranged, conference-style response at the time. In addition, one intended main paper, which at the last minute could not be given at the conference, is included too. The resultant arithmetic is that two of the chapters are by members of the Jewish faith, three by followers of Islam, and the remaining eight by Christians or representatives of the Christian culture. Overall, this seems a reasonably proportionate reflection of the relative influences of the three Abrahamic faiths in 21<sup>st</sup> C Britain.



# CHAPTER ONE

## CREATION ACCOUNTS IN THE OLD TESTAMENT

DAVID WILKINSON

*Revd Dr David Wilkinson, FRAS, studied in Durham and Cambridge. He has PhDs from Durham in both Theoretical Astrophysics and Systematic Theology. He is a Methodist minister and at the same time Principal of St Johns College, Durham, an Anglican foundation. His many writings in the Science/Religion field include two books: "God, time and Stephen Hawking" (Monarch, 2001) and "Creation" (IVP, 2002)*

*This lecture, which opened the conference in Sept 2006, was that year's Gowland Lecture. This is an annual lecture in memory of Revd Bill Gowland, another Methodist minister and passionate communicator, who contended that the churches had missed the opportunity offered by the Industrial Revolution, but must not miss that of the Scientific Revolution.*

*In his Gowland Lecture, David Wilkinson presented the classical Genesis-based view of the creations of the world and of humankind, from the standpoint of a believer who is also a 21<sup>st</sup> C cosmologist and environmentalist. His account seeks to accord with those of modern-day Jewish and Muslim thinkers as well as of his fellow Christians.*

### **Introduction**

It is an immense privilege to be invited to give this annual Gowland lecture. Many of us owe a debt of gratitude to Bill Gowland. As a mentor and a model, he pointed us to the importance of a theology of work through his leadership of Luton Industrial College, the importance of a theology of technology in his *Shaping Tomorrow* project and indeed the

importance of a theology of creation in *Christ and the Cosmos*. In all of these different initiatives, Gowland wanted to take the complexity of the modern scientific world seriously. He also wanted to take God seriously, and especially a confidence in God.

It is therefore fitting to be asked to give this lecture on “Creation Accounts in the Old Testament”. This is a huge and complex subject, but at heart it is about who God is and confidence in God. Indeed, there are many creation accounts in the Old Testament – or, as many scholars prefer to say, the Hebrew Bible. As well as the much discussed Genesis 1-3, we might add Proverbs 8:22-36, Psalm 8, Psalm 19, Psalm 148, Genesis 9:8-17, Job 38:1-42:17 and Isaiah 40:9-31 as obvious examples.<sup>1</sup> Then there is the way that creation appears in other biblical themes and narratives, in particular the themes of sin, fall and covenant. If that makes our lecture title seem vast, we must remember a further complication. The scriptures do not discuss creation in terms of cosmology for its own sake. Creation is discussed for worship, encouragement, the challenge to holiness, and reassurance. Karl Barth reflected this very clearly in his own theological thinking about creation. He expressed it in terms of the covenant being the “internal basis of creation” (its inner rationale) and of creation being the “external basis of the covenant” (the context within which covenant could be initiated and brought to consummation). By so doing, he attempted to reorientate the discussion away from creation and cosmology to God’s relationship with creation and humanity in particular.

Yet the mention of Barth brings one further important dimension to this topic. I come to “Creation Accounts in the Old Testament” from a particular point of view, that is, of a Christian theologian and scientist trained in astrophysics. The scriptures are an extremely rich and diverse source of thinking about creation, and most of us are selective in our reading from our point of view. I am therefore drawn to discuss those passages which resonate both with my interest in science and my Christian faith. I offer this not as a normative way of reading these passages, but as a way of opening up a dialogue with other scholars and faith communities who look to the same passages.

As a Christian theologian, I must acknowledge that the Christian reading of creation passages in the Old Testament has a mixed history. For example, the phrase “let us make humankind” (Genesis 1:26) has sometimes been used in Christian tradition to argue that the Trinitarian understanding of God was there from the beginning. We need to be careful of such an argument, not least because others could argue that in fact the author believed in the multitude of gods of some ancient near east stories rather than one God. The temptation is always to read back into the

creation accounts, things that are not there in the original authorial intention. Now of course, if one adopts a particular view of the inspiration of Scripture which sees it as having a unity transcending authorial intention, then one can argue for such interpretations being valid. However, at the very least one must acknowledge that this is one of the things that you are bringing to the text. I am therefore, as a Christian theologian, quite committed to reading the scriptures from a perspective of God as Trinity, while stressing that the primary way of understanding “let us” is as “a divine announcement to the heavenly court”.

