

# **The State of Play of the Science -Religion Dialogue in**

## **Australia:**

### **Six Emerging Themes, Six Key Strategies, Six Core Values.**

#### **(an ISCAST discussion paper)**

#### Introduction

ISCAST is the oldest and largest science and religion organisation in Australia having been established in 1987. The early years were focused on getting out the message that science and the Christian faith need not be enemies. At that time the organisation was dominated largely by Protestant evangelicals who worked within the physical sciences.

Over the years the focus of ISCAST has broadened to include social, political, medical and ecological sciences and well as specialists in technology, theology and philosophy. ISCAST's membership has also broadened to include both Catholic and Protestant scientists and theologians. A conscious effort is also being made to recruit younger, women and non-Caucasian scientists as well.

Through all of these changes ISCAST remains committed to the need for a constructive dialogue between science and religion in general and science and Christianity more specifically. As an organisation we recognise that many non-religious thinkers believe that religion has little to say to the sciences and therefore there is no basis for dialogue.

We are also aware that some within our own Christian communities believe science is at best a peripheral issue and, at worst, idolatrous and that dialogue is not a priority. It is not

despite but precisely because of these persistent views in many segments of society that ISCAST remains convinced of the need to establish and maintain dialogue.

ISCAST argues that this dialogue will benefit not only individuals in their professional context providing pastoral support, mentoring and encouragement in their personal challenges, but also the churches as they struggle with the apologetic challenges posed by the rapidly developing sciences, and also to the wider community as the insights that this dialogue generates is offered humbly to our society as it tackles progressively more complex (wicked even) problems.

ISCAST continues to be committed to the need for scientific and Christian thinking to be integrated into the daily lives of those Christians working within the various sciences, and in the lives of clergy, theologians and other Christian leaders who are exposed to the modern scientific world.

Within this context, ISCAST realised the need to look afresh at its purpose and the issues it was addressing with a view to future needs and directions. This report is an outcome of this review.

## The Process

In the initial phase the ISCAST community was canvassed for their thoughts on where the emerging areas of dialogue would be. Each fellow and member was asked what they thought the emerging or continuing issues in their particular field would be in the next five to ten years. A very large and diverse number of responses was received. A small group was given the task of putting these into six major clusters.

But much work remained to be done in understanding what these issues were and how we might respond to them. The decision was made to hold a one day consultation with a variety of presentations and panellists to work through the issues. The *State of Play*

workshop was held at Ridley College in Melbourne on 15 August 2015. Presenters made available copies of their presentations and notes were taken of the discussion at each session.

Dr Mark Worthing began the day with an overview of the science and Christianity scene in Australia, highlighting especially the contributions of ISCAST members and fellows. He was also asked to make some brief summary observations at the end of the day.

This report was produced as a result of the workshop. Its purpose is not to note everything that was said or suggested through the consultation process, but to take up from the various contributions the most significant themes and to suggest how these might best be addressed. Prof John Pilbrow produced a document summarising the presentations on the day as a separate document.

## The Distinctive Australian Context

Within the wider context of the science-Christianity dialogue around the world it is important that the distinctive situation, history and role of those involved in this dialogue in Australia be recognised. While there is much in common with science and Christianity discussion in centres such as the UK and North America, the Australian situation is in many ways distinct.

Australia has long been known for its *innovation* in many areas, including science and technology. One of our own ISCAST members, for example, Prof. Graeme Clark, was the pioneer developer of the bionic ear. There is a long history of working creatively and often against the odds to find novel solutions to problems. This same spirit of innovation is present in the contributions to the science and religion discussions that arise out of the Australian context.

Similarly, Australians are known as risk-takers. It is not our custom to wait until an issue is settled and then join the queue of those advocating this position and view. In our

culture as well as in our academic pursuits we tend to be willing to ‘take a punt’ when others would prefer to ‘wait and see.’ While we must guard against being over hasty, this characteristic means we are in a good position to take the lead on emerging issues or, at worst, demonstrate quickly why a particular approach might be limiting.

