

ISCAST BULLETIN 40

Autumn 2003

Great are the works of the LORD: they are studied by all who delight in them Ps 111:2 (NASB)

Institute for the Study of Christianity in an Age of Science and Technology

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Editorial

ISCAST on Mars

Jennifer Laing's article in the last Bulletin and a talk at the November Thinkings discussed some of the implications of human Mars exploration. In a year which in December will see no fewer than seven probes approaching, orbiting or landing on the planet, such interest is timely, as Mars will be one of the great human frontiers of the 21st century.



The Mars Desert Research Station on site in the desert of Utah



Jennifer Laing rugged up against the cold during a videography mission.

As part of the effort towards exploring that

goal, members of Mars Society Australia spent four weeks in February and March on a joint mission, with researchers from the United States and Canada, to the Mars Desert Research Station in Utah. This multi-objective program in a cylindrical two-storey simulated Mars habitat studied geology, biology, suit and rover design, and human factors. Geological research included soil science, regolith geology, and sedimentology, while biological studies included microbiological richness and diversity. Suit research compared different approaches to Mars suit design, and four different types of rover vehicles were investigated, three in a series of comparative trials. Human factors studies involved a comprehensive battery of cognitive tests, personality tests, and social psychology questionnaires. Australian involvement included rover studies from Murdoch University, suit design from RMIT University, PR, human factors from ANU, and geology, also from ANU.



Mars like landscape in Utah near the hab.



Your happy honourable editor with a fragment of Jurassic dinosaur bone fragment (admittedly an unlikely find on Mars!)

Out of a total crew of 28, four were Christians to my knowledge, two of them ISCASTians, Jennifer Laing and your honourable editor. Jennifer looked after the PR program and assisted in human factors research, while I

coordinated the geology program and documented the regolith geology in all its splendour. Steve Dawson, an ISCAST supporter in Canberra, coordinated the human factors research. In addition to the research program, living in close quarters with a diverse group allowed some good opportunities to discuss the Christian faith and act as bridges between different people during the inevitable conflicts that arise with prolonged living and working in close quarters.

Much of the work of scientists may lack the glamour and excitement of working in a simulated Mars base. However, in many ways the experience of Christians in the Mars Desert Research Station is a microcosm of Christians active in science everywhere. Science is often carried out within a broader goal that seizes the imagination, whether it is understanding the way the universe works or applying knowledge for the benefit of the community or a segment of it. Christians exist and work within this system, often in surprising places. As God's people in this system they have the opportunity to fulfil their vocation as Christians in science, which in several ways can work in several ways. Firstly, Christians, as salt and light, can ensure that there – and others' – work is done with the maximum of integrity before God. Secondly, they can both celebrate God's character as revealed in His world and His provision in the world. Thirdly, their work and its setting provides the opportunity to give a Christian witness in both actions and speech. It is a challenge all ISCASTians face, whether we are working towards putting people on Mars, working in industry, researching, or teaching.

One last thing: this is the final edition of the Bulletin before COSAC 2003 on the weekend of July 18th-20th at Avondale College. To whet people's interest there is a summary program in this Bulletin. The organisers have put together a great series of contributions on the theme of 'God, Science and Divine action'. If you have not already signed up to go, then please do so. If you register before May 31 you are eligible for the 'Early-Bird' discounted rate! I look forward to seeing lots of Bulletin readers and contributors at the conference. Reading about it afterwards in the Bulletin is not the same thing as actually attending. So be there!

COSAC 2003
ISCAST's 4th Conference on Science and Christianity

GOD, SCIENCE AND DIVINE ACTION

Avondale College, Cooranbong, NSW

(Cooranbong is about one hour's drive north of Sydney, 2 hours by train)

July 18-20, 2003

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News

NSW

ISCAST (NSW) has had a series of 7.30 pm Monday meetings in the Library of the Physics School at the University of NSW (average attendance 20-35) as a lead up to COSAC 2003, and based on the book, *Science, Life and Christian Belief* by Malcolm A. Jeeves & R. J. Berry (1998). The topics were 'What are the Pre-suppositions of Science?' by Bill Clarke on July 29 2002, 'God, the Universe and Creation, I: The physical universe' (Astrophysics & Geology) by Lewis Jones & David Cohen on Sep 23 2002; 'II: Biological creation and non-human evolution' by Alec Wood on Nov 18 2002; 'Human Nature I.—Biblical and Biological Evidence' by Peter Barry and Ian McFarlane on March 31 2003 and the last one 'Human Nature II — The nature of personality and the contribution of psychology' will be given by Alan Craddock on May 26, 2003.