There are even more serious mistakes in the way that Christians have read the Old Testament. The early chapters of Genesis have become a justification for apartheid, the conflict mentality of six day creationism with modern science and the devaluing of the nature and role of women compared to men. However, other Christians have used these very passages to critique racism, creationism and sexism. This is a reminder that our interpretation of these passages is always provisional, often flawed and never should be done in isolation from others who look to these scriptures. It is in this spirit that I offer the following!

I will therefore present a number of major themes which Christian scholars have seen in the creation accounts of the Old Testament. Inevitably these will be illustrated with reference to the early chapters of Genesis.

### **Theme one: In the beginning God**

The first verse of the book of Genesis sets out a clear statement of the sovereignty of God in the creation of the space-time Universe, “In the beginning God created the heavens and the earth” (Gen 1:1). It may be obvious to draw attention to this, but we should not underestimate its importance to the author of this first chapter. Time after time the author returns to this theme in a number of subtle ways.

For example in verse 16 the author writes “God made two great lights – the greater light to govern the day and the lesser light to govern the night.” The reference here is to the Sun and the Moon but we need to ask why are they referred to as the greater and lesser lights? Part of the reason seems to be that in other stories of creation in the ancient near east the “Sun” and “Moon” were seen as gods. Here we have theological polemic. By referring to the two great lights, the author is saying that the Sun and Moon are not gods but simply part of the creation of the one God. A similar polemic happens in verse 21, “God created the great sea monsters”. This special word for “create” is only used in the creation of the heavens

and the earth (Gen 1:1), the creation of humanity (Gen. 1:27) and here in verse 21. We might understand why this word refers to the whole of creation and human beings, but why the great sea monsters? Again in some stories of the ancient near east god has to overcome the great creatures of the sea before creating. The polemic here is to say that even if these great sea creatures exist they are all created by the one God.

Of course scholars debate the nature of polemic and how the author of Genesis 1 uses it. Gunkel in 1895 raised the question of whether Genesis 1 is dependent on other creation stories and many theories have been suggested as to the relationship of the Genesis account to stories in the ancient near east such as the Babylonian creation stories *Enuma Elish* or the *Atrahasis* epic, or Egyptian ideas of creation in such works as *The Teaching of King Merikare*. Some have reduced the Genesis account to a much later work which has simply copied more ancient stories, while others wanting to defend the purity of Genesis as revelation direct from God have emphasised the differences. The truth is probably more complex than either of these standpoints<sup>2</sup>. There are broad parallels between Genesis and the Babylonian stories, such as the separation of heaven and earth, and the schema of creation followed by divine displeasure followed by flood. However, the evidence for direct dependence is weak in all these cases. For example the often quoted parallel that the Babylonian Genesis is written on seven tablets, which parallels the seven days of creation of the Hebrew account, is simply coincidence. The division of the Babylonian story bears no resemblance to its content, or indeed the stages of the story.

Whatever the exact relationship between Genesis 1 and other creation stories, the intention of the author seems clear. The message conveyed by this text is that God is without peer or competitor, he has no rivals in creation. His word is supreme, that is, He speaks and it is done. This theme is picked up in other parts of the scriptures. The book of Isaiah uses creation to ask “Who is like God?” (Isaiah 40:18), the book of Job to speak of the mystery of God (Job 38:4), and various Psalms as an encouragement to worship. As an astrophysicist in the light of the vastness of a Universe 13 billion light years across and containing 100 billion stars in each of 100 billion galaxies, I hear the theological caution of the JB Phillips’ book title “Your God is too small”.

The sense of God without peer or competitor in creation has led Christians to develop this into an understanding of God’s creative work out of nothing. For some, the opening image of a primordial watery chaos over which God’s spirit hovered and into which God’s word was spoken, leaves open the question as to whether God simply shaped the universe from pre-existing matter, somewhat like an architect imposing order on

matter that was ready to hand. This view appeared in Gnostic writers and was, in turn, used for apologetic purposes by Christian apologists such as Justin Martyr who was executed in 165 CE. Indeed there have been some who have argued that “creation out of nothing” is at best ambiguous in Genesis and only came to clear articulation as Christian faith encountered and responded to the questions and challenges of Greek philosophy and Gnostic thought<sup>3</sup>.