Geographically and historically Australia is well placed to build on its developing relationships within the Asia Pacific region. As Asian economies grow and Asian contributions to scientific and technological advances increase, Australians involved in the science -religion dialogue are in a good position to introduce and encourage the development of this dialogue among our Asian neighbours. Similarly, we stand in a unique position within the English speaking world between the major intellectual centres of the US and the UK and are well placed to serve as ‘trans-Atlantic brokers’ of ideas arising from these centres.

Australia also has a long history of involvement in the science-Christianity field. One of the pioneers of the modern dialogue in the 1950s and 1960s was Australian biologist Charles Birch. Basil Hetzel, who pioneered the adding of iodine to salt, was also active during this period in promoting the conversation between science and religion. And ISCAST fellow Graeme Clark has long been open about his Christian commitment. Prominent Australian scientists such as Laurie Lyons, John White, Robert Stening, Allan Day and John Pilbrow were active in the early formative years of ISCAST making significant contributions not only to their sciences but to the interface of those sciences and their Christian faith.

Australia has also produced a number of scholars whose work in the science-religion area is well-known internationally. We think here, for instance of ISCAST fellow Denis Edwards in the fields of theology, and evolution and eco-theology, Norm Habel in the area of eco-theology, the development of the ‘season of creation’ and the Earth Bible Commentary series, and Peter Harrison in the area of the history of science.

Australia has also produced a number of organisations that have contributed to the science-faith field. Apart from ISCAST the Australian Theological Forum (ATF), Centre for Theology, Science and Culture (Flinders University), Centre for Theology and Culture (St Marks and Charles Sturt University, Canberra), and Graeme Clark Research Institute (GCRI) of Tabor College, Centre for the Study of Science, Religion and Society (CSSRS) in Brisbane, the Australian Fellowship of Evangelical Students (AFES) and the Centre for Public Christianity (CPX) all merit mention.

The Australian science and religion dialogue has been relatively independent of parallel movements in the UK and North America. Some of the major funding sources that have helped to build and shape the field in those regions have had minimal profile here. This means that we have been less well funded in our endeavours to that of our northern cousins but it also means that we have been able to develop in the directions in which various groups and individuals have been committed to pursue, free of adapting these goals to suit the values and aims of the various key funding bodies.

It is also important to note that our relatively small population has meant most of our projects and conferences have been necessarily national (despite the trans-continental distances involved). We have long experience, built out of necessity, of networking widely both geographically and across disciplines.

Finally, our unique environmental context positions us well to be leaders in the field of eco-theology. Our ongoing links with indigenous cultures, our long-standing need to conserve water and other vital resources, our regular and brutal experiences with bush fires, our sad and recent experiences with extinction of species, our many world heritage listed areas from the Great Barrier Reef to the forests of south-western Tasmania, our pioneer work in solar power and wind farming all strengthen our need to contribute actively to the ecological movement and to eco-theology.

## Six key areas of dialogue for the future

Perhaps the main outcome of the State of Play workshop is that five to ten years is a long time in trying to predict what issues will emerge. Not long after the workshop, gravitational waves were discovered opening up a huge new sense of awe and achievement as well as pause for reflection as to what this means for us as God's creation.

ISCAST recognises that the issues identified represent areas upon which focus is being directed at the present time and which have been extrapolated into the coming years. Significant and unexpected discoveries (such as extra-terrestrial life or a grand unified theory) or major changes in the world's ecosystems or political structures will require adjustment to the areas of priority focus within the science -religion dialogue. But we have to start somewhere.

For instance, less than a decade ago ISCAST identified seven areas of priority: Creation and Evolution, the physical sciences, the biological science, environment and natural resources, technology and computing, the human being; and science and Christianity. Many of these foci are still present in the current areas of concern identified, but others have been modified or incorporated into other areas as the dynamics of the situation have changed. We should likewise anticipate that in ten years' time our list of priority areas will have changed. Much can happen over that period of time!