VIC

ISCAST Associate appointed Chief of CSIRO division

Long term ISCAST associate Dr Greg Ayers has been appointed to the position of Chief of

the atmospheric division of CSIRO. Greg is a graduate of the chemistry department of Monash University in Melbourne. After graduating, he joined what was at that time the Division of Cloud Physics (now part of Atmospheric Research) as a Research Scientist. Greg's research interests include the role of the global atmospheric sulphur cycle and climate change, marine and polar atmospheric chemistry and ice core composition, and acid deposition. He has over 100 scientific publications and sits on a number of government and industry committees. *From February 2003 edition of "Clean Air and Environmental Quality" (37(1): 13).*

February 2003 "Thinkling"

At the February 28 VISCASST 'Thinkling' on Miracles, which followed a shared meal at the home of Alan and Lois Gijbsbers, about 20 VISCASSTians were invited to share ideas from any books they had read that dealt with the subject of 'miracles'. The following books formed the starting point for the evening's discussion:

- * Joel Green's *Commentary on Luke*
- * C S Lewis *Miracles* (where Lewis commences by asking whether there is anything beyond nature or supernatural. He sees the human faculty of reason as one evidence of the supernatural.)
- * John Dillenberger's *Protestant Thought and Natural Science*
- * Strobel's *The Case for Christ* and *The Case for Faith*
- * Colin Brown's *Miracles of the Mind* (where three questions arise: Are miracles proof of divine intervention in human affairs? Do miracles prove that Jesus is God's Son? Are miracles restricted to Jesus' time or do they still occur, and can they be understood in relation to the second Person of the Trinity alone, or only in relation to the Trinity as a whole?)

John Houghton's *The Search for God* (in which Houghton presents a number of analogies to assist in thinking about miraculous interventions in the physical world, such as a fifth dimension—the spiritual, the computer—hardware and software, etc.)

Discussion ranged widely touching on complex philosophical ideas as well as deeply

personal experiences. This session certainly whetted our appetite for COSAC2003 with its emphasis on 'God's Action in the World'.

April 2003 "Thinking"

At the April 9 'Thinking', held at the home of Denise and David Clarke in Melbourne, Professor Grant Gillett, Professor of neurosurgery and bioethics University of Otago NZ and Dr Alan Gijsbers had planned to lead discussion on the 'body-soul debate'. At the last moment, Grant was unable to arrive in Melbourne in time and Alan had to hold the fort. He presented a brief paper outlining various monist and dualist positions in regard to human nature with some Christian responses to them, and referred to a wide variety of writers including Donald MacKay, Malcolm Jeeves, Sam Berry, Nancey Murphy, Allan Day, Kandell, Patricia Churchland, Moreland and Rae. Alan's presentation sparked off a lively discussion from amateurs in the mind/soul debate as well as from the more seasoned warriors. We expect to see the fruits of this discussion in the session Alan will be leading at COSAC2003!

Helen Joynt

COSAC 2003

I hope that everyone has been able to look at the conference program on the web site. For those who have not yet done so, here are some of the highlights. I hope you can all be there and make this conference a resounding success.

Friday

Session 1: *Assumptions of Science and the Christian Tradition* Dr Mark Worthing.

Saturday

Session 2: *Assumptions of Theology* Dr Neil Chambers

Workshop 1

- * Strand A – Miracles
- * Strand B – Mind
- * Strand C – Evolution

Session 3: *Divine Action and the Problem of Miracles* Dr Mark Worthing

Workshop 2

- * Strand A – Miracles

- * Strand B – Mind

- * Strand C – Evolution

Session 4: *Mind and Consciousness* Dr Alan Gijsbers

Session 5: *Theological boundaries on theistic evolution* Dr Andrew Sloane

Workshop 3

- * Strand A—Miracles
- * Strand B – Mind
- * Strand C – Evolution

Sunday

Session 6: *Divine action and organic evolution; conflicting or complementary pictures of the world* Dr Jonathan Clarke

Articles

Losing our souls?

