

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

A Non-profit company. ISCAST Ltd. ABN 11 003 429 338. Print post Approved PP 439224/00002

ISCAST BULLETIN 33

(incorporating VISCAST News)

Winter 2001.

(June 2001)

*The views in this Bulletin are those of the individual authors or the editor.
They do not necessarily reflect the official views of the ISCAST Board.*

For circulation concerns, contact the state representatives. To submit articles contact the editor. Articles are best submitted in an electronic format (such as rtf) by email.

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

Editorial

Back to earth

After the speculations on xenothology in Bulletin 32 it is time for the Bulletin to look at more immediate issues. Unlike the last two Bulletins, devoted to single issues (environment and technology, SETI and SF), Bulletin 33 returns to the traditional mixed content. However, not entirely. Helen Joynt provides a reflection on the issues of xenothology for Christology presented in Bulletin 33 and Ken Smith reminds us that extraterrestrials are part of the mythology of our age, becoming for some a God-substitute. The views of "Raelians" shows that opposition to organic evolution is not confined to Christian belief, nor is belief in "intelligent design" equivalent to theological orthodoxy.

The correspondence in past issues over the nature of the soul now has more to reflect on, with the reprinting of Graham Warne's article *Between Body and Soul*. I anticipate a new spate of letters for the next issue!

Professor Edwin Judge gave two talks to ISCAST in Queensland on April 26 and 27 this year. Professor Judge explored the tensions between Christian theological and classical learning, how the tensions were resolved, and these ancient tensions have modern echoes. The text of these two talks is here included.

The third Conference on Science and Christianity, COSAC2001 will be held in Adelaide on the weekend of July 13th-15th. This will be an excellent opportunity to hear from Professor Owen Gingerich, a world authority on Galileo and Copernicus. The relationship of both these scientists and the church is still widely misunderstood and misrepresented in the public mind. COSAC2001 will be an excellent opportunity to learn about the true issues and to meet with others interested in the interaction between science and faith. I look forward to seeing many of you there. As well as speaking at COSAC 2001, Professor Gingerich will be visiting various centres throughout Australia. Look for him at a venue near you.

Jonathan Clarke

Obituary

Bruce Smith

Bruce Smith passed to be with his Lord on March 3, 2001 following a rather long battle with cancer.

Bruce was a person who could convey the truths of the Gospel with great clarity and, maybe not intentionally, emotion. He was much sought after as a speaker and teacher. In earlier days he had a radio program and later he taught at Moore Theological College. While others could speak much better of his very wide spheres of influence, I want to mention just a few personal encounters.

Bruce has been a part of my life on numerous occasions in the past and I count it a terribly, terribly great privilege to have been able to talk to him about some of these just before he died.

My earliest recollection of him was when I was a member of the youth fellowship at St Michael's, Vacluse, and Bruce was on stage, performing magic tricks. He was very good! Bruce remarked to me that no one else had talked about that!

Later, my family was living in Broken Hill (in the 70s) and we felt the need of some deeper Christian teaching and invited Bruce over to give a series of talks, which he did. He remarked on how he remembered the swarms of grasshoppers outside our back door.

Later again, I was teaching a General Education class at the University of NSW on "Beliefs, Values and the Search for Meaning". When my mother died back in 1990, I realised that there really should be a lecture on the subject of death in the course. I didn't feel up to giving this lecture myself so I asked Bruce to give it. I recall how he talked about the different views of death 'Death is the end' and 'Death is cyclical' (the Eastern view) and then dramatically finished with the Christian view: 'Death is abolished!'. So much was his lecture appreciated that the class erupted in applause at the end.

Later still Bruce sometimes attended ISCAST meetings and his presence and wisdom was an encouragement to us all. He was particularly interested in the interpretation of the early chapters of Genesis.

I remarked to him that he has had a pretty tough life. Without disagreeing he told me how he saw that his Creator had dealt with him with "remarkable skill". That phrase will live with me for a very long time.

After leaving him I felt that I understood a little bit better Jesus' emotion at Lazarus' grave in John 11:33.

ISCAST has lost a valued friend but we rejoice that he is now with his Lord.

Robert Stening

Articles

Given the interested in the nature of the mind-soul interface I am please to reprint by permission, an edited version of a paper first published in REO: A Journal of Theology and Ministry, in 1999.

Between Soul and Body

Graham Warne

The long Christian tradition of the human person having a body and soul, the body mortal, and the soul immortal, may appear straightforward, and most importantly, soundly biblical. Wherever the Scriptures speak of "body and soul", the term "body" is usually understood to refer to the material, corruptible and mortal aspect of the human person, while "soul" is taken to refer to the indestructible, incorruptible, immaterial dimension of human existence. This interpretation has been a standard 'given' in Christian theology for centuries, at least as far back as the early church Fathers.

However, the question must be asked as to what degree this dichotomous view of the human person represents a true interpretation of the biblical data. Is this in fact the description of the human person which we find in the Scriptures? Is this the only option available to us, or is there another possible interpretation?

