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Autumn 2005

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

There is an exciting and varied program lined up for COSAC05 in July to commemorate the centenary of Einstein's Theory of Relativity, one of the most significant scientific ideas of the last 200 years. There will be sessions on the scientific and theological issues raised by relativity, as well as more general papers on the significance of science to the gospel and social justice. Some brief descriptions of the talks by the Keynote Speaker, Prof. George Ellis, are in this issue of the *ISCAST Bulletin.* So I look forward to meeting people there. It is not too early to start thinking about future COSACs. At past conferences there have been repeated suggestions that we look at the areas of education and technology, so it would be good to raise this as a possibility for COSAC 07. The sesquicentenary of the publication of *The Origin of Species* is in 2009. Exploration of the impact of Darwin's theory of evolution by natural selection on science, theology, and culture would be a good theme for that year's COSAC.

This quarter's issue of the *ISCAST Bulletin* has quite a few items of special interest. I would particularly recommend Alan Gijsber's reflection on a discussion in ISCAST Victoria about the 2004 tsunami disaster that greatly extends some ideas I presented in my editorial in the *ISCAST Bulletin 45.* I would also recommend Bryan Ezards's essay review on the ID movement. The concept of "Intelligent design" has made phenomenal inroads in Christian circles in recent years but has also been extensively criticised on both theological and scientific grounds. The Editor will welcome further contributions on both these issues.

Lastly, this is my last contribution to the *ISCAST Bulletin* as editor. I have greatly enjoyed this task for the past four years, but the time has come to hand over to Mick Pope, an ISCASTian in Victoria who has made many contributions to the Institute and the Bulletin. He will be glad to receive submissions at bulletin@iscast.org.au. Please welcome and support him.

Jonathan Clarke

HAVE YOU REGISTERED YET FOR COSAC 2005??

The 5th Conference on Science and Christianity will be held at Burgmann College at the Australian National University in Canberra on the weekend of the 15th-17 of July. There are still some places available for the conference.

Book your place while there is time and space!

The Registration Form may be downloaded from the website www.iscast.org.au and completed forms and payment should be posted to

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ISCAST Fellow in new AFES position

One of our NSW Fellows, Lewis Jones, is embarking on a new project and wants to tell us something about it and let us know how we can be involved. At the beginning of 2006, Lewis will be taking the Australian Fellowship of Evangelical Students (AFES) into uncharted territory as their first and only staff worker to focus exclusively on ministry among postgraduate students and academic staff at Australia's universities. Lewis completed degrees in Physics and Astrophysics in the US before taking up postdoctoral work in the Department of Astrophysics and Optics at UNSW in 1996. He is now in his final year of the Bachelor of Divinity program at Moore Theological College, and will be free to embark on the new venture with AFES full time from January 2006.

The new work, dubbed Resource for Evangelising Academics and Postgraduates (REAP), intends to be just that: a resource, a way of connecting Christians in academia right across Australia, of encouraging them in their faith in the university setting, of helping them to articulate the relationship of their work and their faith better, of promoting evangelism among that sector of the university.

AFES is excited about the possibilities and Lewis dreams of adding an academic and postgraduate staff worker to every AFES team around the country. Lewis will be based in Sydney for the time being, but hopes to make connections with Christian academics and postgraduate students everywhere and spur them on in any way he can, whether with ideas or a visit or letting them know of other Christians in their area.

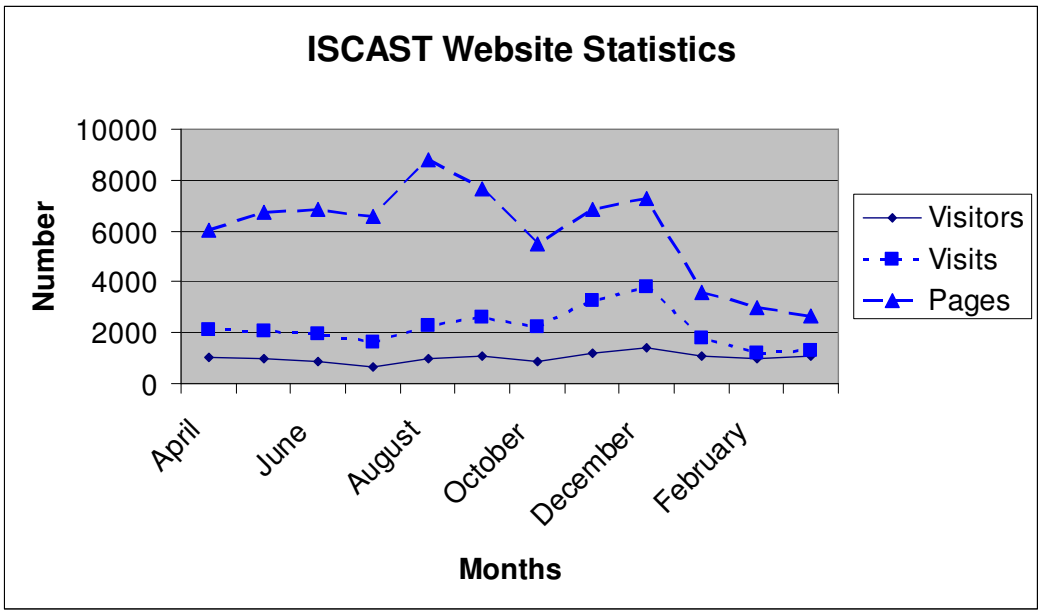
There are two easy ways you can be involved and one more difficult. The first is to support Lewis financially. AFES staff workers raise all their own support, so need a wide base of donors to keep their ministries operating. The second is to tell Lewis about yourself, where you are and what you do and names of other Christians you know anywhere in Australia. The more difficult one is to pray. It's more difficult because, though simple to do, it is also hard to remember.