If we accept the concept of evolution, then human beings are part of that process. Evolution is commonly seen as both random and purposeless, filling in ecological niches as they appear. Yet theistic evolution is still able to place humanity at the top, not because of something within ourselves as much as the importance that God places on us. But if we are products of evolution, are we creatures only or creatures plus? Do we have consciousness or souls? And is it important? Do we derive comfort from the thought of extinction upon death? Do our souls sleep as our brains rot, until we are recreated? If evolution is true, then is consciousness an evolutionary illusion, an emergent property, or a divine addition? Like many Christians, I've struggled with the issue. Here are a few thoughts I've had from a few of the books I've read. It may be somewhat limited (it's a big field) and a little naïve (I'm no expert), but it is my attempt to come to terms with the issue, and it may start you thinking in preparation for this year's COSAC.

The first book I read on the topic was the chapter in *Science, Life and Christian Belief* by Jeeves & Berry. In that chapter, they rightly note that the soul is not immortal because life is never independent of the will of God. They also rightly note that the word *nephesh* is used in the OT in a variety of ways, none of which appears to support a form of dualism (141f). They suggest that "falling asleep" is pure euphemism. Their discussion on shades (*rephaim*) is somewhat disappointing and self-justifying and (as we shall see below) misleading (151f). Yet to those who would accept a form of materialism or monism, it offers comfort – we expect a bodily resurrection, so it doesn't matter if the cold eye of science has chased the soul away.

A second book of interest to the debate is *Mind, Language and Society: Philosophy in the Real World*, by John Searle. Searle is a first rate philosopher. He takes a pragmatic view of the problem. He insists upon materialism because it is common sense (48) but also insists that the either/or position is untenable (51) and that we should avoid eliminative reductionism, i.e. a reductionism that explains everything away. To avoid the conflict, simply change the question and adopt a "biological

naturalism" (54). Consciousness has a first person ontology that can be studied in the third person by science. With this view, consciousness can be viewed as an emergent property of the brain, and we can (though Searle does not) identify this with the soul.

We can examine this concept further following Nancey Murphy in her two chapters in *Interdisciplinary Perspectives on Cosmology & Biological Evolution*, Regan & Worthing (eds). Her view sounds similar to Searle's, that of a non-reductive physicalism (52). She briefly reviews some neurological arguments against a soul *ad extra* (56f) and notes the pastoral arguments against such a soul (68). In the second chapter, Murphy examines the concept of supervenience (69f). Space doesn't permit me to discuss it at length, but the basic thesis is that "downward causation, in the sense of environmental selection of neural connections and tuning of synaptic weights, provides a plausible account of how the brain becomes structured to perform rational operations" (77).

But is this the end of the matter? Not according to John Cooper in *Body, Soul & Life Everlasting: Biblical Anthropology and the Monism-Dualism Debate*. We can have our cake and eat it too! Holism implies functional unity but not monism (45). But this whole can be composed of any number of metaphysical substances or processes, some of which may survive at death. And here is the value of Cooper. He shows the shallowness of Jeeves and Berry's analysis of the shades in Sheol. It is an incomplete existence to be sure, where the dead cannot praise God (Ecc. 9.10; Is 38.18; Ps 115.17-18), yet they can rise to greet a new addition (Is 14.9-10). If there was no possibility of contact with the dead, why forbid necromancy (Lev 19.31; 20.6; Dt 18.11)? We can posit, as Jeeves & Berry do, that the Samuel incident was merely God reconstituting Samuel to warn Saul, but there we add a layer of supposition. Samuel is a shadow of his former self, yet recognisable as Samuel. He tells Saul that he and his sons "will be with me" (1 Sam 29.19). Could this mean in extinction or in Sheol? Space doesn't permit a discussion of Cooper's analysis of Inter-Testamental and New Testament views of the intermediate state, but one comment is worth making. If, as the critics suggest, the bible is philosophically naïve and makes no statements

about a dualistic human nature, how can the same texts, where dualism is refuted, be used as arguments for monism (100)? When a scholar can admit that II Cor. 5.1-10 is disconcertingly dualistic, the disconcertment reflects the scholar's presuppositions and not Paul's predominant monism.

My own thoughts on this are rather simple. I have heard it said that Jonathan Edwards thought that God supported the universe by recreating it every moment. But where is causation in that? Likewise, if I cease to exist at one moment, and am totally recreated at another after a soul sleep, is it the same me? A computer programme run on one computer may be the same as that run on another, but human beings under the view of all of the scholars above are not reducible to that! The hardware and the software are entwined so that the hardware needs to be recreated exactly to run the software, yet it cannot be the same hardware! Yet Cooper would have us believe that the software can exist apart from the hardware, yet incomplete (or we might say not runnable or able to produce its full output).