The doctrine of the 'immortality of the soul' (as the corollary to the mortality of the body) has been accepted as standard in Christian theology for centuries. However, the honest scholar must acknowledge the fact that this belief preceded Christianity by almost 400 years (namely Plato). Is this what the Bible teaches, or has a platonic philosophical framework provided the schema for biblical interpretation? Was Plato part of the divine preparation for the advent of the Christian revelation, as Justin argued (in which case one is required to affirm that Plato's writing was inspired by God)?

Certainly, the New Testament was written post Plato, and could well have been shaped by platonic influences. However, the Old Testament was clearly pre-platonic in its origins. What perspective of the human person do we discover the Old Testament? Do we find the familiar dichotomous view, or a view which is fundamentally different? If the Old Testament presents a different perspective (from the traditional platonic view), what effect does this have upon the writers of the New Testament? It is important, then, that we carefully examine the description of the human person presented in the Old Testament.

Examination of the Old Testament texts, apart from a platonic framework, provides an interesting portrait of the human person. Indeed, the Old Testament contains a whole family of 'soul' words, depicting the human person. The key term is the Hebrew word *nepesh*, occurring some 754 times in the Massoretic Text. The variety of nuances in the word is reflected in the range of variations in the English translations, the KJV translating *nepesh* as 'soul', 'life', 'person', 'heart', 'mind', 'creature', even being taken as a synonym for the personal pronoun on occasions. Most modern translations express a clear preference for "life" in their translations of *nepesh*. Even so, this is only one of the many terms used to describe the human person in the Old Testament.

We do not have space here to examine the biblical material in depth. However, the critical and key text in any interpretation is the definitive Genesis 2.7 statement, where the Lord God is said to have breathed into the human person, who became a "living soul". The essence of this text is the life-giving breath of Yahweh, who takes a lifeless creature of dust and animates it through a divine inbreathing. The fundamental, distinguishing characteristic of the human person in this text is that of life. Therefore, the term *nepesh hayyah* cannot be taken as a "differentia specifica", distinguishing the human person from the remainder of the creation, but defines the human person as a living, animated, corporeal reality, which came into being, and whose very existence is sustained by the Creator, the fountain and source of all life. The significance of the Genesis statement then, is not that God put a divine substance (namely, the 'soul') into the human person, but that, through the action of God, the human person became an animated, conscious, living being.

This definition of the human person as a creature identifies humanity with the created order, which lives only through the life-giving breath of God. The fundamental description of the human person, then, is that of a creature, whose very existence and life is sustained by an act of divine grace. In this definition, the human person is clearly identified with the created order (material world), yet there is also a clear recognition that this life has its origin and source in the divine inbreathing.

What distinguishes the human person from the remainder of the creation is not that he or she possesses *nepesh*, but that the human person bears the image of God. It is the human person's recognition of that unique relationship with the divine Creator, and conscious acknowledgment of God as the Source of our life, which distinguishes us from the remainder of the created order. Nevertheless, the fundamental description is that of a creature, whose very being is sustained by the breath of Yahweh. The primary biblical

definition of the human person is that of a creature who lives and breathes through the gracious action of God. Our very existence is an act of divine grace!

Further study reveals the Old Testament view of the human person to be holistic. The Old Testament authors employ a variety of terms to describe the different ways by which the soul-life is expressed in the human person. One scholar has described it as a "differentiated vitalism". That vital life of Yahweh, the life-giving gift of God, is perceived as refracted through the various organs of the human body. Thus, soul-life is associated with breath, heart, body, bones and bowels. However, the fundamental concept is of a total person, whose every part represents an expression of the life which has its origin in God alone. Biblically, the human person is a single unit, a totality, not composed of antithetical elements, but of the complementary elements of physical existence and sentient life.

When other occurrences of 'soul' in the Old Testament are examined, particularly in parallel contexts in the Psalms, the holistic view of the human person as a fragile creature of earth, conscious of his or her dependence upon Yahweh, the Creator and Life-giver for his or her very existence, becomes quite clear.

However, a new element was introduced when the Jewish translators of the *Septuagint* (c. 250 BCE) chose the Greek term *psyche* (rather than the simple term *bios*) to translate *nepesh*. *Psyche* occurs over 600 times in the Septuagint translation. Obviously, the Greek term *psyche* was thought best to convey the idea of 'living being'. The question arises, however, as to what degree this implies a Greek dualistic (distinct body and soul) understanding of the term, or to what degree a distinctively Hebraic concept (holistic) is still retained. Lys has argued that the translators of the LXX have retained a distinctively Hebraic concept. He concludes that the translator's have carefully avoided Greek dualistic concepts and have presented the traditional Hebraic understanding.

The translation of *nepesh* as *psyche* in the Septuagint provided the Jewish scholar Philo with an ideal vehicle for recontextualizing the biblical texts into the predominantly Hellenistic culture of Alexandria. Under the influence of Hellenistic thought (primarily Platonism and Stoicism), Philo synthesised Hebrew and Greek concepts. It was primarily Philo who imported the Hellenistic concept of the immortal soul into the interpretation of biblical texts. The enduring question concerns whether the New Testament authors follow the Philonic (Greek) interpretation or continue to retain the traditional Hebraic perspective, or whether the New Testament view represents some kind of *tertium quid*.

Space does not permit us to examine all the New Testament data. The Apostle Paul, being a contemporary of Philo, and having been exposed to both the Hebraic (through his upbringing) and Hellenistic (from the contemporary society in which he lived) world views, provides a good point of comparison. What was the Apostle Paul's understanding?