Perhaps the most important finding of the day was that we need to be ready to follow where the issues go and not lock too solidly onto today's issues and get left behind. The six areas of concern are listed below although perhaps the most important outcome of the workshop was the six strategies that follow.

### 1. Stewardship of creation

Environmental concerns are not new, but Christians have a novel perspective and the problem of the 'global commons' is increasingly relevant, as the issue of climate change makes very obvious. This is no longer 'someone else's' issue, it is each of ours—every man,

woman and child's. The Pope's *Laudato Si* and the Paris COP21 meeting in December 2015 (the 2015 United Nations Climate Change Conference) make climate change a particularly timely topic. Environmental considerations take into account a broad range of inter-related topics including anthropogenic climate change, biodiversity, habitat loss, water and resource allocation, new authority structures on the global stage, and the rights of humans versus those of animals and other life forms on the planet. In addition to this, environmental issues include a wide range of sciences many of which rarely speak to each other.

It is important to note that the deep divides that occur in the media and political discussions on these issues are also to be found in the church and within ISCAST. While some see the clear and present danger and seek urgent responses, others question aspects of the data or the appropriateness of those responses. Often they see another danger, or another concern or challenge to be confronted.

The dilemma and challenge is that while those who worship the God who created the heavens and the earth must clearly be actively engaged in these discussions, there is at present no single and unified Christian response but rather a number of responses that have been emerging from Christian thinkers.

It is also important to note the continually changing face of the environmental challenge. Urbanisation in particular is one area around which the environmental concerns will shift; further distancing society from the natural ecology and raising concerns such as the greater need of areas for recreation and the increasing importance of "values" like scenery, natural vegetation and the like over against more traditional values such as timber resources.

## 2. Uses and abuses of technology

This topic cluster has a strong focus on ethics. It incorporates ongoing questions that continue to generate discussion, as well as new issues that have arisen as techno-science opens undreamt-of possibilities. Some of the issues that will continue to dominate discussion

in the years to come include information technology, the militarisation of science, implications of the internet and social media, issues of surveillance and privacy, evolving ‘macro-ethical’ challenges (going beyond personal morality to larger issues), biotechnology and genetic manipulation, the impact of multinational corporations, global politics, gene profiling for insurance and superannuation purposes. All of these issues have experienced resistance from the general public, as described, for instance, by Tom McLeish as a ‘narrative of suspicion’. The church’s lack of action on many of these issues, and even sometimes its tacit (or otherwise) complicity, has raised the question of whether the church’s voice on moral issues has been compromised. The interest shown by Pope Francis in these areas has signalled a more open approach and is striking a chord with the wider public, and this may well contribute to an increased willingness of secular society to be open to listening to the church’s voices on these matters.

### 3. Neuroscience and Christian theology

Neuroscience, philosophy and theology are increasingly coming together as we seek to deal with the complex issues surrounding our understanding of humans, embedded within the complex structures of family, societies, religious communities and others networks. One trend is that of naturalism and reductionistic determinism, which clash with emergent complexity, personal responsibility, and the broader transcendent perspective. This field of enquiry constitutes a nexus between philosophy and natural science. Are we seeing the brain as just another machine (marvellous, intricate, and complex, yet a machine) so that our decisions, emotions, beliefs, personality are predetermined? An important challenge is for those within the psychological sciences to develop their own modes of inquiry which may vary from those of the other natural sciences and to clarify the philosophical issues which impact the way problems are viewed. The conclusions coming out of these discussions will have a profound impact on how human beings are viewed theologically. It is important for



Christians to be involved in these debates and to help the wider church understand the implications of emerging views of the human being arising out of neuroscience. Issues such as emergent complexity and the mind-brain split, arising from neuro-science; and concepts such as the spirit/flesh distinction, arising from biblical anthropology—all need to come into consideration.