I think such arguments underestimate the sense of God as sole Creator contained within the creation accounts of the Old Testament<sup>4</sup>. Now of course, the writer of Genesis 1 was much more concerned to proclaim the movement from chaos to order, than to speculate on the absolute origin of things. Nevertheless, it is important to be clear that for the biblical writers there was no significant dualism of God and matter/chaos<sup>5</sup>. The emergence of the doctrine of *creatio ex nihilo* in Christian writers of the second and third centuries such as Theophilus of Antioch, Irenaeus and Tertullian was driven precisely by the concern to maintain the biblical affirmations of the basic goodness of the world and of God’s utterly unopposed freedom in creating. All that exists has its source in nothing other God.

Torrance defines the doctrine as:

“The creation of the universe out of nothing does not mean the creation of the universe out of something that is nothing, but out of nothing at all. It is not created out of anything – it came into being through the absolute fiat of God”’s word.”<sup>6</sup>

He argues, significantly, that this doctrine and the associated rejection of Gnosticism was important for the development of the natural sciences on account of the affirmation of the fundamental goodness of creation it represents. Creation is distinct *from* God but dependent for its existence *on* God. As such, creation is both to be valued, rather than to be escaped, and free to be investigated rather than worshipped. Along with this, God was not constrained in creating by the limitations of pre-existing matter but could create freely. Thus, to fully understand the God-given order of the universe it was necessary to observe it: that is one of the basic principles of empirical science.

This scriptural understanding of God as sole creator has important things to say not just to the history of science, but also to current scientific discussion. Oxford chemist Peter Atkins promotes the position that God is redundant in modern cosmology:

“Reductionist science is omniscient. Science has never encountered a barrier it has not surmounted or that we can reasonably suppose it has

power to surmount and will in due course be equipped to do so....Religion has failed, and its failure should be exposed. Science, with its currently successful pursuit of universal competence through the identification of the minimal, the supreme delight of the intellect, should be acknowledged king.”<sup>7</sup>

This “conflict” model of science and religion has also tried to enroll Stephen Hawking’s view that science may be able to explain the initial conditions of the Universe through a quantum theory of gravity or a “theory of everything”. However, as I have argued elsewhere, Hawking’s “absence of God” is an attack upon the misguided god of the gaps argument, or indeed a deistic creator who starts the Universe off and then has nothing more to do with the Universe<sup>8</sup>. Hawking does not provide answers to fundamental questions such as the origins of the laws of physics, the purpose of the universe, its order and intelligibility. The Christian theologian will want to affirm Hawking’s scientific attempts to explain the first moments of the Universe’s history, but will also want to point to questions which are beyond the capacity of science to answer. Without a sense of God as the sole Creator, the Universe will never be understood.

In fact, there are those who suggest that the Big Bang model itself confirms the biblical understanding. Russell suggests that the notion of a historical origination of the universe provides an important corroborative meaning for the logically prior notion of the ontological origination of the universe – the belief that all that exists depends on God regardless of whether or not it had a beginning – although it is not essential to it<sup>9</sup>. The relationship between historical and ontological origin lies in the concept of finitude. The fact that the universe has a finite history is not trivial in the sense that a temporal origination of the universe can provide confirming but not conclusive or essential evidence for ontological origination. If *creatio ex nihilo* was viewed as a hypothesis to understand the Universe then a temporal beginning could be used as confirming evidence alongside other things.

## **Theme two: God saw that it was good**

If modern science depends on the biblical conviction that God as sole Creator of the Universe had freedom in creating, then it also needs a belief that this freedom does not lead to incomprehensible chaos in the Universe. Many historians of science have pointed to the Judaeo-Christian worldview as giving the belief in an inherent order to the natural world, and that this order should be comprehensible<sup>10</sup>. Thus the laws of physics

are a reflection of the faithfulness of God in sustaining the Universe and its order.

Genesis 1 is one of the passages which illustrates such an order within creation. God transforms the “formless void” (Gen 1:2) by giving structure through separation and then filling up those structures. Some biblical commentators have also seen a pattern of the number seven which goes beyond the simple seven day structure. For example, there are seven Hebrew words in verse 1, verse 2 has fourteen, and verses 1 to 3 of chapter 2 have thirty-five. The word “God” occurs thirty five times, the word “Earth” occurs twenty one times, and the phrase “God saw that it was good” occurs seven times. Now one does not need to be a great mathematician to see that something very subtle is going on! The order inherent in the chapter communicates that creation has an order to it because of the Creator

A similar message is communicated through the description of the role of Wisdom in creation (Proverbs 8:22-31). Wisdom is before the Universe and fundamental to its creation (v23-29), and Wisdom’s relation to the creation is given in terms of an architect (v27-29), a builder (v28) and a ruler (v29). Wisdom is personified and fundamental to the whole creative process, and in particular to ensuring the stability and continuation of the creation. Wisdom is key to the continuous process of fashioning creation into a world which is intelligible, orderly and good. The images of architect and builder give a picture of a well-structured creation. Further, Wisdom rules the chaos of the sea, setting boundaries for it. There is no suggestion of a primeval battle between the waters and God, but simply that the chaos of this world is contained by Wisdom.

