



Whitefield BRIEFING

December 2004 (Vol.9 No.5)

GOD OF CREATION, GOD OF SCIENCE

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Our recent book *Beyond Belief – Science, Faith and Ethical Challenges* [1], written by two working scientists, aims to provide a broad introduction to the interactions between science and faith for the general reader. In the book we highlight some fruitful ways, as well some less helpful ways, in which these two aspects of human belief and experience are currently being related. We also reflect on the Christian's attitude to some of the ethical challenges that science continues to throw at us with such bewildering speed, including genetic engineering, cloning and the environmental challenge. As Simon Conway Morris, Professor of Evolutionary Palaeobiology at Cambridge, commented after reading the text: "Here is a remarkable book that will make for some uncomfortable moments for many scientists, and as it happens quite a few Christians as well".

When tensions arise between science and faith, it is nearly always due to either bad science, or bad theology, and sometimes both. Explicit in *Beyond Belief* is a robust Biblical theism which provides the framework within which all other issues are considered. Since Mike Poole has written a very helpful overview of the interactions between science and religion in a previous Whitefield Briefing [2], we will focus here on how our understanding of God as Creator provides key insights for building a healthy relationship between science and faith. When that relationship degenerates, it is remarkable how often this can be traced to a sub-Biblical understanding of God's relationship to his creation. Three aspects of God's character in creation are critical in the Biblical picture:

God's Transcendence in Creation.

Christians do not generally go around hugging trees because they worship a transcendent Creator who is not to be found in trees, but who has certainly brought them into being and who sustains their being. The Biblical idea that God is the all-powerful transcendent Creator who is distinct from the creation he has brought into being has been a key element in the development of modern science. Joseph Needham, an expert on the history of Chinese science, commented that one of the reasons that China failed to develop modern science was because it 'lacked the idea of (divine) creation' [3].

The transcendence of God is integral to the Biblical text. As the psalmist prays in Psalm 90:2:

*Before the mountains were born
or you brought forth the earth and the world,
from everlasting to everlasting you are God.*

The same theme is picked up in the majestic poetry of Isaiah 40:28 as in many other passages. The God of the Bible is not a local or tribal god who can be pinned down to some neat time-bound or culture-bound formula. He is either the God of the whole universe or not really God at all. When Jesus prayed it was to his 'Father, Lord of heaven and earth' (Matthew 11.25). And when Paul and Barnabas were mistaken for the local versions of the Greek gods Zeus and Hermes as they travelled round first-century Asia-Minor, they rushed into the crowd shouting:

“Men, why are you doing this? We too are only men, human like you. We are bringing you good news, telling you to turn from these worthless things to the living God, who made heaven and earth and sea and everything in them”. [Acts 14: 15].

The transcendence of God in creation distinguishes Christianity from all those monistic systems of thought which identify ultimate reality with the universe itself: these include the pantheism of Buddhism as much as the Hindu world-view or for that matter Plato’s picture of the universe as a living entity, with a soul penetrating its body. The idea of creation only becomes possible if there is a Creator who is the source of that creation. Belief in an eternal all-powerful creator, who speaks and things happen (cf. Gen. Ch 1), excludes Plato’s demiurge who struggles to shape the materials of the world, just as it excludes the God of process theology in which he becomes the divine chess-player, responding to a quasi-independent nature, with the on-looker hoping all the time that God will make the right moves (but you can never be sure). In contrast the God of the Bible knows and controls the future just as he does the past and is not restricted in any way in his sovereign acts.

The doctrine of divine transcendence leads directly to the idea of the ‘contingency’ of the created order, that is, its properties are utterly dependent on God’s say-so and we cannot second-guess God as to what those properties *ought* to be. The natural philosophers intimately involved with the emergence of the modern scientific movement, such as Robert Boyle (1627-91, founder of modern chemistry) and Francis Bacon (1561-1626), were acutely aware of the way in which Biblical theology demythologised nature of its subservience to Greek rationalism (“how nature *ought* to behave according to its intrinsic forms”), instead insisting on the Biblical view that God can make things any way he wants, so the only way to find out the properties of matter is by investigating them empirically [4]. The experimental method is likewise facilitated by the fact that God acts as the guarantor of the reproducibility of the properties of matter, something now so ‘obvious’ that we barely think about it, but not at all obvious to the ancients who believed in a panoply of warring gods.