For more information please contact Lewis directly on lewis.jones@reap.asn.au, by phone at (02) 9519-0189, or by post at 2 Little Queen Street, Newtown, NSW, 2042. You can also check out the fledgling REAP website at http://www.reap.asn.au or the AFES website at http://www.afes.org.au.

News

NATIONAL—- ISCAST Website Report: April 2005

The ISCAST website continues to be visited from around the world. Below is a graph of usage of the site over the last 12 months. The number of monthly visits is hovering at around 1,000 unique visits per month while the number of repeat visits and number of pages downloaded has dropped suddenly. This is perhaps because we have not posted many new papers on the site recently and, while people are checking the site out, there is not much new for them to see.



Work on creating a Search Engine to help search for papers by topic, author, subject and date is about to begin. We will also develop a new events calendar to provide information about events and enable people to register or express interest for these events online. This latter feature will be available to each State coordinator so that they will be able to load up events and receive online registrations directly themselves.

Progress is also taking place on the editorship of the Online Journal. I am expecting that, with a bit of leadership and encouragement, we will get more papers published online and for a wider range of subjects. PLEASE, if someone from the editorial panel asks for a contribution, consider it seriously. We should have more news on this at COSAC05.

The top five ISCAST papers downloaded in March 2005 were:

1. COSAC 2003 Collected Papers (viewed 80 times)
2. "Genesis 1–3: Science? History? Theology?" By Dr JA Thompson (still up there! But it has got knocked off the #1 position for a change!) (79)
3. "Ethics, Experiments and Embryos: A Christian's Observations on the Embryonic Stem Cells Debate" by Dr Brian Edgar (51)
4. "The Ethics of Drug and Alcohol Care: Social Changes and Christian Responses" by Dr Alan Gijsbers (42)
5. "What it Means to be Human: Theological Responses to Contemporary Biology" by Prof. Allan Day (41)

The top five countries (other than Australia) from which the site was visited in March were:

1. USA (Educational)
2. United Kingdom
3. Netherlands
4. Canada
5. Germany

And the top five key words used in search engines to discover the site?

1. Christian
2. Genesis
3. Stem
4. Science
5. Cell

In other words, make sure you publish your papers on Science and Faith on the ISCAST site and include these words and you have a good chance it will be read in USA, UK, the Netherlands, Canada, and Germany….oh, and Australia.

Richard Gijsbers

NSW

Scientist Receives Inaugural Faith and Work Award

The first *Faith and Work Award* was presented by Macquarie Christian Studies Institute (MCSI) to a leading Australian scientist and inventor last week.

MCSI, based at Macquarie University, North Ryde, aims to bring faith to life and put faith to work by providing university-accredited and professional development units and courses especially for Christians in the workforce or 'marketplace'.

The recipient, Professor Graeme Clark, was the leader of the team that developed the cochlear implant ('bionic ear'), which allows profoundly deaf people to hear speech. Today more than 60,000 people in 70 countries have had hope and hearing through the Cochlear Limited Bionic Ear. Prof Clark's invention is still the world leader in its field and his team continues its ground-breaking research.

In 2004, Professor Clark was awarded a Companion of the Order of Australia (AC) for services to medicine and to science, was elected a Fellow of the Royal Society, London and named Australian Father of the Year. He has also received the Prime Minister's Prize for Science, Australia's pre-eminent award for excellence in science and technology.

At the Faith and Work Award Dinner on Friday, April 8, MCSI Director and Dean Rev Dr Gordon Preece said Prof Clark was chosen because God calls us all to be 'secular saints', to strive to reflect his character whatever we do for a living. He said the award recognised the extraordinary things God could do through "workplace Christians", exemplified in Prof Clark.