This sense of God freely creating the universe in an orderly way not only encouraged the growth of science but also engendered a positive attitude towards the study of nature in theologians otherwise as different as Aquinas and Calvin. Christians need to recapture this positive attitude to science and the creation. While wanting to reject Dawkins’ wilder claims about *The God Delusion*, the Christian theologian must be thankful for Dawkins’ description of the wonder of evolutionary biology. Too often in the contemporary world church leaders are either fearful or ignorant of science. Yet to be a scientist is affirmed as a calling by the Abrahamic faith traditions, as those who explore the order of the Universe or those who use the order do so because of God.

It is important to note that this sense of God’s faithfulness reflected in the order of creation does not give any support for the Intelligent Design movement. This broad umbrella of creationist and anti-reductionist groups has grown in popularity in North America. Some of the arguments regress

to “god of the gaps” approaches, but more importantly they ignore one of the most important aspects of the scriptural accounts. This is, the reflection of God in the order of the Universe can only be seen in the dialogue of God’s word and his works. None of the biblical accounts suggest that God can be found on the basis of rational argument. When the order of the Universe is discussed it is discussed in the context of a God who speaks and reveals his role as Creator of that order. For example, the heavens declaring the glory of God (Ps 19:1) are held together with the law of the Lord “enlightening the eyes” (Ps 19:8). For the Christian, the New Testament takes this further and says that the Creator God is only fully seen in Jesus Christ. It is telling that there is little mention of Jesus within Intelligent Design.

### **Theme three: He made the stars also**

In case this talk of order gives the impression that the biblical accounts portray God as a boring egghead or divine mathematician who can be blamed for numerous students having to learn calculus, we need to notice another over-riding theme. Alongside the images of lawgiver, king, builder and architect, God is also the great artist in creation.

If we return to Genesis 1 we see creativity and diversity in abundance. The acts of separation (verses 3, 6, 7, 14, 18) give contrasts of heat and cold, oceans and dry land, the brightness of a summer day and the star field of a clear night. These all engage senses and add to our experience of the world as an awe inspiring place. When vegetation and animal life is brought forth it is of various kinds with the ability to reproduce.

As an astrophysicist, I am amused by one of the greatest understatements of the scriptures, “he also made the stars” (v 16)! It is an awe-inspiring by-the-way statement of the creativity of God. I am often asked why God made the Universe so large. After all, if he was only interested in human life, one planet orbiting one star would have been sufficient. Indeed, it might seem that a much slimmed-down natural world could have also sustained human life. However, the Universe contains more stars than grains of sand on the beaches of the world, and the biological environment of the Earth teems with a rich diversity of life. At this point the biblical images of God flinging stars into space give a picture of a divine artist who loves diversity and extravagance in creation. Indeed Psalm 148 uses this extravagance as a source of praise to the Creator. Beyond that, however, modern cosmology is clear that a Universe of the size and age of the one we inhabit was essential for sentient life to have developed, under the existing laws of physics<sup>11</sup>.

The past few years have seen new concern about global warming and pollution. Al Gore's *An Inconvenient Truth* and *Live Earth* concerts have been positive that we can turn our abuse around, while other voices such as James Lovelock have been much more pessimistic. While renewed emphasis on care for the environment is to be welcomed, a great deal of the concern remains anthropocentric. The message is often given that we must deal with global warming or else our children will not survive. While this is true, the biblical accounts want us to widen the vision. "The Earth is the Lord's and everything in it" (Psalm 24:1) and we therefore need to protect and sustain the biodiversity of this planet, for to do otherwise is blasphemy. God has given us extravagance, and all that reduces this diversity is a denial of creation. The historian Lynn White, at the American Association for the Advancement of Science in 1967, drew attention to this anthropocentricity:

"We shall continue to have a worsening ecological crisis until we reject the Christian axiom that nature has no reason for existence but to serve man... Both our present science and our present technology are so tinctured with orthodox Christian arrogance towards nature that no solution for our ecological crisis can be expected from them alone."<sup>12</sup>

Thus, Christianity, it is claimed, bears "a huge burden of guilt" for the environmental crisis.