#### 4. Evolutionary biology and theology

The “creation-evolution” debate has been around since the 1859 publication of Charles Darwin’s *Origin of Species*. While most hold that the debate among scientists has been long ago settled, the issue is still very much alive in many Protestant churches. Despite all predictions that this issue would fade away (made by advocates of both sides) increased activity by Young Earth Creationists in congregations and Christian schools, and the linking of YEC with the Christian faith in general by many New Atheists has injected new life into this debate.

For many Christians it is still the first thing they think of when one mentions any dialogue between science and Christian faith. The implications of genetic research for human lineages continue to impact our understanding of human origins, debates within theological circles about how to read and interpret biblical texts such as Genesis 1-3, as well as the need to broaden our theological understanding of creation beyond the Genesis account to include other biblical creation texts, are all ongoing and continue to add new layers to this old debate.

It is therefore vital that, despite the fact that for many members of ISCAST this is no longer an issue, that it be given serious attention in future, including the challenge of finding ways for constructive dialogue with those who have a very different view to our own.

## 5. Secularism, New Atheism and other worldviews

Aggressive secularism, including the stridency with which atheism is increasingly presented and the enthusiasm with which this has been taken up by some in society lays a number of challenges before us.

Scientific naturalism is still problematic for many of those who confess faith in a supernatural Creator who is active in sustaining creation and is just as active in human history. Other issues of note in this broad category include the rise of the new internationalism, the emergence of new fundamentalisms (scientific, religious, environmental, etc.), and the apparent retreat by Christians into cultural and intellectual ghettos that often keep us out of the forefront of engagement over these issues. We also need to address the tacit impact of secularism even on Christian thought which has prompted us often to move to the sidelines of our day-to-day thinking about the God whom we confess to be creator and sustainer of all that exists.

## 6. Scientific literacy in the public forum and in the pews

This cluster concerns public science and the nature of science. The loss of public connection with science within our culture (including within the Christian community) must be acknowledged.

Science and technology have given us nuclear weapons, thalidomide, pollution and so many other dubious “benefits”. It is also now often the preserve of huge organisations like the military and multinational companies and the everyday wonder of discovering and exploring new knowledge has been taken from us by a high priesthood that controls what is available to the public and what we use and how we use it.

Science is fragmented so that conflicts can be just as much one science versus another science as for any other reason. The lack of knowledge concerning the various sciences is not only a problem within the Christian community and the wider public, but also between

the individual sciences. This in turn raises the question of the ongoing place and role of science within our human societies.

## Six key strategies for engagement with these dialogue areas

### 1. Dialogue

The very nature of the science and religion field is built around dialogue and the fundamental assumption that these two distinct areas of intellectual pursuit have something to learn from and say to one another. ISCAST is not an organisation whose purpose is advocacy of certain points of view, but an organisation dedicated to establishing and maintaining healthy dialogue. With this background and this fundamental assumption underlying ISCAST one of strongest key strategies should be making use of the ability to bring together people from diverse fields and diverse points-of-view to debate and discuss key issues. ISCAST must provide opportunities for science and theology students to discuss and debate key topics of mutual interest so that, at the very least, they will be aware of the difficulties and have some comprehension of their nature.

ISCAST must model how divergent opinions should be handled. It must help Christians to understand the perspective of those in the sciences, and help those in the sciences to understand the concerns of those in the churches. It must seek to reach out in constructive dialogue to those with whom many of us would strongly disagree (e.g. Young Earth Creationists). It must create opportunities for those in separate fields of study to come together to discuss common (and even divergent) concerns.

### 2. Publications and Conferences

As a group seeking to have a profile within and impact upon the academic community it is imperative that ISCAST actively pursue publications and conferences. The COSAC series and the e-journal have been star performers in the past. But these must be reviewed

continually and infused with new ideas and directions if they are to continue to fill these roles.