Our responsibility to act as responsible stewards of God’s good earth (Gen. 1: 26-31) flows directly from his divine creative transcendence. God in his wisdom has chosen to delegate to humankind, made in his image, the enormous responsibility to look after his created order. So Adam was made from

adamah (‘ground’) in order to look after the earth, to be God’s earth-keeper (Gen. 2:7). This provides a solid basis and motivation for environmental responsibility, a basis lacking in monistic religions in which everything that exists is seen as comprising a single ultimate reality, an uncertain foundation for environmental care. The American environmentalist Matthew Fox, for example, has argued for a ‘creation-centred’ rather than ‘God-centred’ theology in which ‘we are we and we are God’, our divinity being awakened by various forms of ecstatic experience [5]. But in the God-centred theology of the Bible, understanding and caring for God’s world becomes part of our worship, a holy calling. Our concern for global warming, environmentally friendly forms of transport and sustainable consumption is no ‘optional add-on’ to our Christian lives, but an integral way in which we honour the transcendent Lord of creation [6].

The Immanence of God in Creation

A concept of God which depended only on the notion of transcendence could easily degenerate into the deistic idea of a distant and remote God who winds up the universe at the beginning and then occasionally returns to ‘intervene’ or meddle around with it. Such a scenario is disallowed by the Biblical insistence that God is also *immanent* in his creation, meaning that God is intimately involved in continued creative activity in relation to his universe. All that exists only continues to do so because of his continued say-so. The properties of matter continue to be what they are because God wills that they should continue to have such properties.

The theme of God’s on-going creative drama is well illustrated by passages such as Psalm 104 which speaks of God bringing the present natural order into being in the past (vv 1-9), but also speaks of God making grass grow for cattle (v 14) and supplying food for lions (v 21). God is even seen as the one who makes animals die (by taking away their ‘breath’ v 29) and then creating them with his Spirit when they are born (v 30). The Hebrew word *bara* used here for ‘create’ is the same word frequently used in Genesis and elsewhere in the Old Testament to refer to God’s creative activity in bringing the earth and heavens into being. Obviously this Psalm is providing us with a theological and not a biological interpretation of the natural world. As a rural and agricultural people the Israelites were perfectly aware of the natural processes of animal birth and death. The poetic description that is being provided is not, therefore, some *rival* theological description to what everyone knew by simple observation took place in

the natural world, but a theological interpretation of a deeper creative reality that underlay all events without exception.

The same emphasis is found in the New Testament. Jesus said that his Father (in the present tense) *causes* his sun to rise on the evil and the good, and sends rain on the righteous and the unrighteous' (Matthew 5. 45). And Paul wrote that:

He (Jesus) is the image of the invisible God, the firstborn over all creation. For by him all things were created: things in heaven and on earth, visible and invisible, whether thrones or powers or rulers or authorities; all things were created by him and for him. He is before all things, and in him all things hold together". [Colossians 1.15-17, my italics].

So the whole created order is held together by the on-going actions of the risen Lord Jesus, a point further underlined in Hebrews 1.2-3

All analogies are limited, but God's continuing creative activity has been likened to the continual flow of electrons being diverted by a changing magnetic field, without which there would be no picture on our TV screen. Your favourite TV soap is a self-contained drama, and talk of electrons and magnetic fields will add nothing to it, yet without the continued flow of electrons the drama would cease to be conveyed to your living-room. God is the continuing author of creation, the musical composer in relation to a symphony or a fugue.

The immanence of God in his created order has enormous implications for the science-faith debate. It means that the central role of scientists, whether or not they acknowledge the fact, is to describe the activities of God in creation. There is nothing that we can describe that was *not* brought into being and sustained by God's power. As Augustine put the point succinctly back in the 5th century: 'Nature is what God does'. The role of scientists is but to 'think God's thoughts after him'. Such a theological framework excludes any notion of a 'two-tier' universe in which God designs some bits but not others. It also highlights the theological weakness of the infamous 'god-of-the-gaps' type of arguments that have had such a long innings in the history of Christian apologetics. There has often been a temptation amongst Christians to draw attention to current areas of scientific ignorance and make the claim that 'such-and-such phenomenon could only be explained by God'. The problem, of course, is that a generation or so later the gap in scientific knowledge is filled and so it then looks as if God is being