Yet the biblical accounts of creation taken together critique this arrogance towards the natural world. It is striking that the Genesis 1 narrative reaches fulfillment not in the creation of Adam and Eve but in the sabbath day on which "the whole creation glorifies its maker."<sup>13</sup> This provides a perspective on the distinctive role of humans within the created order as that of priests giving voice to creation's praise. That is, resting in, rejoicing in and living out of the sabbath praise of God is regarded here as the very pinnacle of what created reality and human reality in particular is called to. Viewed in this way, we humans are called not just to "use" material reality for our own ends, but to hallow it, to reverence it as God's gift, to work for its flourishing and, in this manner, be viceroys of God's gracious generative sovereignty in God's good world.

This combination of the complex and extravagant diversity within creation with the essential role of human beings does make clear the risk involved in creation. Here the biblical accounts make very clear the effect of human sin upon the land, while at the same time holding out the hope that the God who created this Universe will not stand apart from it, but one day will bring about new creation (Isaiah 65:17-25). It is this combination

of risk and hope that motivates and encourages human beings to join with God's purposes in the care and renewal of creation.

### **Theme four: In the image of God he created them**

As we have already seen one can learn much about the biblical accounts by comparing them with other creation accounts in the ancient near east. This is particularly the case when one considers the nature and status of human beings.

In the Babylonian creation story, *Enuma Elish*, human beings are created as the slaves of the gods to look after their every need. In contrast in the Genesis account, God provides food for human beings (Gen 1:29), human beings are made in the image of God (Gen 1:27), they are given responsibility to look after the Earth (Gen 1:26), and in the lovely imagery of chapters 2 and 3 of Genesis human beings walk in the garden with God enjoying intimate relationship and communication.

Of course there has been much debate about the meaning of being made "in the image of God". While some commentators have argued for moral or mental capacities, in recent years studies in the language and context of the ancient Near East have helped us in a deeper understanding of "image". Egyptian and Assyrian texts sometimes describe the king as the image of God, meaning God's representative on earth. Certainly there is a close connection in the Genesis text between "made in the image of God" and God's command to exercise dominion over the natural world (Genesis 1:26-28). To be in the image of God is to be given responsibility. Further, the image of God is not part of the human constitution so much as it is a description of the process of creation that makes human beings different. The image should not be imagined to be a "part" of us, whether our body, our reason or our moral sense. It is not about something we have or something we do, it is about relationship. The Old Testament scholar Claus Westermann writes, "human beings are created in such a way that their very existence is intended to be their relationship to God"<sup>14</sup>. The "image of God" means that we are sufficiently like God that we can have an intimate relationship with him. This special nature of human beings in the biblical accounts is not primarily that we are physically different from the rest of creation, though in many ways we are, but in the fact that God has given us the gift of intimate relationship and responsibility.

This is seen also in Psalm 8 which reflects the themes of the Genesis text. Asking the question of the significance of human beings in the vast cosmos, the psalmist answers in terms of relationship and responsibility as

a gift from the initiative of God in the phrases “you made” (v5), “you crowned” (v6) and “you put” (v6).

Thus the meaning of the Universe is not to be found in an impersonal cosmic force, or in a mathematical theory of everything but in a personal God who wants to be in relationship with human beings. We live in a world which often devalues people, if they do not have the right body shape, the right colour of skin, fame, money or power. The biblical accounts of creation define human value in terms of relationship rather than achievement. This insight is important not just for justice in the world, but also in the areas of artificial intelligence and medical science which pose clearly the question “what does it mean to be human?”.

As Bill Gowland emphasized, understanding creation is all about understanding the Creator. Among many other things, the biblical accounts present God as sole creator, as the sustainer of order in the Universe, as the source of extravagance and as the seeker of relationship with human beings. You will find this understanding reflected in the Christian doctrine of creation as expounded by Aquinas, Luther and Calvin, but you will also find it, not surprisingly, in other faith communities who look to the same scriptures.