Strangely, in the context of a popular Hellenism which emphasised the immortality of the soul, the Apostle uses the term *psyche* only 13 times, and nowhere associates immortality with it! Rather, he follows the classic old Testament definition of 'vital life'. However, he develops the biblical definition further by using the adjectival form *psychikos* ('soul-ish')

to describe the purely biological existence of the human person which fails to recognise the true source of its life in God. He then introduces *pneumatikos* ('spiritual') to describe that true, authentic life which recognises its total dependence upon God. It would appear that Paul has carefully avoided any association of Greek concepts with the term 'soul', taking as his starting point the Old Testament definition of concrete human existence, dependent upon the Creator for its life. The old Hebraic view of God as the source of life provides Paul with his starting point. Now, for Paul, it is the *pneumatikos* who is truly human ('spiritually alive'), finding authentic life through a proper relation to God.

This development reaches its climax in 1 Corinthians 15 where Paul devotes a whole chapter to the discussion concerning resurrection. Nowhere is Paul's rejection of the Hellenistic view more evident than here. To the Greeks, the body was to be despised and gladly discarded in preference for the immortal life of the soul. However, the centre of Paul's focus is the resurrection of the body. Here his earlier distinction of authentic life is foremost. It is sown a *soma psychikos* (an earthly body, animated by breath), but it is raised as a *soma pneumatikos*, a transformed person, whose ongoing existence is derived from the life-giving spirit itself. Undoubtedly, there are underlying allusions here to the original inbreathing of God (Genesis 2:7), where the original person experienced life through the inbreathing of the Spirit of God. Thus, the fundamental biblical affirmation of dependency upon God as the only source of true life, both in this earthly existence and beyond, is affirmed. Paul retains the fundamental biblical (Hebraic) definition.

This is nowhere clearer than in 1 Corinthians 15:45. Here the Apostle engages in a careful interpretation of Genesis 2:7. He quotes from the Septuagint version (confirming his familiarity with the Greek Old Testament). However, he deliberately redacts the text for his own purposes. It is this redaction which is most significant. By adding the words "first ὁ ἄνθρωπος ὡς ἄνθρωπος" and "the second Adam a life-giving spirit", Paul has created a perfectly balanced sentence in which the First and Second Adams are contrasted. The First Adam (referring to the human person as originally created) became a "living soul", while the Second Adam (obviously a reference to Christ), became a "life-giving spirit". Now, it needs to be understood that, in the Philonic interpretation of Genesis 2:7, the First Adam was the Heavenly Man (the prototype of all humanity), while the Second Adam was the human creature into whom God breathed life. Paul has clearly reversed this Philonic interpretation. In so doing, Paul has rejected the Hellenistic interpretation and returned to the fundamental Hebraic concept of the human person.

Thus, in the context of the argument concerning resurrection and after-life (a context which would provide an ideal opportunity for, the affirmation of the Hellenistic concept of immortality of the soul), Paul emphasises the power of Christ as the Second Adam to generate new life beyond death. The contrast which is made is between one humanity (the first Adam) which is totally dependent upon the Creator for its life, and the other who represents the very Source of Life itself. There is no inherent immortality (within the soul itself), but rather derived immortality, from the only One who inherently possesses life, and who alone has the power to sustain it beyond death. However, in order to affirm this, Paul has returned to the old Hebraic interpretation of Genesis 2:7.

According to 1 Corinthians 15, then, Paul affirms an Hebraic perspective rather than a Hellenised one.

(a) There is no reference to the classical Greek concept of the immortality of the soul. Rather, the term *psyche* is used in relation to the body-life which is experienced in this earthly, mortal existence.

(b) The locus of life both in this world and beyond is the *somatic* (focused on the body). The body is the concrete locus of the human person, both in this life and the next.

(c) Paul's use of Genesis 2:7 relies on an Hebraic understanding rather than a Greek one. He appears to have rejected the Philonic (Hellenistic/platonic) interpretation.

From the biblical material which we have examined (above), it is clear that the Apostle Paul rejects the contemporary Hellenistic view of the human person in favour of a fundamentally Hebraic one. The basic characteristic of human existence is total dependence upon God, as the ultimate Giver of life. This is how it was in the beginning, and this is how it must be in the eschaton: Christ, as God's representative, has powerfully demonstrated the life-giving power of God in his own resurrection. This is a uniquely biblical affirmation, in which the Christian doctrine represents an enlargement of basic Hebraic (Old Testament) understandings.

This discussion reminds us how easily we may be carried along in the current of a particular idea in theology that appears natural, biblical, and therefore unquestioned, only to discover that it is more reflective of a particular cultural milieu, which has provided the schema by which we have interpreted the biblical tradition. Our discussion on the Hellenistic perspective of the soul over against the Hebraic 'living being', and Paul's resistance against the first in favour of the second, is a clear example of this. The implications stemming from this recognition are compelling and vital for Christian faith and like this discussion, will only be adequately resourced by a vigorous and open engagement with the biblical tradition.