If the soul is emergent from the brain, how is it stored apart from it? Cooper dislikes the analogy used above, as if a soul is being copied, does it exist in two places at once? Are there two Mick Popes (God forbid)? My suggestion is that it is more like moving than copying, for if the process occurs at death then

the brain is dying, my soul is not both in my brain and preserved (hence Judaeo-Christian and not Cartesian dualism) by God, but with God. We might also add that the problem with the analogy is that copying data takes a finite amount of time; God might do this instantaneously.

Finally, Ric Machuga in "*In Defense of the Soul: What it means to be human* argues for a return to an Aristotelian philosophy (though not science). Cooper too sees that Solomon would have been closer to Aristotle than Plato. Meaning is not in words the way dirt is in a rug (48), neither is the soul in a person in that way. We are holistic, but not reducible either. Viewed scientifically, elements, substances, plants, animals and people are a continuum. Viewed ontologically, there are obvious differences between them (see figure). Both are valid and necessary perspectives, pushed upon us by science and revelation respectively.

In short, I think we need to accept our abiogenetic, simian and divine origins, expect to be with the Lord at death and wait for our new bodies. If God can create us in His image through evolution, and raise Jesus and us from the dead, He can sustain us with Him until Jesus return. What do you think?

Mick Pope

Science and Christian Belief

The Journal of Christians in Science (UK). It comes out twice a year and contains many thoughtful articles.

Cost: Aust\$50 for one year's subscription

For subscription contact Helen Joynt, Administrative Secretary ISCAST (Victoria)

Reviews

The Matrix Reloaded?

Denis Alexander— *Rebuilding the Matrix— Science and Faith in the 21st Century* (Lion Books, 2001) pp.510

Denis Alexander will be well known to ISCAST members. He is an active biological

scientist in Cambridge and Editor of the Christians in Science Journal *Science and Christian Belief*. His book is a tour de force which brings out logically and systematically the firm stand for a complementary view of Science and Faith that has been the clear message of the scientists of the Research Scientists Christian Fellowship (the forerunner

of both Christians in Science in the UK and ISCAST in Australia) for some 50 years. Indeed one can hear clearly the echoes of many books written over this period by evangelical scientists from the RSCF stable: *The Scientific Enterprise and Christian Faith* by Malcolm Jeeves, *Crosscurrents* by Colin Russell, *Christianity in a Mechanistic Universe* and many others by Donald McKay and *God and Evolution* by Sam Berry. It is interesting to remind ourselves that well before the relatively recent explosion of interest in the Science Faith interface, the issues of the relationship between science and Christian faith were being debated by professional scientists, perhaps not with the theological depth that is presently apparent, but nevertheless with the stringency of hard scientific logic. This book is no exception. Perhaps rather more than its predecessors it is marked by its hard scientific logic, its exhaustive discussion of the issues and its extensive reference material, not only in regard to its bibliography, but also with respect to its extensive use of quotations in the arguments presented.

The intention of the book is clearly stated. After the first three chapters, which define the current concepts of science in the community and media, it goes on to indicate (p. 63) “that the remainder of this book will be committed to the argument that first, the paradigms concerning science and religion that are most often comfortably maintained in secularised societies are actually wrong; and second, that the use of the various transformations of science as ideological tools for either secularising or religious purposes represents an abuse of science”. It is concerned therefore to lay to rest the “conflict hypothesis”. About 60% of the content is concerned with the history of the science faith interaction, with the role of Christian scientists in the development of modern science and the consideration of the historical episodes of Galileo and Darwin etc. The remainder takes up the current issues of biology, evolution and evolutionary psychology, with final chapters on cosmology and ethical implications of science. In many respects for those familiar with the activities and publications of the RSCF and C in S, the arguments are very familiar. They are none the less cogent for that. The book is over 500 pages in length with no illustrations and fairly tightly packed, both by way of print and argument. It is therefore not something that one can read at a sitting. It is more in the character of a reference book, a dictionary of the complementary approach to science and Christian faith.