"We thank Graeme for all he has done … and we praise God for him and what he's accomplished, as I know Graham does himself, ending his autobiography *Sounds from Silence* with 'Our Father in Heaven, Hallowed be your name'", Dr Preece said.

The Award was presented at the ceremony at the Macquarie Graduate School of Management, North Ryde, by Macquarie University Deputy Vice Chair Dr John Loxton. He said the relationship between MCSI and Macquarie University was unique in Australia, reflecting the practical focus of MCSI and innovation of Macquarie.

Although a private higher education provider, MCSI's work-focused units from a Christian perspective are approved by Macquarie University. This meant that they could earn credit points towards almost any university degree around Australia (including by distance education). Subjects next semester include ***Person, Politics and Ethics of Jesus/Paul***, ***A Christian Perspective on Popular Culture*** and ***Christianity and Science: An Open Dialogue.***

When accepting the award, Prof Clark said although he had received many awards, this was the first time his wife Margaret had also been presented with a gift. He warmly admitted he could not have achieved all he had without her support. Prof Clark shared the story of his journey towards inventing the bionic ear with the crowd of mainly Christian business and professional people and academics. He also shared his faith journey, including Bible passages **(e.g.1 Corinthians 4:7)** and answers to prayer that had inspired him and given him courage when things seemed most bleak.

For more information on Prof Clark visit the Bionic Ear Institute website at www.bionicear.org. For more information on MCSI's university subjects and Christian professional development opportunities visit www.mcsi.edu.au.

VIC

On 30th April some 30 ISCASTians gathered at Ballarat to experience "God's Story in the Stars". While most travelled from Melbourne, more than the usual number of members from rural areas were able to attend. We were hosted by volunteers from the Ballaarat Astronomical Society at the Ballaarat Municipal Observatory (note the archaic spelling – the observatory was established in 1886) and fed by the local CWA.

Dr Bill Fiddian, a member of the Astronomical Society and retired meteorologist, took us through the history of the Observatory. There were fascinating links with the local church and he referred to how the leading lights would seamlessly shift from preaching to talking astronomy and vice versa. Bill quoted from a

book of the time (there was no date in it other than to a reference of an event in 1879). The language is a bit flowery but it represents a sentiment not far removed from what ISCAST is standing for, that both faith and scientific knowledge illuminate the true nature of things:

> "We need never hesitate, therefore, to bring old faiths into new light. Our spiritual life can suffer and grow pale only if we shut it out from the increasing light, and leave it to grow in darkness. The clear shining of knowledge may dissipate a thousand fancies which we have mistaken for realities; but it shall bring to faith health, and vigour, and renewed life. While many run to and fro, and knowledge is increasing, Christianity cannot be preserved as a cloistered virtue or a scholastic art; but only in the breezy world, under the open sky, rejoicing in the light, its strength shall not be abated, nor its eye grow dim. Reverently and humbly, but nothing doubting, the Christian apologist of today may follow wherever new paths of knowledge seem opening to our approach; and though he goes down into the depths, or wanders through realms of strange shadows and endless confusions, nevertheless, after he has traversed all the spheres into which thought can find entrance, if he remains true to the spirit sent for his guidance, his better self – like Dante following Beatrice from world to world – he shall find himself at last by the gates of Paradise, walking in a cloud of light, full of all melodious voices."
>
> Concluding words of Newman Smyth, *Old Faiths in New Light,* Ward Lock, London, after 1879:170.

Dr Michael Drinkwater (Physics, University of Queensland) then presented his reflections on 'Faith, Astronomy and the Big Bang'. For those of us whose knowledge of astronomy and cosmology was out of date or negligible, it was a useful summary of recent advances, including evidence for the big bang, dark energy and the rate of expansion of the universe, and Michael's own contribution to the discovery of ultra-compact dwarf galaxies. Michael also spoke about the differences and relationships between science and Biblical faith, giving his own testimony to their compatibility: a good preparation for the ISCAST(Vic) annual lecture on Cosmology & Christianity coming up on 22nd July.

Unfortunately, the evening was cloudy and the anticipated star gazing through the observatory's telescopes was not possible. Some of us did get a fleeting glimpse of the moons of Jupiter but another visit to the observatory (open every Friday and Saturday night) would be a good follow up. Thanks to Dr David Angus, Ballarat Astronomical Society and the local CWA for a most enjoyable excursion.

Robert Joynt & Richard Gijsbers

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 ($56 for both printed and online access)

For subscription contact Richard Gijsbers, Administrative Secretary ISCAST (Victoria)

Essay Review

***Doubts about Darwin: A History of Intelligent Design,* by Thomas Woodward. Baker Books, 2003. Hardcover, $19.99.**

The last 20 years has seen the rise of the modern Intelligent Design (ID), arguably the most important movement in the philosophical foundations of science in over a century. One hears so many contradictory remarks about ID that it is wonderful to have an overview both of its history and of the opposition to it. In *Doubts about Darwin* Woodward traces this fascinating story from its inception in 1986 to the present. Before I turn to details of Woodward's rhetorical approach, I present an overview of the subject matter of the book—a history of ID—which revolves around four well-known publications that have caused no small stir in academic circles and increasingly in the media. *Doubts about Darwin* is a highly readable, and at times fascinating, account of ID and must itself be considered a major contribution to the movement.