AN EVENING WITH OWEN GINGERICH

ISCAST(Vic) will be having a dinner at Trinity College, University of Melbourne, on Wednesday evening, July 18 followed by a lecture titled:

Galileo: Hero or Heretic?

The dinner (6.15 pm for 6.30 pm) will cost \$30, the lecture (8.00 pm) \$15 (concession \$10).

To make sure of a seat, send your registration NOW with full payment to Dr. Helen Joynt, 8 Mabel Street Camberwell Vic 3124

Athena, the Unknown God of the Churches

This is the text of a talk given to ISCAST, Brisbane, on the 26th of April this year by Emeritus Professor Edwin Judge, AM FAHA . Edwin Judge is a Fellow of ISCAST and founded the Documentary Research Centre at Macquarie University which publishes the journal "New Documents Illustrating Early Christianity".

'Science' and 'religion' were, for most people in antiquity (though Lucretius, the Epicurean philosopher, denounced the evils of *religio*), not antithetical. *Theologia* was an element of science, since the gods were part of the material totality (though far removed from human interests, according to Epicurus). Only scientists (sc. 'philosophers') held creed-like axioms. Creeds were not needed for the cult of the gods. The hated vulgarisation of Christian dogma opened theology (and thus philosophy and science) to everyone, embedding belief and morality in ritualised worship. But the explosive results for science were delayed for 1300 years because the churches also tied themselves to Aristotelian naturalism.

The classical 'cult-group' (e.g. the synod of Highest Zeus, A.D. Nock, *Essays on Religion and the Ancient World*, vol. I, Oxford 1972, 416) is a small self-governing men's club offering specific benefits, from drinking to funerals. Their rules focus on curbing turmoil. The Pauline churches also had drinking problems, but were much more open (e.g. mixed membership) and dedicated to the reconstruction of social relationships through studied interaction. Unlike the Hellenistic clubs, they offered training for a new life. The Christian self-classification (*ekklesia*) inescapably paralleled the public 'assembly' of the civil body. Our word 'church' loses this telling concurrence. But Luther translated it by *Gemeinde*, and every German place still embraces two modes of 'community', civil and ecclesiastical.

The term 'religion' also confuses the issue. Our concept of a series of religions dates only from 1614 (Peter Harrison, *'Religion' and the Religions in the English Enlightenment*, Cambridge 1990, 39). *Religio* meant the scrupulous practice of inherited rites (though often not understood). But when we speak of ancient 'religions' we retroject our modern concept of religion as commitment to life-changing beliefs (which may set us apart from our tradition). Romans called this *superstitio*, and what they called *religio* we now call 'superstition'. The modern concept of 'religion' comes from Christianisation. Ancient cult was not meant to reform belief or life, but to anchor the status quo in ritual.

Theology and ethics belonged to philosophy. Over the first three centuries the churches rejected cult outright (as idolatrous) but came to terms with the cardinal virtues, *arete* (courage), prudence, self-control, and justice. They were the qualities of character by which philosophers had fortified the soul against passion (the shocks of contact with others). Paul's 'things that abide', however, are not self-protective, but positive responses to others: *pistis* (trust), *elpis* (hope) and *agape* (care).

The late first-century letter of Ammonius to Apollonius (P. Oxy. 42.3057) reveals an ethical counsellor cautioning his patron against the risk of troubles amongst his circle. It would give 'others' occasion against them. He urges *homonoia* ('oneness of mind') and

philallelia ('mutual attraction'). This has led to the proposal that it is a Christian letter (and, if so, the earliest recovered from Egyptian papyri). The sentiments (though not the words) may remind one of Paul. But in his greeting and farewell Ammonius again offers no echo of biblical phraseology, such as might have been expected if that was his guiding light. By contrast, his delicate feeling for status (which Paul had scornfully rejected) seems central to the bond.

The apologists, however, leaned more towards the classical ideals, as we do now. *Arete* is written into our prayers as the new means of grace ('courage to believe', 'courage to embrace forgiveness', etc.). Secular ethicists turn even the Pauline outreach itself into self-protection ('taking care of yourself is a form of kindness', 'fidelity ... is about being faithful to yourself and your needs'). Yet the whole community now admires compassion (once a vice of the soul, like cruelty), and commitment.

In 362 Julian took over the Empire and debarred Christians from teaching in the classical schools. Since they did not accept the gods of Homer, they could not conscientiously teach from the classics. Instead, they should start their own schools and teach from the Bible. Julian knew it well (he was the last of Constantine's house). He also knew that biblical Greek was educationally impossible (it was too 'common'). Apollinarius set out to paraphrase it all into the classical styles. Marius Victorinus left his chair of rhetoric at Rome to write philosophical theology, and commentaries on Paul. But the bishop of Troy, Pegasus, sided with Julian. Eight years before, when the latter's change of heart was not yet public, Pegasus had shown him the local temple of Athena, closed now but carefully preserved. The bishop had kept the key (Julian, *Ep.* 19 Wright).

But the long custody of classical culture by the churches did not in the end lock away the new view of the world. When symbolism was finally abandoned as the key to Scripture, and it was taken at face value, the perfect and eternal cosmos of Aristotle was opened to the test of experiment, history to documentary proof, and public life challenged by dissent.