It does not consider the integration of science and religion—the development of a theology of nature—canvassed by Barbour nor the consonance picture developed by Polkinghorne and therefore does not engage with present theological issues in the science faith debate. For those wanting a brief interaction with science and religion as developed in some of the recent books of Polkinghorne or Peacocke or of the interface being explored currently by theologians this will be a disappointing book. For those however who would value a reference book that illustrates the development and apologetic issues of the science faith interface this will prove a valuable resource.

Allan J. Day

Protestants and science revisited

Peter Harrison – *The Bible, Protestantism and the Rise of Natural Science*. (Cambridge University Press, 1998), 313 pp.

History doesn't just happen and this is nowhere more evident or relevant than in a consideration of the history of modern science. John Gribben, the popular science writer has just published his new book, *Science a History 1543 – 2001* which seems to imply that it just happened, as he describes the people and dates that surround these happenings. (One's confidence in the happenings is seriously eroded however when one considers the statement on p.15 that Queen Mary came to the throne of England in 1553 at the death of Henry VIII!!). Gribben's choice of a beginning however is significant, 1543 being the date for the publication of the revolutionary books by Copernicus on astronomy and of Vesalius on anatomy.

The modern scientific movement commenced in the 16th and blossomed in the 17th-Century and then proceeded over the next two to three centuries to become the dominant force that it represents today. There were important changes at this time—a different approach and understanding of nature—that resulted in the emergence of rational empiricism as the engine of modern science. The renewed authority of nature itself, observed and probed by experimental methods, was asserted rather than that of the old textual authorities.

The question Peter Harrison addresses is why modern science arose at this time? Science had been pursued by the ancients and indeed supported (though somewhat fossilized) in its Aristotelian synthesis with theology by the

medieval church. He argues that the significant factor in the modern development was the indirect result of the Protestant Reformation, with its resultant change in approach to scripture. In Protestantism, there was a move from an allegorical to a literal interpretation of texts and a move from an espousal of the authority of ancient authorities to a fresh look at the unencumbered text itself. He argues that medieval scholarship was largely based on symbolism and allegory and on the authority of texts both with respect to nature and to theology. The Renaissance brought a replacement of authority by observation and of interpretation free of such authority. The Reformation brought a return to original texts and authority in both scripture and in nature. The book of nature was now considered not as a text (represented for example by the allegorical Bestiaries with their somewhat bizarre mythical and unexplored beasts), but as a book of objects to be explored literally.

The purpose of nature was also considered in a new sense as a new natural theology with the details of nature observed as objects by science and explored to extol the glories of God. This certainly facilitated the knowledge of nature, but it was not without its rationalization in the hands of the natural theologians. Woodworm that destroyed the hulls of ships was considered for example as justified by its role in furthering international relationships because it promoted the sale of pitch to repair the damage. It did however get woodworm investigated!!

The exploration and renewed interest in a literal Adam and of Eden led to a renewed exploration of the concepts of a humanity dominating nature and also to an attempt to restore the perceived primitive full knowledge, of nature that was considered the language of Eden lost by the fall. These subjects and others are developed fully in Harrison's fascinating and scholarly book, which makes it a significant addition to the literature of the history of science. It is both well written, conclusively argued and fully documented from original sources and can be read and pondered by all those interested in the development of the modern scientific movement.

Allan J. Day

Darwin as churchgoer

William E. Phipps *Darwin's Religious Odyssey*. Harrisburg, PA: Trinity Press

International, 2002. xiv + 207 pp. The reviewer completed thirty-two years on the faculty of Berea College, retiring in 2001 as distinguished professor of general studies and professor of classical languages. The review is reprinted with the permission of the *American Theological Review*.

Darwin may have "made it possible" for scientist Richard Dawkins "to become an intellectually fulfilled atheist," but not Darwin himself. As Phipps, professor emeritus of religion and philosophy at Davis and Elkins College, shows in detail, Darwin spent his adult life pondering the God who has created this evolving universe, with all of its grandeur and suffering.

Phipps has extensively mined the public and private writings of Darwin and his contemporaries, as well as the works of his modern biographers, to produce this informative and interesting account of Darwin's spiritual odyssey. Much is already familiar: Darwin abandoned the notion of special providence as he found evidence for evolution and observed the terrible waste and suffering in nature; he gave up the traditional Anglicanism of the Thirty-Nine Articles and the creeds; his odyssey led him to agnosticism. Yet, he retained a notion of general providence--that the creator had endowed the universe with general laws, including natural selection, which has produced the descent of life nature reveals. And his agnosticism pertained "to a lack of certainty, not to a denial of Deity," Phipps asserts.

