

FARADAY SUMMER COURSE - 29th JUNE-3rd JULY, 2020 On-line from Cambridge, UK

Telling a better story – why Faith and Science belong together Abstracts

Science and Religion: Two Disciplines, One Reality - Prof. Rene van Woudenberg

This is a "big-picture" talk. I will be painting a big picture of how humans acquire knowledge (or reasonable beliefs) about the world in which serious science and serious religion play complementary and co-operative roles. This big-picture stands in stark contrast with that warfare picture that paints science and religion as engaged in on-going warfare and, as time progresses, with religion on the losing side.

The big-picture I will be painting contains the following points:

- There is one world ('world' is the most general term that I use for whatever it is that exists; the world, in this sense, includes God and all that God created)
- The one world that exists contains things of radically different natures
- The one world that exists displays a fair number of irreducible aspects
- Knowledge of the world needs to be based on evidence
- Evidence comes in a great variety: there is, among others, the evidence of the senses, there is testimonial evidence, there is intuitive (rational) evidence, there is moral evidence, there is (as for example Christians believe) the evidence of divine revelation.
- There are more kinds of evidence than those that science is sensitive to
- Since there is only one world, the kinds of evidence cannot be in conflict with each other

How do we know what we know in science and religion? - Prof. Roger Trigg

'Why do we trust science? It gives us n illusion of mastery over the physical world, but it is often provisional and tentative in its theories (as when confronted as now with a new virus). In both science and religion we ultimately face a reality we cannot fully comprehend. Yet that does not mean that we should collapse into scepticism or nihilism. Science, though cannot set itself up as uniquely rational, in distinction from the 'irrationality' of religious faith.'

Theology, Science, and a better story about the nature of reality (and of our relation with it) – Prof. Tom McLeish

We explore what a 'Theology of Science' might mean in terms of the 'better story' of a gift from God, and how this helps to reframe the relationship between God, Humans and Nature in terms of purposed work within the Kingdom. Rather than assume a 'conflict narrative' at the outset, we follow the tradition of science historically, through examples in Patristics and Early Modern Natural Philosophy, to its origins in ancient Wisdom Tradition, including Biblical texts in Proverbs, Psalms, and especially Job. An essentially relational role for the re-creative work between humans and nature is sharpened by Paul's invocation of kosmos and creation in the Letters to the Romans and Corinthians. Seven aspects of a theology of science emerge: its long human story, human aptitude, dual structure, the experience of ambiguity and pain, the tension of order and chaos, the centrality of questions and the role and work of love. A relational, soteriological and participative understanding of science within a Christian worldview urges a Church that welcomes science as gift, rather than fearing it as threat, and becomes active in the support of a healthy public conversation about the urgent scientific and technological challenges of our time.

Making sense of randomness in the physical world – Prof. Russell Cowburn

Einstein quipped that he did not believe that God played dice with the Universe. How can randomness and physical processes built on chance be compatible with a creator God? Randomness is usually associated with imperfection and error, while a creator God would be expected to use the most perfect methods. In this lecture I will draw on lessons from nanotechnology to question our expectations of good design and will show that randomness is actually a powerful tool in any designer's kit and that without it the Universe would have no life or function.

Understanding Genesis - insights from the study of ancient near-east cultures - Genesis 1 - Prof. John Walton

In our world featuring the ascendancy of science, our story of origins is a scientific story. Consequently, when we read Genesis 1, it is natural that we should be inclined to read it as a story that will be scientific in nature. But the biblical narrative is telling another story—one that reflected the values, ideas, and perspectives of the ancient world. To get to that story we have to set aside our own inclinations and recognize that in the ancient world, they were interested in identity more than in anything like what we call scientific origins. We will have to ask questions such as "What does it mean to create?" What is the significance of the seven-day structure and of the seventh day?" When we understand the story they are telling, we will be in a better position to discuss the relationship between science and the Bible, and to tell a different story about their interaction than is often heard today.

Understanding Adam and Eve and the Fall - Genesis 2

We must again give careful attention to the story that the Bible is telling and avoid the presupposition that it is telling a scientific story. We will begin with a careful attention to the biblical material as the primary source of our information. We will ask questions such as What is the significance of dust?" "What does the text intend to tell us about men and women?" We will again recognize that the story they are telling is about human identity, not about scientific origins. The primary question is whether the biblical text, read closely and contextually, could be viewed as compatible with the modern scientific consensus (an evolutionary model). We will conclude by suggesting some guidelines for thinking about the integration of science and theology.

Does the evolutionary narrative tend to support theism? – Prof. Simon Conway-Morris

We are products of evolution, but the only species on this planet that either knows this or has the least interest in tracing our Darwinian genealogy. One consequence of this genealogy seems to be that as we are but one tiny twig on the Tree of Life so we are correspondingly of utter insignificance. Darwinian mediocrity, if you like, rather than Copernican mediocrity. But that is not the only perspective. Just as the cosmos seems strangely well ordered, so one can argue that evolution rides on deeper levels of organization that may mean that its outcomes are much more constrained than most neo-Darwinians believe. So something like a human might be a far more likely outcome process of the evolutionary than is sometimes thought. Evolutionary convergence suggests exactly this. But as mentioned above only we understand evolution and this is only one example of not only scientific knowledge but a general mentality that separates us from animals. Is this "gap" a false perspective or is there something about us that is genuinely different?