In the twenty-first century the churches are still often left nourishing a conservative social and intellectual culture and its unknown god (Athena!). Science is presented by the media as their enemy. But modern science (the empirical as distinct from logical testing of fact) is itself the product of the biblical doctrine of creation. (It is not merely ironic that contemporary cosmology also posits a beginning and an end, in contrast with the perpetual circularity of Greek logic.) Yet church life tends to foster an harmonious fatalism that is the hangover from Paul's Stoic peers, while environmentalism absorbs man back into a static, naturalistic cosmos that has no proper conceptual basis in the evolutionary science spawned out of Genesis.

Ancient Contradictions in the Australian Soul

This is the text of a second talk given by Edwin Judge to ISCAST, Brisbane on the 27th of April this year.

Contemporary scientific culture has become universal. For all the admiration Westerners may lavish on the ingenuity of historic Arab or Chinese science, the broad fact is that these systems, like that of the Greeks (whom the Arabs followed, and the Chinese paralleled), tied themselves to an unchanging universe. Their many inventions and skilled practice could not of themselves unlock that closed world without a fundamental rejection of its false premises (inherent fixity, and endlessness). It was the book of Genesis, whose world was constructed from without and would end (corrupted through its guardian, man), that opened the road to the expectation of empirically testable changes and its causes. The plausibility of this literally world-making intellectual revolution has been dazzlingly illustrated by Western technology. (Only in science fiction, however, can man be changed by technology: his problem may be genetic but its cure is spiritual.) This is why all of us on earth now stand potential heirs to biblical innovation.

Similarly at the individual level: we may yearn sentimentally in the West to savour, with Hinduism, the soporific cycles of polytheistic nature, or, with Buddhism, the suspension of our painful consciousness, but all of us round the world now assume responsibility for each other's problems, or at least demand that someone be held answerable, and we all claim the freedom to develop our talents and to seek new possibilities. One can only do this on the basis of a psychology that rejects predetermined fate and the inescapability of inborn character. The conceptual source of this is the moral law of Sinai and the gospel of Pentecost.

Was the Roman Empire multicultural? The first-century tribute (G.H.R. Horsley, *New Documents Illustrating Early Christianity* 2 [1982] 58-60) to Theophilus of Julia Gordos shows one of the least of Asia Minor's 300 cities in an international light. It not only actively practised the standard democracy promoted by the Empire, but sent its own embassies to the Caesar (Caligula?) in distant Germany. Its public enactment is formally backed by 'the Romans engaged in business among us'. The minor democracies of our contemporary Empire are more coy about dependence upon 'global capital', but they still queue up to be received at the White House. The Romans did not endorse cultural diversity, since everyone accepted Greek civilisation as normative. Exemptions were however granted to Jews, whose ancestral duty could be shown to be more ancient. The first and second centuries would have found the cultural warfare of the twentieth incomprehensible. Everyone gained from the Roman hegemony. Travel was unrestricted, the world open. The good and great might be coopted directly into the citizen body of the imperial power, while others might even come in the back door, by emancipation from slavery to a Roman. The modern state-system is far more rigid.

A poetic tribute of the second century (*New Documents* 1 [1981] 68-69) salutes Julian of Laodicea in Syria, who had addressed the Celts of Gaul with 'persuasion'. He had practised *arete* (virtue) in many states, of diverse ethnicity, travelling by sea. To the West

he had brought 'all the gifts which God instructed the bountiful East to bear'. Is this Julian a missionary of the gospel?

Multicultural Australia does not draw its core values from the East. However diverse our migrant cultures, the common language and institutions inescapably tie us to Europe (and its modern imperial overlord). This will persist. Global patterns are not and cannot be set by *terra australis incognita*. Yet the more the world falls under the English language and Western technology, the more our cultural dependence will become common to all mankind. So in asking about our divided mind we uncover features that will be universally vital.

It was an axiom of Greek culture that the cosmos was total (including even the gods), perfect and changeless. Its harmony was endlessly repeated. Human error could be corrected by education. But it was Paul who most emphatically shattered this assurance. Through one man's failure, error entered the cosmos (Rom. 5.12). It was no longer complete. The doctrine of creation, moreover, had set out its beginning, and end. The microcosm of the mind was also shattered. 'I do not understand my own actions for I do not do what I want, but I do the very thing I hate' (Rom. 6.15). Through Augustine the Pauline quandary has transfixed our whole culture. Basically novel lines of reflection have opened up < autobiography, psychology, morality instead of ethics, the focus upon motive in fiction and film, and in political explanation.

E.R. Dodds ends his autobiography (*Missing Persons*, Oxford 1977) by querying his own rationality (he was an agnostic, of Irish Protestant culture): 'At rare moments ... an obscure being whom I call my daemon ... assumes command ... I am grateful to him and to fortune' (p.195). Dodds was Regius Professor of Greek. He was trapped between Epicurus and St Paul.

G. Vermes of Oxford, Professor of Jewish Studies, who had left both his native Judaism and later the Catholic priesthood, ends his autobiography (*Providential Accidents*, London 1998) on the same dilemma (p.232). It is the universal contradiction to which all (in the West at least) are consigned by the history of our culture.