1) In 1986 (1985 in England) Michael Denton published his *Evolution: A Theory in Crisis.* Far from being a follower of the creation-science movement, Denton and the proponents of what came to be known as the ID movement find Darwinian micro-evolution quite plausible and Denton himself is a self-confessed agnostic. Denton's 'awakening' resulted from discoveries in his field of molecular biology which opened to him aspects of nature that are so 'astonishingly complex'—molecular machines manifesting transcendent brilliance of design—that it violates common sense to suppose they are reducible to a simple, continuous, random process. Increasingly he came to realise that he faced highly recalcitrant patterns — anomalous structures — that indicated to him a fundamental implausibility of Darwinian theory. Denton began to look more widely and critically at the evidence for transitions. He was surprised to find that empirical evidence of macro-evolutionary transitions is simply not there in any area of biology from palaeontology to molecular biology. The overwhelming empirical evidence is of the discontinuity of nature.

While most biologists concede that there are serious problems here, nearly all take the conservative view that solutions will be found by making only minor adjustments to the Darwinian framework. In contrast, Denton argues that the problems are so severe and intractable as to make the orthodox Darwinian framework untenable.

2) In 1987 Phillip Johnson, the next contributor to the ID movement, saw a science-bookstore window with two new books displayed: Richard Dawkin's *The Blind Watchmaker* and Denton's *Evolution*. He bought both books and within hours the fierce clash of views over the plausibility of macro-evolution had fully captured his attention. As a trained lawyer he recognised a classic court-room scene:

> Denton the skeptic attacked macroevolution as empirically empty, a gossamer shell propped up by the sociological forces of a paradigm. Dawkins, the fervent believer and crusader, defended Darwinism as utterly compelling, supported by logical reasoning and even by his computer simulations called "biomorphs". (Woodward p.69)

Convinced that Denton was either very wrong or very important, Johnson devoted his sabbatical year to preparing his 'brief' by background reading in classic evolutionary texts, becoming convinced that the Darwinian worldview is indeed built on flawed foundations. He continued his preparation by taking every opportunity to bounce his ideas off biologists and other academics. His *Darwin on Trial* was published in 1991. According to Woodward (2003:95), Johnson has four major theses: (1) He concurs with Denton that there is no empirical evidence for macro-evolution, (2) Darwinian macro-evolution is ultimately grounded on the philosophical assumption of naturalism; (3) When Darwinism is brought into question, it is routinely protected by empty labels, semantic manipulations, and faulty logic; (4) Thus Darwinism functions as the central cosmological myth of modern culture—as the centrepiece of a quasi-religious system that is known to be true *a priori*, rather than as a scientific hypothesis that must submit to rigorous testing. Johnson has continued his well-informed criticism with a string of books: *Reason in the Balance* (1994), *Testing Darwinism* (1997), *Objections Sustained* (1998), *The Wedge of Truth* (2000), *The Right Questions* (2002).

3) Next came Michael Behe with the publication of his *Darwin's Black Box* in 1996. Nine years before, he had ordered a book-club

edition of Denton's *Evolution* which he read in a single day. He describes it as the greatest intellectual shock of his life as he realised that he had been so greatly misled throughout the whole of his biological training to PhD level. He remains angry at the intellectual deception that he sees in textbook discussions of macro-evolution.

While it was possible to dismiss Johnson as a non-scientist, Behe's credentials as a micro-biologist were impeccable and he was immediately propelled into the spotlight of media attention. Behe argues that molecular machines, such as those involved in a flagellum, the tiny revolving 'propeller' that enables a bacterium to move, fulfils the falsification requirements of Darwin's 'wager':

> If it could be demonstrated that any complex organ existed which could not possibly have been formed by numerous, successive, slight modifications, my theory would absolutely break down. (from *The Origin of Species)*

No-one is able to propose a developmental path for the flagellum as it is an irreducibly complex molecular machine that, like a mouse trap, will not operate if any one part is missing. A mousetrap has only five working parts, a flagellum has 40, most of which could not have been co-opted as they have no other function in the cell. Darwinian theory was proposed before anything was known about molecular structure and, for Behe, everything points to the fact that the theory will never be able to account for the 'systems of horrendous irreducible complexity' that inhabit the cell.