Readers may be surprised to learn that while he seldom attended services with his devout family, Darwin remained a pillar of St. Mary's, Downe. A life-long friend and conversation partner of the vicar, the Rev. Brodie Innes, he served on the parish council, and liberally contributed to its Sunday school and to church repairs. Far from indifferent to religion, he maintained throughout his life that no conflict existed between evolution and religious belief, and praised the efforts of clergy, including dozens of those nineteenth-century Anglican parson-naturalists, who broadcast this message. Though Edward Pusey condemned his theory, both Frederick Maurice and Aubrey Moore praised its gift to theology.

The heart of Phipps' argument is that even as Darwin rejected traditional faith, he remained a deeply religious man who "exhibited reverence toward whoever was responsible for originating and developing the universe," and

embodied the highest sentiments of Victorian Christianity: "Even though Darwin rejected Christian orthodoxy, he retained Christian orthodoxy...." A vigorous opponent of slavery and any form of human oppression or cruelty, he supported organizations to aid the poor and the handicapped and to prevent the unnecessary suffering of animals. A devoted husband and father, kindly and compassionate, he was generous in his praise to supporters and honourable critics alike, grateful for the backing of many and suffering without retaliation sometimes vicious attacks from those threatened by his theories.

At times Phipps' portrait of Darwin seems to cross the line into hagiography. The warts, if any are known, do not show. And there are some assertions that do not entirely mesh. Still, Phipps succeeds in providing a comprehensive description of Darwin's religious odyssey. Written in a style that is clear and straightforward, the book will be an absorbing read for anyone interested in the man who remains at the centre of our contemporary conflicts and conversations about science and faith.

Robert J. Schneider

Enchanted nature?

Alister McGrath *The Re-enchantment of Nature—science, religion and the human sense of wonder*, Hodder & Stoughton 2003, 214 pp, ISBN 0 340 86146 0.

This is a largely excellent book which sets out to "suggest that we reclaim the idea of nature as God's creation and act accordingly". It certainly makes that suggestion persuasively. It explores the idea "that the grounds of our ecological crisis lie in the emergence of a worldview that proclaimed human autonomy and viewed nature as a mechanism subordinated to humanity". In the course of this it provides a very thorough repudiation of Lynn White's infamous 1967 essay which still leads people to make Christianity a scapegoat for the world's environmental ills, despite the more obvious cause of post-Enlightenment secularism and the emancipation of humanity from any relationship with God. Finally, he takes on Richard Dawkins.

The book is persuasive condemnation of that stream of Western culture which is detached from any Christian sensitivity or constraints and which has approached the natural world

exploitatively, carelessly and unconscionably and which has consequently caused much environmental damage and waste of resources. This is perhaps seen most strongly in the former Soviet Union, where technological arrogance was politically unconstrained. At the same time I feel that his assessment of the problem seems exaggerated ("trapping humanity in a decaying world" p 94) and his case against technology seems based more on legends of Prometheus and Faust than on scripture. Faust acquired "forbidden knowledge and power that that humanity was never meant to possess", so do we as "we unwittingly unleash forces we cannot control" (pp 82-83)

McGrath makes a case that the motivation for development of technology is to remove the limits set by God for human behaviour and activity, to remove moral and physical constraints, and to lure mankind to seek "the powers and possibilities that are here associated with Satan". Technology is basically sinful. (pp 79-81). But this is where the exhortation to regain a proper respect for God's creation falls down. He repeatedly contrasts respect for God's handiwork with "exploitation" of it, a word loaded with negative connotations and which he links predominantly with selfish consumerism, greed and secularism. This is a breathtaking distortion and oversight in relation to the many thoughtful Christians (and others similarly motivated) serving God in engineering, mining, forestry, agriculture, energy, manufacturing, etc.!

In my view the book is severely deficient in failing to expound the positive Christian basis for technology and its application. It is almost Luddite. McGrath considers technology largely as a manifestation of sin, not an expression of God-given creativity serving the needs of six billion people though in his unspoiled world relatively few of those could be accommodated. He does not seriously address the case for technology as a godly positive development—albeit which is prone to misuse. Like other academics writing in this area, he is helpfully reflective but totally detached from the notion of actually needing to do anything in the world. (I acknowledge that non-academics have blind spots too!). The book has a good bibliography and an index.