When Paul stated that he was not relying upon 'persuasive words of wisdom' but on the 'demonstration of Spirit and of power' he was capturing for his experimental enterprise the key term (apodeixis) of Aristotelian science (1 Cor. 2.4). 'Demonstration' refers to the syllogistic methods of proof, still taught in logic in my own day. Justin (*Dialogue with Trypho* 7) explains how, in contrast to that, the prophets, by reference to 'events which have happened', were able to help one know 'the beginning and end of things'. Later in the second century Galen, the master physician whose work remained the norm for 1500 years, contrasts with the proper 'logical method' a newfangled 'empirical fashion of teaching'. You would think you had 'come into the school of Moses and Christ' (*On the differences in the pulses* 2.4).

Galen admired the discipline of the Christians, but his contemporary Celsus launched a full-scale assault on its intellectual consequences. His most powerfully expressed objection is that the drama of redemption grossly exaggerates the importance of man in

the universe (Origen, *Contra Celsum* 4.23). Peter Harrison, *The Bible, Protestantism and the Rise of Natural Science* (Cambridge 1998) explains carefully the huge lag between Christianisation (4th century) and the application of the empirical method to science (17th century). It was because the triumphant churches themselves maintained the Aristotelian system, until they learned to read the Bible literally instead of symbolically.

The Bible was also the ultimate source of the shift in history from ethical modelling to proof by documentation. Authentic testimony had always been decisive at law, and Josephus documented Jewish rights. But classical history, though seeking eyewitness truth, presented it in rhetorically more persuasive style because the purpose was to teach lessons in behaviour. The third gospel speaks of eyewitnesses as 'servants of the word' (Luke 1.2). Dogmatic truth required the actual words of authority, as in so-called 'philosophical history'. It was on this principle that Eusebius first compiled an 'ecclesiastical history', citing his sources extensively (*HE* 1.1.3). Modern historians must all footnote their authorities, and cite them, for the same reason.

It was the prospect of the Kingdom of God ('the city that is to come', Heb. 13.14) that ultimately created the open society. Origen's defence (*Contra Celsum* 1.1) for the first time articulated its principle: '... it is not wrong to form associations against the law for the sake of the truth.' We now obligate people to that (e.g. through war crimes tribunals). More positively we concede that one may determine one's own life-style, as Galerius first did in his edict of toleration (30 April 311, Lactantius, *Mort.* 34): '... they were making laws for themselves ... and were assembling alternative societies on alternative principles (*per diversa diversos populos congregarent*).' Multiculturalism must not entrench national traditions, but open the responsibility of choice to everyone.

Modern science is open-ended. It accepts that we proceed from one thing to another, rather than moving in circles according to the old 'music of the spheres'. We expect, not endless harmony, but change. Thus things will progress, or decline. The universe itself is built upon non-predictable adaptation. We are affected by that, and contribute to it, as we respond to its maker and sovereign, and to each other. Our biblical (and therefore scientific) understanding of the world may endorse (as it has indeed helped to generate) such legendary Australian values as anti-authoritarianism (but subject to our observing the 'canon' of the 'new creation', Gal. 6.16) and mateship (in the sense of bonding to each other's needs, not precommitting to their misdeeds). It does not however justify our atavistic 'natural' (but not scientific) instinct that anything goes and she'll be right. We are not called upon to resign ourselves to fate, as though that were a good end, but to open ourselves to the promise of the spirit who will transform even our mortal bodies.

Reviews

Is God a Virus? Genes, Culture and Religion

John Bowker:, SPCK, London, 1995.

John Bowker is one of the few polymaths currently writing. Equally at home in the intricacies of the philosophy of world religions, the minutiae of genetic and socio-evolutionary theory and the biochemistry associated with it, the appalling history of the church's inadequate dealing with women's issues and contemporary exegetical issues relating to the Biblical text. I am sure he can write about many other areas as well but all of the above are covered in this strenuous and demanding book written in three inter-related sections i. Is God a virus? ii. Why are religions so dangerous and iii, The nature of women and the authority of men.

In the first section relating to Genes and culture including religion Bowker admits to co-writing with the geneticist Quinton Deeley, Bowker locks horns with the powerfully written socio-biological theories of E O Wilson, *Sociobiology: The New Synthesis*, (Harvard,1975) and Richard Dawkins, *The Selfish Gene* (Oxford,1976) and *The Extended Phenotype*, (Freeman, 1982). These writers take the nature/nurture debate into new ground by postulating a new combination of interaction between genes and culture with lasting hereditary effects called "memes" or "culturegens". According to Dawkins, memes are discreet cultural "items" which have a life of their own by which they track and defend the necessary conditions for the replication of genetic information, by analogy with genes. This almost Lamarckian view of the impact of culture on human development majors on those sociological phenomena which are most successful in influencing and transmitting particular behaviours regarded by groups as important. Thus a sporting family will have traditions, family stories, habits, recreations etc that will ensure that the next generation will be equally sporting. Of course Dawkins quickly identifies religion as a major source of such memes because the ideas are held so strongly by groups, have so much to do with food and sex, and are so intimately tied up with family issues. Religions are highly successful cultural transmitters and gene-culture coevolution very effectively maintains religions as particularly powerful forces in every society. Dawkins, of course, has the view that religious memes are bad memes in fact that the idea of God is a virus, which is harmful to the human race and should be stamped out as effectively and as quickly as possible. In this view all religions are based on falsehood and are hence dangerous. Bowker both agrees and disagrees. In part 1 he uses considerable genetic firepower to demonstrate the non-viability of the "meme" or "culturegen" concept. The argument is technical but centres on the complexity of factors involved in cultural development and the overly constraining and simplistic notion of inventing "memes" simply by analogy with "genes" when it is inaccurate even to speak of genes "determining" outcomes unaided let alone theoretical constructs like "memes". In any case Bowker shows that Dawkins does not make allowance for the possibility that the human brain might genuinely recognise what is truly the case about its own environment and nature such things as beauty, truth, goodness and indeed "God". Such "things" may indeed be genuinely "out there" and the human brain may be genuinely responding to