4) The final major contribution discussed by Woodward is that of William Dembski who has PhDs in both mathematics and philosophy. His 1999 publication, *Intelligent Design*, is a rewrite for the general reader of his 1998 technical publication *The Design Inference* (Cambridge University Press). Dembski's importance lies in his explanatory filter—a three-tier system of conceptual sieves that formalises the detection of design. This system detection is currently applied to fields as diverse as forensics, SETI, archaeology and patent review. His system can be expressed in simple terms:

Filter 1:— Is it a high probability event, consistent with the operation of natural law? Design is ruled out.

Filter 2:— Is it a medium probability event, such as dealing a royal flush in spades in a game of poker? Statistically there is one chance in 2,598,960 of this happening; again design is ruled out. The hand dealt is highly unusual, but no conclusion of cheating can be inferred. Only items not ruled out by these two filters are submitted to filter 3.

Filter 3:— To be a candidate for design an event must be a low probability event and conform to a specification—an independently given pattern. To return to the poker game, if five royal flushes were dealt to the same person in a row, one would definitely suspect cheating. The five hands are clearly a very low probability event that conforms to an independently given pattern. The other players can infer design—someone has cheated.

Woodward (2003 174) considers Dembski's filter the most important plank in the ID movement for four reasons: (1) The filter places design theorists in the context of currently accepted science, merely proposing to apply to biology what astronomers are already applying to radio signals. (2) The filter is a regulative procedure that demonstrates caution, allaying fears as to what design theorists might propose next. (3) The filter uses a principled system of statistical analysis avoiding relative notions of intuition and common sense. (4) The filter does not specify any transcendent designer. Science can detect design, not the identity of the designer, just as a forensic pathologist can only indicate that a person was murdered, not who did it.

Doubts about Darwin is not simply a history of ID; a large amount of space is devoted to the rhetoric employed by both sides in the debate. Woodward himself promotes Design by telling the movement's dramatic story. For example, Woodward (pp.47-48) likens Denton's arrival to the opening scene of *Saving Private Ryan*.

> Darwinism had held the continent of scientific consensus for over a century. At last the time had come to wade ashore and establish the first beachheads of empirically based antievolution. The odds against the would-be "liberators" seemed so terrible as to border on the absurd. Everything hinged on the weapon held by the invaders—a 344-page book, *Evolution A Theory in Crisis*…
>
> As the invaders clambered up the cliffs towering over the beaches, they hurled Denton's explosive charges toward the pillboxes: "*Neither of the two fundamental axioms of Darwin's macroevolutionary theory—the concept of the continuity of*

> *nature…and the belief that all adaptive design of life has resulted from a blind random process—have been validated by one single empirical discovery or scientific advance since 1859"* (italics mine[1]). MIT's Murray Eden with his Wistar colleague Schutzenberger joined the invading troops, announcing that Denton "should be required reading for anyone who believes what he was taught in college about Darwinian evolution"…

The Darwinian defenders were not asleep. Rhetorical bullets flew in savage counterattack:

> "Denton's book displays a vast ignorance about Darwin, evolution, and science in general."[2]
>
> "A specimen of creationism at its most subtle and up-to-date." [3] "No area escapes misrepresentation and distortion."[4]

This extract illustrates not only the power of Woodward's own writing in dramatising the story but also his approach of presenting arguments from both sides of the debate: in this case the newcomer making serious empirical claims which are dismissed with invective, personal abuse, or guilt by association with creationism.

For Woodward the drama begins with the profoundly misguided pronouncements of scientists who claimed overwhelming evidence in favour of macro-evolution. Increasingly, the evidence has been shown to be woefully lacking in factual support and in molecular biology, points compellingly to some sort of creative intelligence. In *The Icons of Evolution* Jonathan Wells (2000) charges textbook publishers not only with misinformation in promoting Darwinism, but also with toleration and even propagation of known fraud (Woodward p.190).

The rhetoric—the language and type of argument used to make their point—deployed by both camps is studied in detail. The background story of the key characters, texts and interactions is highlighted, creating its own rhetoric of persuasion. Reactions to ID have varied. Many Darwinists are not prepared to concede that scientific naturalism is open to question and wish to rule out the possibility *a priori.* Instances are given of ID proponents seeking to argue on empirical grounds only to face 'severe and malignant distortion' by opponents. On the other hand, instances are recorded of cordial and fruitful debate.

Doubts about Darwin presents much more than can be outlined in a review, however long. For example, one of many themes discussed is whether biological science may be in the early stages of a Kuhnian revolution in which the current *paradigm*—Darwinian naturalism—is suffering an *anomaly overload* (as claimed by Denton). Will the *crisis* result in philosophical naturalism being replaced by a new *paradigm*—Intelligent Design? In this and many other ways ID is presented as a significant, virile and up-and-coming movement, with a growing list of books, articles, email chat rooms, videos and DVDs.