'squeezed out' of his universe. The fatal error in this line of thinking is to focus on God's actions in arenas of ignorance in current human knowledge, but once one holds to a robust biblical theism in which all matter is God's matter, without exception, then the weakness of the argument becomes readily apparent. The argument from personal incredulity is a shaky one ('I just can't imagine how that could happen – how could all that cellular complexity arise from inorganic matter?') because God's actions in the created order so often turn out to be full of surprises once our understanding of them becomes more complete. In science we never say 'never'! This does not, of course, mean that we hope to ever understand at a scientific level how God performs unique miracles, such as the resurrection of Jesus, but it does mean that we are cautious about investing too much apologetic capital in the shifting sands of current human ignorance. For the biblical theist there is really no need to do that.

The personal nature of God in creation

The transcendent-immanent character of God's creative relationship to the universe could, in principle, be claimed as referring to a God who was essentially an ultimate form of abstract intelligence, or some kind of heavenly super-computer. The Biblical claim, however is quite distinctive in its insistence that this creator-God is a Trinitarian personal God and that the emergence of personality is therefore what one expects in a universe which exists because of his creative activity. We live in a relational universe.

There has been much recent discussion about how exactly God interacts with the world. The main answer that the Bible gives is that He does so by that most personal of activities - speaking: 'And God said' is repeated again and again in Genesis Ch. 1 to describe God's creative actions, and in the New Testament we learn that through Jesus the divine Word "all things were made; without him nothing was made that has been made' (John 1:3). Jesus *speaks* to the waves and they obey him (Mark 4:39-41). As Colin Gunton comments: "a theology of nature is the gift of biblical revelation, for it teaches us that the unity of things is upheld neither by the formal causality of the Greeks nor by the supposed omnipotence of human reason, but by the incarnate Lord whose work on earth was achieved in the power of the Spirit and in weakness" [7]. We are living in a universe created, shaped and sustained by God the Father, Son and Holy Spirit.

Our creator-God is not a demiurge, nor a vague force underlying the mathematical elegance of the structure of the universe, but a personal triune God who is distinct from the world and yet intimately involved in it. We can trust him utterly for the past, present and future of the planet that we call our home as much as we can with our own lives. Not even a sparrow falls to the ground without him knowing. We can fulfill our stewardly responsibilities to care for his creation, knowing that this is our home, this is where we belong until God brings into being His new heaven and a new earth. We can rest assured that God holds the future of the universe in his hands and we need have no fear of what new discoveries science will uncover for they will give us new understanding of God's amazing handiwork and new possibilities to utilise their fruits for the good of others and for the care

References

1. Denis Alexander and Robert S. White, 'Beyond Belief – Science, Faith and Ethical Challenges', Oxford: Lion, 2004.
2. M. Poole, 'Science and Religion – an Introduction', Whitefield Briefing Vol 8, No.1 April, 2003.
3. Cited in D.R. Alexander 'Rebuilding the Matrix – Science and Faith in the 21st Century', (Oxford; Lion, 2001, p. 85).
4. R. Hooykaas, 'Religion and the Rise of Modern Science', Scottish Academic Press', Edinburgh, 1972.
5. R.J.Berry (1995) 'Creation and the Environment', *Science & Christian Belief* 7: 21-43.
6. cf. Ref 1, Chapter 8, 'Spaceship Earth'.
7. C.E.Gunton (1995), 'A Brief History of Revelation' Edinburgh: T & T Clark, p. 59.

Recommended Further Reading:

- Denis Alexander and Robert S. White (2004) *Beyond Belief – Science, Faith and Ethical Challenges*, Oxford: Lion.
- D.R. Alexander (2001) *Rebuilding the Matrix – Science and Faith in the 21st Century*, Oxford; Lion, pb version 2002.
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- C.A. Russell (1995) *Cross-currents: Interactions between science and faith*, London: Christian Impact (originally IVP, 1985).
- M.A.Jeeves and R.J.Berry (1998) *Science, Life and Christian Belief – a Survey and Assessment*, Leicester: Apollos.
- *Science & Christian Belief* (journal published twice a year). See www.scienceandchristianbelief.org. The journal is included in the *Christians in Science* membership fee (see www.cis.org.uk).

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