them (a possibility which also seems to be ignored by the current television series on the brain in *Compass*).

On the other hand in part 2, Bowker does agree with Dawkins that religions **are** particularly dangerous. This is because they are such effective cultural transmitters, because religious views are held so deeply and because religious issues often have so much to do with family life and the bringing up of children. All these being areas where humans feel most vulnerable and where they most want to preserve their own received values.

From his United Nations advisory work Bowker suggests that the way forward is not in a simplistic post-modern "all religions are the same underneath" type argument. Rather it is to embrace the complexity of each individual religion, analyse the sub-groups and boundaries within each religion, and recognise the power of the faiths for which indeed many believers are certainly prepared to die. Also both the worst as well as the best possible implications within each religion must be fully comprehended, majoring on the positives and trying to deal with the negatives. I have to say at this point Bowker has so highlighted the difficulties of this task that it is not easy to be optimistic about mankind's future even with his clear analysis.

Finally in part 3 Bowker engages in a form of case-study of the ordination of women within the Christian faith. He uses this to illustrate the complexity in which various Christian sub-groups have created their own boundaries, systems and constraints in much the same way as other world religions. The completely ridiculous folly of which has been to make life intolerably miserable for fifty per cent of the population for the majority of the years of "Christian" (sic) history.

This trenchantly argued section tackles some very large and very sacred Christian "sacred cows" from a devastating series of angles. It makes a very good case that the controlling hand of "superior white males" has for ever dominated authoritative corridors of decision-making power in mainstream Christianity to the total detriment of minorities but in particular women.

In sum, a difficult, no punches pulled, awkward and far-ranging text which sets the scene for a hundred arguments and which contains trenchant criticisms too important for a historically based church to ignore. At the same time Bowker provides much needed correction to the beautifully crafted wordsmith Dawkins whose publications still dominate the popular biological scene in our current Melbourne intellectual marketplace.

Richard Prideaux

The Tower of Babel: The Evidence against the New Creationism

Robert T. Pennock, The MIT Press, 1999

"Creationism is evolving. Several new varieties of creationism have appeared recently and are competing to stake out a niche in the intellectual landscape." So begins this book,

which is one of the first to offer criticisms of attacks on science, which go under the names of "irreducible complexity", "intelligent design", or attacks on "naturalism".

The author is Assistant Professor of Philosophy at the University of Texas, Austin, and a Quaker. He is thus well qualified to comment of philosophical issues surrounding these latest manifestations of creationism.

The "Babel" of the title refers to the very diverse views about creation held by Christians. Chapter 1 gives a broad overview of these, some of which he labels "young-earth creationism", "old-earth creationism", "mature-earth creationism", "progressive creationism", "theistic evolutionism", "providential evolutionism", and "intelligent-design creationism". This refers to the situation in USA: it is somewhat different in Australia, with the most vocal opponents of science falling into the "young-earth creationism" camp.

Chapter 2, "Evidence for Evolution", gives a brief, but readable, summary of the findings of science, and points out the scientific and philosophical errors made by many creationists.

Chapter 3, "The Tower of Babel", uses the evolution of languages as an illustration of the way biological evolution occurs. Teachers of English who have tried to preserve English spelling rather than letting their students get away with American spelling should appreciate his analogy.

Chapter 4, "Of Naturalism and Negativity", is mainly a criticism of Philip Johnson's criticism of the use of naturalism in science.

One of the most interesting parts of the book is chapter 5, "Chariots of the Gods". If you have ever talked to a Raëlian you may have been somewhat bemused by his ideas. Pennock gives an outline of these, but in essence Raëlians also believe in "intelligent design", and deny that evolution is capable of producing the wide variety of living organisms we see around us. In contrast to "intelligent-design creationists", however, the designers they have in mind are extra-terrestrial beings, who go by the name of "Elohim" (now where have I heard that word before?). These are super-intelligent beings who are clever enough to design biological organisms. They are well aware of the need to ensure that any genetically modified organisms do not escape, and so they set up their laboratories to use this planet as a testing ground. Mutated organisms would not be able to escape back and infect the Elohim on their home planet.