Unfortunately, this telling and retelling of the stories from different perspectives results in the book's greatest weakness: unnecessary repetition. Most annoying is when repetition is introduced as new material. A second edition could be improved by employing a good copy editor.

Philosophical naturalism is widely presupposed throughout science and takes the universe to be self-contained. More recently ID claims that nature points beyond itself. Does this claim constitute an argument from incredulity—an unwarranted appeal to ignorance? If not, is the explanation of such phenomena beyond the pale of science? Is it possible to offer cogent philosophical and even scientific arguments that nature does point beyond itself? [5] Such questions have to be among the most significant that we human beings are called upon to answer. Those wishing to become conversant with the ID debate could do no better than to start with Woodward's well researched and well written history of the movement.

Bryan Ezard

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[1] Woodward speaking.

[2] Lee Dembart, *Los Angeles Times*, 10 July 1986.

[3] Paul Preuss, *San Francisco Chronicle*, 25 May 1986.

[4] Philip Spieth, *Zygon*, June 1987.

[5] These questions are taken from the purpose statement of a 2000 conference titled, "The Nature of Nature" (Woodward p.181).

Summaries of Prof. G. Ellis' talks to be given at COSAC 05

The Present State of the Science and Religion Debate

This talk discusses issues that used to be considered important in the science and religion debate, but are no longer central to it; and then moves on to consider issues that remain of importance today. These include cosmological issues (for example, to do with whether there exists a 'multiverse' or not) and issues to do with the way human beings are regarded in the light of the reductionist thrust of much of modern science. The talk will emphasize the limits of what science can do both at present and in the future, the problem of fundamentalisms of whatever kind (religious or scientific), and the key issue of discernment in relation to religious experience.

Cosmology-Theology-Ethics Part I

This presentation looks at the cosmological context of human life from a scientific viewpoint, considering the nature of the expanding universe and the emergence of biological complexity. It shows how there are specific 'fine tuned' conditions that must be fulfilled if life is to emerge in the universe. It considers the metaphysical options that can underlie the nature and existence of the universe, and the various kinds of ontologies that occur. Overall it sets the cosmological stage for a discussion of the meaning of life.

Cosmology-Theology-Ethics Part II"

This continuation of the previous presentation moves on to look at issues of meaning and morality, which cannot be determined by the scientific method. It emphasizes the importance of such issues and considers the various possible natures of morality. It proposes that the true nature of morality is encompassed in a 'kenotic' or self-sacrificial ethics which is a basic principle underlying many aspects of human life. It suggests that the strictly scientific methods of investigation of the nature of reality can profitably be complemented by an ability to discern various 'intimations of transcendence' that are available to those with an eye to see them. Overall the message is that the science and religion dialogue has to be complemented by a compatible understanding of ethics in order to be complete. Various aspects of this complementarity are highlighted.

The Nature of Emergent Complexity

Complex biological structures, including human beings, arise out of the underlying physics and chemistry. However they are much more than physics and chemistry. How this comes about is discussed here, focusing on top-down causation in the hierarchy of complexity and the causal significance of information in the physical world. I discuss how physics provides a causally incomplete description of the real, everyday world around us because it does not encompass the nature or effects of human intentionality. Various ways of approaching this incompleteness are considered. The key issue arising is that higher levels of the hierarchy attain their own autonomous levels of meaning and behaviour that are largely independent of the underlying physics, and the outcome of their actions cannot be predicted on the basis of physics alone. This becomes particularly clear when considered in its proper cosmological context.

ARTICLE

Reactions to the Tsunami: What myths do we live by?

This is a personal reflection arising out of the ISCAST (Vic) discussion held on 26 February. Two months and much reflection later the notes taken at the time have been fleshed out, maybe beyond what was actually said at such a deep and challenging meeting.

Charles Sherlock challenged us to see the hidden story underlying the way we live. The

mediaevalists accepted the authority of the established church and lived according to the church calendar. The Reformation and subsequent wars of the nation states shook people's beliefs in such a secure order, and the rise of modern science helped to desacralise the world. The 1755 Lisbon Earthquake, Tsunami and fire which killed over 100,000 people were used by Rousseau and Voltaire to further re-image the world without God and Christ. These events, like the Indian Ocean Tsunami of 2004, in some minds side-lined God even further.

The scale of the Boxing Day disaster is still registering, with hundreds of thousands of people killed, and the devastating loss of infrastructure. This is greatest in the coastal areas, where the poor and the marginalised live. It also affected a few hundred rich westerners on holiday in these idyllic areas.

What stories do we live by? Today's society tends to live with faith in science and technology (ISCAST concerns). We believe that superannuation, electric lights and shopping centres save us! For pagans, if you do things right by the gods, the gods will do things right by you. Evangelical Christians can falsely live believing that faith in Jesus Christ will lead to a long, prosperous and trouble free life. By this belief, the world is kept predictable by our faith. A Tsunami shatters such myths.