Ian Hore-Lacy

A Stannard approach

Russell Stannard *The God Experiment* Faber and Faber, London (1999)

Russell Stannard's previous contributions on science and Christianity are well known to many. They have included *Science and Wonders* and the video series *The Question Is?* Stannard bases *The God Experiment* on his 1997 and 1998 Gifford lectures. Each chapter can be largely read as a stand-alone article, although there is a developing theme that runs through them. This is to be expected given the origin of the book as a series of lectures. The book essentially is an examination of the reasonableness of belief in God, and I am reminded to some extent of Lewis's *Mere Christianity* that had a similar aim and similar approach. The first seven chapters are primarily philosophical in focus, and presumably correspond to the 1997 lecture series. The second seven chapters focus on science, and I likewise assume they are drawn from the 1998 lectures.

There are fourteen chapters to this book, each chapter is a largely independent entity. There are too many to summarise in any detail in this review. However a few chapters stood out when I read them. In the first chapter, 'The prayer experiment', Stannard discusses the Templeton-funded prayer experiment and the implications (if any) of its success or failure. He points out God is not an experimental value that can be manipulated and this introduces a fundamental openness to all such studies. This fundamental openness extends to all our attempts to understand God, whether abstractly or concretely.

Thinking about prayer leads almost inevitably to the question of miracles, the subject of the second chapter. To some extent Stannard takes a "have your cake and eat it too" approach. On one hand he is quite sceptical about miracles in general, including most Biblical miracles. Most miracles he would regard as being later accretions, parabolic illustrations, or capable of multiple interpretations. I found this both disappointing and one of the weakest chapters in the entire book. Stannard however is careful not to rule out miraculous events.

In the third chapter, *Life Beyond Death*. Stannard develops his discussion about miracles further with reference to the resurrection. After examining the resurrection stories. He concludes that the evidence for the

bodily resurrection of Jesus is convincing. Given his earlier scepticism about miracles this is a little bit surprising, and I am reminded of Lewis comment about those theologians who strained at the gnat of the virgin birth but swallowed the camel of the resurrection. However Stannard also again tries to have his cake and eat it also, saying that "if it could be somehow proved that I am mistaken, it would not to any significant degree adversely affect my faith" (p35). Given the apostle Paul's statement (2 Cor.) on the centrality of Christ's resurrection to the gospel, one has to wonder about the nature of Stannard's faith. Doubtless Archbishop Carnley would be proud.

Chapter 5, 'A meeting of minds', was for me one of the most interesting in the book. Stannard provides a useful contrast between approach to belief in God of Freud and Jung, with a parenthetical comment on Dawkins. He points out the irony that Freud's writing on religion was at the time hailed by many as the most far reaching of his works, and is now the least read by psychologists. The influence of Freud on popular atheism remains, even though his opinions say more about Freud than they do about religion.

The book then examines the nature theology and how it has developed over the Biblical period from the patriarchs to the apostles. A stronger statement on whether Stannard thinks this reflects a progressive revelation or only a development in thinking about God would have been helpful.

As noted previously, the last seven chapters focus mainly on scientific issues. These have been well covered in books by other authors, especially those of John Polkinghorne and of David Wilkinson, although Stannard's summary of such issues is still useful while necessarily brief.

There are times when his discussion of important issues is, I feel, too brief, such as in Chapter 10 ('Human origins') where Stannard settles firmly on the literary rather than literal side of interpretation of the account of the Garden of Eden. Even at an introductory level, I believe he could have done more to discuss how and where such a literary account segues in historical (or at least proto-historical) narrative. In the following chapter, 'Further insights from evolution', I similarly found somewhat superficial the handling of complex and divergent issues such as whether or not there is a genetic basis of behaviour and

spirituality, and implications of the human genome project

In Chapter 12, 'A case of over-design?', many aspects of the cosmos – its size, general hostility to life and ultimate fate (freeze or fry) seem contrary to the possibility of teleology. However, at a fundamental level, the fine-tuning of the universe seems extraordinarily favourable for the appearance of humanity. Stannard summarises this fine-tuning, the basis of the anthropic principle, although introducing relative little that is new. However he does go a step further and use the anthropic principle to ask what kind of God can we deduce from the universe? This type of natural theology is tempting, but can also be misleading, however Stannard merely sketches some of the possibilities, rather than draws conclusions. In 'God and Time', Stannard outlines the state of contemporary thinking on the nature of time, in particular, the paradox of how the macrocosm is dominated by the arrow time whereas the microcosm is not all standard stuff, but as a geologist I could not help but reflect that even the microcosm is not as free from the arrow of time as many physicists would like to think. Decay of atoms and subatomic particles