## Notes and References

1. For a detailed discussion of these passages see D. Wilkinson, *Creation* (Leicester: IVP, 2002).
2. See for example W. G. Lambert, “A New Look at the Babylonian Background of Genesis,” *Journal of Theological Studies* **16** (1965), p. 294; D. T. Tsumura, *The Earth and the Waters in Genesis 1 and 2: A Linguistic Investigation* (Sheffield, Sheffield Academic Press, 1989) pp. 156-57.
3. G. May, “Creatio ex Nihilo: The Doctrine of “Creation out of Nothing” in *Early Christian Thought* (Edinburgh: University of Edinburgh Press, 1994); F. Young, “Creatio ex nihilo: A Context for the Emergence of the Christian Doctrine of Creation”, *Scottish Journal of Theology*, **44** (1991) p. 141.
4. See also M. W. Worthing, *God, Creation and Contemporary Physics* (Minneapolis: Augsburg, 1996) p. 76.
5. C. Westermann, *Genesis 1-11* (London: SPCK, 1984) p. 1:109.
6. T.F. Torrance, *The Christian Doctrine of God: One Being, Three Persons* (Edinburgh: T & T Clark, 1996) p. 207.
7. P. Atkins, “The Limitless Power of Science”, in *Nature's Imagination*, ed. J. Cornwall (Oxford: Oxford University Press, 1995) pp. 129, 132
8. D. Wilkinson, *God, Time and Stephen Hawking* (Crowborough: Monarch, 2001)
9. R. J. Russell, “T=0: Is it theologically significant?” in *Religion and Science: History, Method, Dialogue*, W. M. Richardson and W. J. Wildman, eds (London: Routledge, 1996) pp. 201-24.

10. R. G. Collingwood, *An Essay on Metaphysics* (Oxford: University Press, 1940); M. B. Foster, "The Christian doctrine of creation and the rise of modern science", *Mind* **43** (1934) pp. 446-468; R. Hooykaas, *Religion and the Rise of Modern Science* (Edinburgh: Scottish Academic Press, 1973); F. Oakley, "Christian theology and the Newtonian science: rise of the concepts of the laws of nature", *Church History* **30** (1961) pp. 433-457; D. Stimson, "Puritanism and the new philosophy in seventeenth century England", *Bull. Inst. Hist. Med.* **3** (1935) pp. 321-334; E. Zilsel, "The genesis of the concept of physical law", *Phys. Rev.* **51** (1942) pp. 245-279.
11. J. D. Barrow, *The Constants of Nature: from alpha to omega* (London: Jonathan Cape, 2002).
12. L. White, "The Historical Roots of our Ecological Crisis", *Science* **155** (1967) p. 1203.
13. D. Fergusson, *The Cosmos and the Creator* (London: SPCK, 1998) p. 17.
14. Westermann, ref. 5, p. 1:158.

## CHAPTER TWO

### THE QUR'ANIC ACCOUNT OF CREATION: A RESPONSE TO DAVID WILKINSON

M.B. ALTAIE

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*In the latter field, Prof Altaie focuses particularly on the methodology and arguments of the traditional Islamic approach, known as Kalam, in dealing with issues of contemporary debate. This is evidenced in his reactions below, to Dr Wilkinson's talk, where readers will perhaps be struck as much by the difference of flavour between the approaches of the Muslim and the Christian writer as by their differences of substance, appreciable though these are.*

*Prof Altaie's main focus in this chapter is on the cosmological outlook of the Qur'an – a topic on which he has further things to say in his second contribution to this volume (Chapter 8). However, he closes the present paper with some comments on the Qur'anic view of environmental matters, with Christian and Jewish readers will more readily feel at home; this theme is taken up at greater length by Dr Izzi Dien in Chapter 12.*

The question of creation was one of the prime topics considered early on by the Abrahamic faiths. The first two verses of Genesis talk about the creation of the Earth and the Heavens and state that both emerged from water. The Qur'an considers the same topic in a more or less similar way, but with some differences in the details. A reasonable interpretation of these similarities is to think that both the Bible and the Qur'an stem originally from the same source, despite claims that both were infected by

the popular myths of the host communities within which they were revealed. One major difference between the Old Testament and the Qur'an lies in the degree of authentication which they respectively enjoy. The Old Testament is a 'library' much older than the single-source Qur'an, which was dictated by the Prophet Mohammad. For this reason Muslims think that the Qur'an is more authentic, and therefore more reliable than the Old Testament.

Creation is mentioned in the Qur'an in numerous verses, and in them, as in the Old Testament, we notice that the intention is to draw humankind's attention to the order and perfection of creation, the greatness of the creator and his oneness. The goal is to get to know that behind this creation there exists a God who wants us to know him.

In response to David Wilkinson I will discuss the views that can be construed from the Qur'an about creation, development, and the fate of the universe in particular.