What Biblical stories should shape our world? Charles looked at two – the chaos out of which God created the world and the creation of the world. The Spirit of God hovered over the wet dark deep before God called light into being. This deep was split in two by the 'firmament' which separated the waters above from the waters below. This firmament was removed with Noah's flood. Then the waters came together and chaos returned. The rainbow reminds us of God's covenant that such a firmamentectomy would never again devastate the earth. The Exodus is seen as God's provision in the midst of the floods. Miriam's song of Exodus 15 picks up the same term for the deep used in the first few verse of Genesis. Crossing Jordan picks up the theme of God's provision in the flood and the Psalms express God's care in the face of overwhelming floods. In Psalm 69 the floods of distress overwhelm a person. Jesus cites this Psalm in his own suffering. We too shape our understanding of the world, and the chaotic deep of suffering through the passion of Christ. The story of Noah's flood is linked with baptism in 1 Peter 3 and lifts our hopes from the devastation of this life to the hope of the new creation, where the sea will be no more. In the meantime creation groans as we wait a cosmic redemption.

Charles next looked at creation, which was 'good'. How can a rock, dry land, a tree, birds, reptiles, animals and fish be 'good'? God created according to the laws of nature, and that which was made was made according to God's will. What God makes, God makes well. God also made tectonic plates, gravity, uplift and heat – all the forces which when acting together create powerful effects like volcanos, earthquakes and tsunamis. Evil does not enter into such a consideration. There is a sheer fascination with the power and the scale of the forces which shape out planet.

The fall was an Augustinian idea. Finitude and mortal limitation is a good thing, (as is decay and compost and a grain of wheat falling into the ground and dying) but the introduction of sin through humankind's disobedience meant that the elemental spirits of the universe went wrong, and humans were cut off from God. In spite of this God still acts providentially in creation, indiscernibly but completely – God's ambiguous finger in the world. Charles warns us against thinking that unless there is a miracle, God has not acted. God acts in everything.

At this point the discussion started. Why did so many die, was it because they lived on the edge of a huge force of nature? (What about those sitting on the San Andreas fault in Los Angeles?) Or did many die because they were living in marginalised areas because of unjust social forces?

Why did this disaster lead to such a crisis of faith? The Bible is full of disasters, so why should this one challenge us so? True Christian spirituality finds salvation and deliverance in the midst of and through disasters rather than from disasters, and our theology needs to be robust enough to face a challenging future. We cannot know the answers, because we can only know when it is finished. When we are in the midst of the story its full telling is mere speculation. It is short term to see death simply as evil, for in God's larger economy a fuller story has yet to be told.

A significant local Christian response was one of fatalism. We accept our finitude and our powerlessness. Yet this is not entirely satisfactory, as seen in the book of Job. But in

the struggle to find meaning we find it on God's terms, not our own. In God I have found meaning, for meaning found me. There is a huge mystery in that meaning.

There are various other responses from the different religions. The Islamic world speaks "Inshallah," which is a hopeful fatalism. The Buddhist response is one of compassion and a disaster like this is a drive to seek the 8-fold path more closely. Christians in this situation need to conduct themselves with respect and courtesy without thoughtlessly imposing their ideologies on others, yet remaining true to God who in Christ gives meaning to suffering.

What is the relevance of Lamentation? Charles laments the lack of lament in so much of our modern liturgy. He quoted passages like Isaiah 63:10 where God is described as the enemy of the people of God. The lament of Psalm 44 is another poignant one usually applied to God's people under the holocaust, where even those who had not forgotten God or been untrue to his holy covenant suffered unspeakable horror. The 1995 Anglican prayer book committee tried to redress this imbalance.

What then do we pray for? Do we pray for health? Or what we will do with whatever health we get?

The meeting closed with a brief discussion by two people well versed in the Aid delivery service. Deb Story had worked among the poor in Afghanistan for 6 years and experienced a number of disasters. The most vulnerable in any disaster are the poor, because they have very little flexibility and no choice. Aid agencies find that disasters and child sponsorship are the most effective ways of raising money, and that the best help long term is to build infrastructure and capacity within the country to cushion the blows of disasters. Bill Walker, working with World Vision described the responsibility of non-government and government departments who suddenly have huge amounts of money to deliver most expeditiously and effectively to those who need it most. They need much wisdom.

It is obvious that we covered a lot of ground, consequently we may not have covered all of it well, but the overwhelming challenge to us all is to worship a God bigger than our thoughts and imaginations who in this modern era has given us so many new resources (jet travel, video linkages, the Internet, helicopters that also can crash) with which to respond either selfishly or selflessly. The challenge is not to succumb to compassion-fatigue, not to only respond to those disasters that make it onto our television screens, but to do what we can where we can to show God's compassion to the suffering.