provides a directionality to time even at the smaller scales. In the last chapter, 'The ultimate nature of God', Stannard links the ultimate unknowability of the world (thanks to quantum indeterminacy) and the unknowability of God. Despite this unknowability of God, what we can know is that God is a God of relationships. This is a result of the ongoing relationships with the Triune Godhead God and by the clearest revelation of God—through the Incarnation.

This book could well be a helpful introduction to these issues for some. Apart from his discussion of miracles, I found little to disagree with, although those comments would alone be sufficient to discourage many evangelicals. Furthermore, there is a lack of Trinitarian and incarnational perspectives to his theology. Given the increased attention that has been given to understanding the doctrine of creation from a Trinitarian approach, this lack is regrettable. Despite this lack, there is much else in this book I found useful. However, with these caveats, it remains a useful book, both to keep and to pass on.

Jonathan Clarke

Books on Science and Religion from the Australian Theological Fellowship

God, Life, Intelligence, & the Universe Edited by Terrance J Kelly and Hillary D. Regan. ATF Science and Theology Series: One, 2001. \$35.00

Interdisciplinary Perspectives on Cosmology and Biological Evolution Edited by Hillary D. Regan and Mark Worthing. ATF Science and Theology Series: Two, 2001. \$25.00

Habitats of Grace: Biology, Christianity, and the Global Environmental Crisis Carolyn M. King, ATF Science and Theology Series: Three, 2001. \$25.00

These books can be ordered from the Australian Theological Forum, P.O. Box 504 Hindmarsh SA 5007

Letters

Lomborg and debate

Thanks for your excellent lead item on Lomborg in Bulletin 39. It is a disgrace the way he has been pilloried for pointing out the obvious but unspeakable.

Given that your (and my) views on Lomborg remain contentious with some, we can take some consolation from the fact that both *New Scientist* and *Nature* seem more on his side

than his inquisitors! The Danish Committee for scientific truth and purity was quite Orwellian, and in *Nature's* opinion (16/1) it "misfired" in failing to show any dishonesty in Lomborg's acknowledged polemic. His chief sin seems to have been that people took him seriously though his work was not essentially scientific. *The Economist* (11/1) called the Committee's ruling "inconsistent and shameful", and *New Scientist* (Fred Pearce

18/1) said it was "unfair and bad for science", casting Lomborg "as the victim of a green witch-hunt". *Scientific American* (sic) remains unrepentant for the disreputable part it played. Meanwhile CUP are said to have reprinted the book 25 times! Professor Deepak Lal (Development Studies, U. Cal) wrote in *Financial Times* (14/1):

"The Danish Committee on Scientific Dishonesty has issued its fatwah against Mr Lomborg, like Ayatollah Khomeini's against Salman Rushdie and the Holy Inquisition's indictment of Galileo. The Danes also want Cambridge University Press to suppress the book, which is reminiscent of the book burning and intimidation of publishers of *The Satanic Verses*. I hope this will open the eyes of those involved in environmental policy debates to the fact that the 'scientific' proponents of the green agenda burn with no less fierce (though a different)

'religious' passion than those of other fundamentalists.

"By attempting to suppress free debate and any questioning by lapsed 'believers', not only have they gone beyond the proper bounds of science, but their activist followers are also attempting to coerce the world to accept their 'religious' beliefs, no less than the Islamist fundamentalists such as Osama bin Laden."

Strong stuff indeed! The fundamental problem for Christians is that critique of popular views can be treated as heresy, even if those views have a rather flimsy basis in fact. Such critique should surely lead to re-examination of the basic facts, not to a heresy trial in the media, in this case the scientific media.

Ian Hore-Lacy

The deadline for submissions for the next issue of the Bulletin is June 30th

Word limit for articles is 1,000 words, for letters, reflections and book reviews 600 words. Exceptions may be made in exceptional cases.

Please submit to Jonathan Clarke at the address on the front page. Electronic submissions preferred.