## The Heavens

The Qur'an talks about the Earth and Heavens in numerous verses, 310 in total. Generally, the term "Heaven" is used to describe the vast space above the Earth extending to infinity. The term "Heaven" (singular) is used 120 times and the term "Heavens" (plural) 190 times.

The Qur'anic description of the Heaven and Heavens appears, at first glance, somewhat vague. This is mainly caused by the many confusing facets to the usage of these words. In a number of verses the Qur'an speaks of *seven* stacked heavens one above another, for example:

It is He who has created seven heavens, one above the other. You can see no flaw in the creation of the Beneficent God. Look again. Can you see faults? (67:03)<sup>1</sup>.

From another set of verses we understand that the heaven is a well-guarded roof. For instance: "And We have made the heaven a guarded canopy and (yet) they turn aside from its portents." (21:32) The Qur'an clearly points to the well structured heaven and indicates that it is built: "What! Are ye the more difficult to create or is it the heaven which Allah hath constructed?" (79:27) This might indicate an influence of the naive view of the public at the time when the Qur'an was revealed, but a close look at other related verses shows that this is not the case.

As Dr Wilkinson says, the scriptures are an extremely rich and diverse source of thinking about creation and most of us read them selectively from our own point of view. However, it should be stressed that the

reading should be comprehensive enough to cover all the related texts. This is necessary in order to achieve an accurate overview of the topics concerned.

In an extensive recent study of the terms “Heaven” and “Heavens” in the Qur'an, it is shown that that the Qur'an did not describes the heavens as they were previously understood by the Greeks<sup>2</sup>. As is the case with many other terms, “Heaven” and “Heavens” are contextual and the correct meanings cannot be realized unless the context in which the terms are stated is fully considered.

I can identify three major meanings for the term “Heaven”:

1. The Earth's atmosphere
2. Our arm of our galaxy
3. The whole universe.

Of the seven, the first is the lowest or nearby Heaven (*Sama' al-Dunya*) and the rest are the upper or high heavens. The *lowest Heaven* is cited three times and it is always mentioned in conjunction with the planets: “We have adorned the lowest heaven with adorning planets”. (37:006)

This verse is important to refute the claim that the seven heavens referred to in the Qur'an are the seven heavenly spheres of the planets suggested by the early Greeks. The five historically recognized planets (Mercury, Venus, Mars, Jupiter, and Saturn) along with the Moon and the Sun were actually well known to the Arabs long before the revelation of the Qur'an. Being in contact with the Greeks and the Romans through Syria, those Arabs had certainly understood these celestial objects to be stacked in the concentric spheres of Aristotle or the later more sophisticated model of Ptolemy. So, when the Qur'an describes these planets as some coronation of the *lower* Heaven in particular, it would be inadequate to conclude that the seven Heavens meant by the Qur'an are those spheres of Aristotle. Rather, they are: “A revelation from Him Who created the Earth and the upper high heavens.” (20:04)

The lower heaven is the one containing the air and the clouds. In this sense it is what we call “the sky” from which the Qur'an tells us that rain comes. But the lower heaven is more than that since it includes the planets and the stars.

Another allusion to it is as “The heaven of the Zodiacal Signs”. (85:001). This suggests that the lower heaven is meant to be the Earth's atmosphere plus at least the solar system and the nearby collection of the stars, including the constellations which are in fact situated within the spiral arm of the Milky Way to which we belong. But this interpretation of the verses should not limit the scope of the Heaven to the Galaxy, for many other verses point to a wider scope. For example, speaking about

“extending the Heaven”, as it happens to be in another verse would point to an even larger space. This point will be further discussed below.

There remains the dilemma of there being a total of seven Heavens. This is a problem that I find irresolvable within the scope of our contemporary astronomical knowledge. If one assumes that the Qur’an has a human source, one will ascribe this uncertainty to its author’s lack of knowledge. But then the question will arise why this term has been repeated 190 times unless it was fully meaningful to the author? If Mohammad was the author of the Qur’an, and if he was not properly informed about this term, he would surely not have repeated the term so many times. For this reason I would rather suggest that the more realistic view assumes that the Qur’an is actually authored by God. The difficulty lies in the fact that no reasonable model is available which fits this term. Therefore, I would consider this term, the “seven Heavens”, to be radically obscure. However, such a consideration will by no means affect our interpretations of the other Qur’anic verses considered in this paper.