ISCAST should also consider whether it can develop or support other conferences, workshops and public lectures to supplement its existing program. Are there other forms of publication ISCAST might support? Could ISCAST partner with one of the academic or religious presses to support a science and faith monograph series? Should it seek to produce a book of published papers coming out of the COSAC conferences? In what ways can it encourage its members to write more on science and faith topics and promote these works?

### 3. Growing the science-religion dialogue community

Any organisation that is not constantly renewing itself and that is not growing, has either stagnated or is dying. A key strategy for ISCAST in addressing the major issues it has identified is not only to grow the organisation but to grow the science-religion field. It must work intentionally to recruit students and younger academics as well as those coming from fields with which its members may not have traditionally engaged.

It must encourage theologians and clergy with an interest in the natural sciences to write, teach and preach on these topics. The often discussed vision of a research facility linked to an academic institution could well play a significant role in this area. By whatever means it ultimately employs, ISCAST must encourage and equip scientists with a commitment to Christ to talk about how their faith impacts upon their professional life and vice versa. An important aspect of growing the dialogue community will certainly involve increased links and cooperation with other organisations with an interest in the science and religion dialogue.

Recently also, ISCAST changed its focus from necessarily establishing Chapters in each State and Territory, to supporting the science-religion dialogue and the various entities

that promote it wherever that occurs. This shift is significant, seeking to reduce competition for expertise, funds and time as the dialogue develops around the country.

#### 4. Education

One of the things ISCAST can offer is educational resources for both the general public and the Christian community. Schools and congregations are in need of high quality resources for classrooms, small groups, worship, preaching etc. Having identified a lack of scientific literacy (along with a lack of understanding of the science-religion interface) as one of the major challenges facing the dialogue in the years to come we must address ways in which we can better educate those in various contexts with whom we have contact. The 2012 book *God and Science in Classroom and Pulpit* by ISCAST fellows Graham Buxton, Chris Mulherin and Mark Worthing (Morning Star Press) makes the case for this need in both congregation and school and outlines some of the challenges involved. One of the key strategies for each cluster area must be the development of educational resources geared to specific audiences (such as primary school, senior secondary, undergraduate, graduate, congregational members, the academic community, etc.) to raise awareness and produce the general knowledge needed to engage the topic in a healthy and productive way.

One point that falls under the area of education is definition of terms. Many times key words and concepts are used loosely or even very differently by different groups or individuals. For instance, a recent ISCAST sponsored study found that there is much diversity and lack of clarity both between Christians and atheists, as well as within these groups, of what is meant by the word 'faith.' Specific terms such as 'global warming,' 'creation,' 'evolution,' 'theory' and 'verification' can often be even more fraught with built-in diversity of meanings as employed by different groups and within different contexts. Clearly defining what we mean by specific concepts, and encouraging others to do the same, is an

important aspect of the educational role that ISCAST can play and which will have significant benefit for all levels of dialogue.

#### 5. Recognising and affirming the diversity of approaches to the issues

A key strategy for addressing the six cluster areas of issues that have been identified must involve an ability to recognise and work with a diversity of approaches to these issues. It was apparent from the responses received in preparation for the State of Play workshop and in the discussions that occurred during the day itself, that there were few issues upon which the group was in agreement either concerning the science behind the issue, the nature of the issue, or the approach we should take to it. This is not to say there was not a significant amount of convergence and common cause that was also exhibited through the process. But it was clear that there are few areas in which ISCAST would easily be able to write a detailed and official position paper (indeed, it is a commitment by ISCAST that it does not develop ‘positions’ as a part of its determination to allow a theological and academic ‘safe space’ for the dialogue. An important strategy should be to turn this diversity into a strength, to allow the variety of views to enrich the dialogue and to sharpen everyone’s thinking.