Alan Gijsbers

Book Reviews

God Created the Heavens and the Earth Donald Neild [Telos Books, Auckland, NZ 2004 ISBN 0-476-00817-4] and ***A Seamless Web: Science and Faith,*** Graeme Finlay (Editor) [Telos Books, Auckland, NZ 2004, ISBN 0-476-00816-6]

These two books complete the set of four apologetic booklets recently released across the Tasman. ISCAST Bulletin 46 contained reviews of the other two texts by Graeme Finlay which addressed biological evolution and genetics in some detail.

Donald Nield is an Associate Professor of Engineering Science at the University of Auckland and also has a degree in Theology. His purpose is stated as follows: 'This essay is written in an attempt to help those people who are concerned with what students are taught about science (and in particular about biology) at school or university, in connection with the Christian faith…' Chapter 1 is a clear and readable statement of his key presuppositions. We must read scripture intelligently, to develop a theological understanding that is robust and not subject to change according to the whims and fancies in science. Nield argues that a critical realist position is appropriate and is a basis for sound theology.

What is particularly helpful is his critique of the claims of Richard Dawkins [Chapter 2]. In particular Nield exposes the flaws in Dawkins' arguments but pointing out that 'Theism (the belief in God the Creator) does not compete with science, but… with materialism'. Chapter 3 is a useful review of the Philosophy of Science and provides a critique of a number of points of view being promoted today. One can sum up his views here with the quote 'Science *per se* is not impoverished by a restriction of its methodology to naturalist methods. In its own field of endeavour, science proceeds quite

well with that restriction. The true implication of the restriction is that science is handicapped as a [complete] account of reality'.

Neild provides a careful and insightful critique in Chapter 4 of Intelligent Design as promoted by Phillip Johnson, an academic lawyer, the biochemist, Michael Behe and mathematician, William Demski. Importantly Neild refutes the probabilistic arguments of Demski which depend 'on an exact knowledge of the real world…' He draws attention to the video, *Unlocking the Mystery of Life*, which has been widely distributed and viewed in NZ. This reviewer has talked to one clergyman in NZ who was very strongly persuaded by the video on the grounds it reassured him that his desire for specific design in the universe could be met in this way. The chapter goes on to present the views of Owen Gingerich, the Harvard Astronomer and Philosopher of Science, relating to the fine tuning in the cosmological and evolutionary history of the universe as providing a satisfactory account of things as we find them. There is much food for thought in the rest of this chapter.

There is a short chapter [5] on Big Bang Cosmology in which he makes the point that our theology should be able to sit comfortably with either a Big Bang universe or some other.

Chapter 6 on Biological Evolution covers more of the arguments as to why Creation Science and Intelligent Design are not appropriate responses to the overwhelming evidence of the fact that evolution has occurred [and is presumably occurring still]. The evolution of the eye has often been held up as a reason for rejecting Darwinian evolution; Neilds's presentation is well worth reading [pp 30-1]. Finally he considers 'God's interaction with his creation', a topic found in much of contemporary writing in the area of science and Christianity. He presents a balanced view; however the last paragraph, on the subject of miracles, is too brief to do the topic justice. To this reviewer's mind, more questions are raised than answered.

His booklet is wound up with brief chapters on 'Limitations of Science' [Ch 7] and the 'Doctrine of Creation'.

I found this book, along the two titles by Graeme Finlay [reviewed in ISCAST Bulletin 46] to be timely and a very helpful resource for secondary students, university students and people in the pews, to help alleviate the creeping anti-intellectualism and fundamentalism that seems alive and well in many quarters.

The fourth book in the series, *A Seamless Web: Science and Faith*, edited by Graeme Finlay, is a series of short chapters each contributed by a number of Australian and New Zealand scientists or theologians with an acquaintance with science. This is a readable and valuable resource since each person has responded with a personal account of their own journey. It is always good in the church to have authentic testimonies where people can speak from the heart. However I found the different chapters to be uneven in content and depth. In particular, some contributors showed little awareness of the vast literature in the Science-Faith area that is readily available and that would have made their accounts rather more contemporary.

I am delighted to be able to recommend all four books in this *Telos* series as being a useful kind of shortish, readable account of contemporary issues in Science and Faith.

Readers can get copies of these books by writing to Stockdale ACS, 58 Koonawarra St, Clayton North Vic 3168 or emailing vic@iscast.org.au. The books will also be available at COSAC this year. Each book (except for "The Web of Life") costs $10. The Web of Life costs $15. $2.50 is charged for postage and handling.

Richard Gijsbers

The deadline for submissions for the next issue of the Bulletin is August 1st

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 Mick Pope at bulletin@iscast.org.au