Does evolutionary anthropology show that humans are distinctive? - Cara Wall-Scheffler, PhD By around 100,000 years ago there were at least three different species of hominins on earth, two of which came into contact with each other by about 40,000 years ago. These two species, *Homo neanderthalensis* and *Homo sapiens* share many traits in common, including large brains, the use of fire and the hunting of large mammals for food. Despite their many similarities, distinctions are apparent between their subsistence strategies and their cultural artifacts and practices. This is particularly because *H. sapiens* begin making of symbolic figurines and art as early as 70,000 years ago whereas we do not see such a trend among *H. neanderthalensis*. The evidence for the similarities and differences between Neanderthals and modern humans, and the importance of symbolism as representative of possible evidence of the sacred will be considered.

Neuroscience and Human Identity – Dr Sharon Dirckx

Neuroscience has accelerated in the last few decades and we know more about the human brain than ever before. Yet, this has caused some to conclude that neuroscience alone can explain the human person. What should we make of this view? What exactly are human beings? Is the human mind merely brain chemistry? Are we just machines? In this lecture, Dr. Dirckx, draws from neuroscience, philosophy, theology and medicine to tell a better story about human identity.

'I think therefore I am? Dementia and human identity - Revd Dr Joanna Collicutt

Dementia is a gradual, irreversible decline in mental abilities that is caused by an underlying health condition affecting the brain. It has devastating personal, interpersonal, and social consequences. Prominent among these is the deconstruction of personality that renders the individual less recognisable to self and others, a loss of the rational ability that the modern age has equated with existence as a human person, and the pre-modern age equated with the *Imago Dei*. The memory loss that accompanies conditions such as Alzheimer's disease means that the affected individual can no longer tell his or her story, but even more important is the story that society tells. The recent pandemic has sadly shown the truth of the old adage; 'The tragedy in dementia is not that the individual forgets but that she is forgotten.' How might a better story of dementia be told and how might it inform questions of human embodiment, identity, and worth more generally?

Dying Well – Prof. John Wyatt

The modern world has a paradoxical attitude to death and dying. On the one hand death is seen as the ultimate enemy of humanity and billions are being currently invested into research on possibility of radical life-extension and even the technological abolition of death. On the other hand medically-assisted suicide is being promoted as a noble expression of autonomy and self-determination, and a wave of medical killing is growing in Europe and North America. In normal times speaking about death is difficult and even taboo, but the last months the COVID-19 pandemic has confronted us with its terrible reality, raising deep fears for us and our loved ones. What does it mean to die well, particularly for those who have a Christian faith? Is death merely part of the natural order to be accepted and welcomed, or is it an enemy that we can overcome with scientific and technological ingenuity? What are the challenges and opportunities that dying can bring and in what practical ways can we prepare for our own death and support loved ones and friends at the end of their lives?

What has Faith to do with the Environment? - Dr Hilary Marlow

Although our attention in the past few months has been focused on the COVID-19 pandemic, environmental challenges have not gone away. No-one could fail to be aware that the world is facing a serious crisis, one that threatens global security and the wellbeing of countless people, not to mention other species. But how do we respond? What are the best or the right courses of action? How might religious faith help us respond to some of the tough questions raised by our use of earth's resources? This talk will examine questions such as these with a particular focus on the Christian tradition and scriptures.

Biblical Scholar Dr Hilary Marlow is a freelance researcher, writer and speaker on the Bible and environmental issues in a range of contexts, both academic and non-academic. She is a Graduate Tutor at Girton College Cambridge and teaches in the Faculty of Divinity. Hilary relaxes by tending a small field just outside Cambridge with her husband Ian, where they grow fruit and vegetables and have nesting barn owls.

Why care about conservation? – Prof. Darren Evans

The recent Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) Global Assessment estimated that 1 million animal and plant species are threatened with extinction. As ongoing research uncovers the true extent of the ecological crisis around the world, particularly in the context of the impacts of species and habitat loss on human poverty, the news headlines can be so depressing that the subject becomes a turn off for many. Yet in amongst the stories of loss there are inspiring stories of regeneration and positive change, with nature making a difference in people's lives, and people valuing and nurturing their natural environment (for example, the Conservation Optimism movement). In the context of nature conservation, we find a surprisingly positive contemporary dialogue where Faith and Science speak to each other in a joint quest to tell a better story about the environment. In this talk, I will provide a brief scientific overview of the state of the planet before focussing on some conservation success stories that enrich both human and non-human life. I explore what motivates conservationists (i.e. numerous deeply held beliefs) and the novel ways in they engage with disinterested societies. I chart the response of the global church to the ecological crisis and its influence on environmental ethics and conclude by considering some practical initiatives that can be undertaken, both individually and collectively to improve the places where we live.