ISCAST fellow Richard Gijsbers has written a reflection on the diversity of legitimate approaches that can be taken to the key issues that have been identified. (‘Christian Voices in the Environmental Debate, unpublished, September 2015). He identifies four key voices that need to be heard: *the prophetic voice* calling for decisive action), *the priestly voice* providing the pastoral and intercessory function, *the kingly or executive voice* providing good management and administration to bring about good outcomes, and the voice of *wisdom*, providing the distinctively Christian perspective weighing of sin and grace to the complexity of the situation. Gijsbers argues that all four voices are needed and should be enabled and listened to.

He goes on to argue that it is in the collection of voices that the truth will emerge eventually. Gijsbers reminds us that the way an issue is argued and the things that are argued is not only dictated by the Christian voice being used but by the context and the profession of the people doing the arguing. Public servants, politicians, academics, lobbyists, local people directly affected will all use a different voice in stating their case.

#### 6. Act intentionally, not opportunistically

Too often ISCAST has organised, say, a conference theme around a speaker who happened to be passing through, or responded to an issue well after the heat had passed from it.

ISCAST needs to look at the breadth of its challenge, the scope of its strengths and resources and work out an intentional strategy to develop and broaden the dialogue. Acting in the moment, reacting to circumstances without a clearly defined understanding of what it wants to achieve and where it wants to go means that ISCAST will be reactive and will not be able to build up its resources and use them intelligently.

The ISCAST agenda must be clearly understood so that its members know where it is going and what it is trying to achieve. In so doing they can support it with confidence and intent.

This calls for leadership and clear governance, and an ability to pass on the baton to the next generation (which, in turn implies that there will be a ‘next generation’ to pass the baton on to).

#### Six Core Values for engagement with these dialogue areas

As an organisation ISCAST has identified a number of core values that indicate its nature and mission. It needs to act intentionally and proactively to promote these. The six core values ISCAST have committed to are:

### 1. Christian Commitment

We affirm the Gospel of Jesus Christ as expressed in the Bible and outlined in the Nicene Creed as central to our faith.

### 2. Scientific commitment.

We are committed to rigorous scientific and technological research; particularly the insight this gives to our understanding of our creator and the benefits it brings to our planet and humanity.

### 3. Moral accountability.

We are committed to understanding and working within the limits of our knowledge and seek to minimise the adverse impacts of the application of our science and technology.

### 4. Biblical interpretation.

We seek to interpret the Bible within the mainstream evangelical tradition while respecting the stance of others.

### 5. Theological and Academic Safe Space.

We will encourage people to be free to explore new areas of discovery without fear of unfair or inappropriate criticism or theological ostracism.

### 6. Mode of debate.

We seek to speak the truth in love and firm humility while being open to new ways of thinking and without rejecting the insights of the past.

## Conclusion

The challenge is for those responsible for each ISCAST activity or project (COSAC, issues of the e-journal, public lectures, books, mini-conferences, research projects, etc) to identify at least one key strategic area of focus and at least one key strategy for engagement and at least one core value that will guide the planning and anticipated outcomes of the event or activity. Every proposal that comes before the leadership should be challenged to address the following questions:



- What key topic or cluster of topics will this initiative or activity address?
- Which key strategy or strategies will this initiative or activity employ?
- Which core value or values will be exhibited in this initiative or activity?

These questions should not only be asked at planning and approval stages of projects, but should be revisited by the organisers and key participants or stakeholders upon **completion** of the project or event to determine to what extent they have been effective in addressing these and to make recommendations about how improve delivery of these objectives in future projects.

The suggestions outlined in this paper which has arisen from the State of Play initiative in no way suggests ISCAST should change its focus or values. They are instead aimed at strengthening these through the clear identification of core topic clusters that are likely to dominate discussions over the next five to ten years and the identification of clear strategies that will assist the organisation in addressing these topics or issues in a manner consistent with its stated core values.