In order to get the full flavour of these ideas some of their writings should be consulted, but Pennock provides enough information for the average reader. Since these Elohim are only super-human, and not supernatural, they can make errors. The genetic code they devised does not have automatic error-correction built in, so mutations can occur. And germs can evolve resistance to antibiotics, since they reproduce so fast. In fact, all the problems which those promoting "intelligent-design creationism" have to face are overcome by simply saying that the extra-terrestrial designers are fallible, and make mistakes. Near the end of this chapter Pennock comments "At some point, bad science is

the same as pseudoscience, and continuing to believe in it is to make it a religion. Whether the supposed 'intelligent designer' is alien or divine, the conclusion is the same." He goes on to add "... it [intelligent design theory] is nothing more than the old creationism now dressed up in designer clothes."

In the remaining chapters of the book Pennock moves more into the American scene, with the pressure to include creationist ideas in science classes coming from both fundamentalist Christians and politicians. In Australia we have, to date, seen very little of this, but it is well to be aware of what could happen. The closing sentences of the book sum up Pennock's ideas and would, I believe, be acceptable to nearly all supporters of ISCAST: "Science is neither God nor devil, but profoundly human. It is not infallible. It cannot answer every question. It reveals nothing of possible supernatural realms. It is simply the best method that we evolved, natural creatures have yet discovered for finding our way around in this natural world."

Ken Smith

Letters

'ET' and the Incarnation

Lewis Jones, in considering David Wilkinson's question, "Does God take on little green flesh to save the Martians?" exhorts us to "Remember Jesus, and live like an alien!". His exhortation is timely < we are all tempted to live as if our citizenship is located in planet Earth. Both Lewis and Mark (Worthing) raise the question of whether, if there is sinful life in other places in the universe, Christ would need to be re-incarnated in another place at another time. Or is the Incarnation of Jesus Christ a unique event which is effective for all life in all places at all times? In other words, they ask, would there need to be multiple incarnations (in multiple intelligent life-forms) for the redemption of these life-forms (but Scripture assures us that Christ died once for all); or is the Incarnation of the Son of God in Jesus of Nazareth sufficient for their salvation.

These arguments seem, to me, to be so tied to our *three-dimensional-with-time* universe, that we come close to confining God within these bounds. Traditional theology would claim that God exists outside the bounds of space and time; that space and time do not alter God. If that is the case, then although human experience of the Incarnation sees it as an event that happened within space-time in the man Christ Jesus about 2000 years ago, from the divine side the Incarnation must be an eternal attribute of God. God is an incarnational God < that is, God chooses to enter into relationship with beings in his creation in flesh that they can understand and identify with. God acts to make such relationships possible by his own willing self-giving to the uttermost so that sin can be expiated and fellowship restored.

Paul wrote that in Christ dwelt 'all' of the Godhead bodily. Yet it is clear that God willingly accepted limitations in taking on human flesh in the man Christ Jesus. So how

does this relate to the question of the 'efficacy' of the Incarnation of Jesus for all living beings at any place in the universe?

I would like to suggest that the divine incarnationality is perceived by human beings in the person of Jesus. That is, in Jesus dwelt all of the Godhead in human bodily form. In other galaxies or universes, however, the divine incarnationality might well be expressed in quite different ways. This could be simultaneous with the incarnation in Jesus Christ (as far as the human space-time experience is concerned) or it could be at a different time. It makes no difference to God. Since God is outside time and space, we cannot use language such as "the Son of God suffering vicariously on a myriad of planets". This language implies that God is constrained by time and space, and that the divine suffering in Jesus Christ occurred in a finite time and place. 'The altar was at Jerusalem, but the blood of the victim bathed the universe', wrote Origen. For us humans the altar was at Jerusalem in one sense, but in a deeper sense, the altar is (and always has been and will be) in the being of God. Humankind experienced this at Jerusalem. We cannot say in what way God's incarnational redemption would be mediated to beings in a different world.

A metaphor may help us. Consider the imagery of sunlight. Let us imagine a group of beings all confined in boxes of different kinds. Each box has a window that allows sunlight into the box. One box has a yellow prism as the window pane; another has a ruby red prism; another sapphire blue, and so on. The beings in each box are only able to perceive objects through the colour of their window pane. In each box, it is possible for people to see a complete image of the sun as mediated through the window of their box. The whole sun, quite clearly, cannot 'fit' inside the box, and yet there is a complete image in the box. It would be pointless to try to insert a red image of the sun into the yellow box since the beings in that box would not be able to perceive it. What they perceive of the sun through the yellow window is accurate; it is all they can take in of the sun. It is the image of the whole sun. Yet it is not the whole sun. In addition, the sun is not diminished by having a red image in one box and a yellow image in another box. There is not less of the sun's light because some has gone into the box (at least, this is true if we consider the sun to be, relatively, infinite!). And all of these 'images' of the sun can exist at the same time. The sun does not need to 'wait' for the red image to cease before the yellow one can exist.

Clearly, all of this is metaphorical language. Yet there is no other way to speak about God. All language we use about God is metaphorical and has limitations. Since God is eternal, unlimited, it makes no sense to speak about God suffering 'again and again', as if there is, in God, a 'before and after'. The 'before and after' element is a core feature of our human experience, not of the being of God. Although we can be confident about what God has revealed about the divine provision of redemption for humankind, we should probably be very careful about stipulating, on that basis, what God may or may not do in another context.

Helen Joynt

The deadline for submission of items for the next issue of the Bulletin is August 31

Science and Christian Belief

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

Cost: Aust\$42 for one year's subscription

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