### **Creation of the universe**

Sometime the Qur’an is understood to indicate that Heaven was originally created out of nothing, since the word “create” in Arabic would normally be taken to mean “find out of nothing”. Nevertheless, this suggestion is controversial.<sup>3</sup>

In 29 verses mention of the Heavens is coupled with that of Earth, with the term Heavens preceding the term Earth, a point that the early commentators on the Qur’an took to indicate the temporal order of creation.

Behold! in the creation of the Heavens and the Earth, and the alternation of Night and Day, there are indeed Signs for men of understanding. (3:190)

We also read:

Praise be to Allah, Who created the Heavens and the Earth, and made the Darkness and the Light. Yet those who reject Faith hold (others) as equal with their Guardian-Lord. (2:190).

However, conjoining two more verses we find that the seven Heavens were made out of an original one which was in the state of smoke:

It is He who created everything on earth for you. Then, directing His order towards the Heaven, He turned it into seven heavens. He has knowledge of all things. (2: 29)

And:

He established His dominance over the sky, which (for that time) was like smoke. Then He told the heavens and the earth, "Take your shape either willingly or by force" They said, "willingly we obey". He formed the seven heavens in two days and revealed to each one its task. He decked the sky above the earth with torches and protected it from (intruders). Such is the design of the Majestic and All-knowing God. (41:11-12)

The 'smoke' that is mentioned in this verse might be presumed to mean a hot gas or mixture of hot gases. (The word 'gas' itself does not exist in the original Arabic).

The verse may be understood to indicate that the seven Heavens were structured after the creation of the original heaven and the Earth. Some authors<sup>4</sup> claim that the Qur'an states that the Earth was created before the heavens, but this is a misinterpretation of the Arabic. In fact even early commentators of the Qur'an have denounced such a flawed understanding and have pointed out that the verse does not necessarily stipulate temporal ordering of creation<sup>5</sup>. Nowhere in the Qur'an is there any explicit indication that Earth was created *before* heaven. On the contrary, the repeated references to heaven and the heavens, prior to any mention of the Earth would appear to indicate that it was heaven which was created first. The Qur'an also clearly states that the heavens and the Earth were both attached (joined) together but was later detached.

Do not the Unbelievers see that the heavens and the Earth were joined together (as one unit of Creation), before We clove them asunder? We made from water every living thing. Will they not then believe? (21:30)

This verse may well be compared with the description given in Genesis:

In the beginning God created the heavens and the Earth. Now the Earth was formless and empty. Darkness was on the surface of the deep. God's Spirit was hovering over the surface of the waters. God said, "Let there be an expanse in the middle of the waters, and let it divide the waters from the waters."

God made the expanse, and divided the waters which were under the expanse from the waters which were above the expanse; and it was so. God called the expanse "sky." There was evening and there was morning, a second day.

God said, "Let the waters under the sky be gathered together to one place, and let the dry land appear;" and it was so. God called the dry land "Earth," and the gathering together of the waters he called "seas." God saw that it was good. (Genesis 1: 1-10)

It might seem that the Qur'an is telling the same story as the Old Testament, since the Qur'an has indicated the union between the Heavens and the Earth. However, we have to look through the whole context of creation of the Heavens and remember that the Qur'an has indicated a hot origin for the Heavens as these were generated from a single Heaven which was in a state of smoke (41:11-12). Here I have to stress again the fact that smoke in Arabic is a hot gas emanating from fire and perhaps containing dust.

The Old Testament's story of creating the Heavens and Earth might have been influenced by the earlier Babylonian literature which tells us that in the beginning there were only vast waters out of which Earth and Heaven originated. Moreover, the Qur'an properly tells that all living creatures were made from water.

### **Development of the universe**

The Qur'an affirms that God created the heaven with power and he is extending it. We read: "We constructed the sky with our hands, and we will continue to expand it." (51:047)

The "extension" was understood by early commentaries on the Qur'an as being an extension of the sides of the heavens.<sup>6</sup> Thus the Qur'an talks about an "extension" of the initially-constructed heaven. From the exact Arabic wording we understand that the extension is meant to take place through adding more construction from within, in addition to extending space. This would mean that there is a continuous creation of matter and energy within the universe. The alternative word will entail expanding the construction which already exists not by adding more construction from within, but by increasing the separations between the constituents of the heaven. However, these alternatives are not yet observationally testable by modern cosmology despite the fact that both alternatives are theoretically possible. The dominant contemporary view is that the universe is expanding not extending, in the sense implied above.

### **The fate of the universe**

Two verses of the Qur'an explicitly state that the heavens will ultimately collapse into a state similar to the initial one.