

Science and Faith - Banyule Interfaith Network

Ivanhoe - 13th Nov 2022

Who am I, and my background.

My name is Andrew Bennett.

I'm a scientist and Professor in Ecology at La Trobe University.

My field is landscape ecology and conservation biology. My research relates to the conservation of wildlife in Australia. The kinds of research I've undertaken with colleagues / research students include:

- studies of the distribution of species (wildlife surveys)
- studies of the ecology of particular species (incl threatened spp, species and groups of concern)
- how human land use affects the conservation of native fauna, particularly changes in agricultural landscapes, effects of fire, and restoration through revegetation

What is my faith? Can I rephrase it another way, because 'faith' is one of those difficult words that's often misinterpreted. Some think of it as 'blind faith' – as though it's something believe against all evidence.

I'd like to use the term 'world view'. What is the world view that underpins the way you or I live, that helps explain the big and deep questions we pose: e.g. why am I here? what is the purpose in life?

I hold a Christian world view. I'm a follower of Jesus Christ and see in his life the example of what a fully human life can be like. Some aspects of a Christian worldview include:

- there is a creator God, who made the Universe and everything in it
- humanity has a purpose and is made for a relationship with God
- at the centre of history is Jesus Christ, his life, death and resurrection – he was both human and God
- God loves us, reaches out to us and wants to restore the relationship with our Creator.

How do I see science?

Oxford: *"science is the intellectual and practical activity encompassing the systematic study of the structure and behaviour of the physical and natural world through observation and experiment."*

So, it's about the physical and natural world, and about gaining knowledge through systematic study.

The words 'science' and 'scientist' are not old. It's thought that 'scientist' was coined around 1830. It has Latin origins in the word 'scio' 'I know'. Before that, the common term for people who studied such things was 'natural philosopher'.

PhD is Doctor of Philosophy.

Philosophy – based on two Greek words 'philia' and 'sophia' for 'love' and 'wisdom', respectively. So, natural philosophy could be described as a 'love of wisdom to do with natural things'.

I really like that description. It has more humility than 'I know' and it also goes deeper – it's not just knowledge, but 'wisdom'. And it's also helpful, I feel, because we see that people have been doing this kind of activity for a very long time, though not necessarily in the structured form of present day science.

How is my faith expressed in my work?

Well, first my Christian worldview essentially doesn't affect the science I do. There's not a Christian or a Hindu or a Buddhist version of science.

I think it affects my work in several other ways.

a) my character as a person, and I hope in the way I work with colleagues and students, treat people with respect, show care, be responsible – be a good human being. Note, I'm not saying that Christians are better or that people that don't have a Christian world view don't have these attributes. I'm simply saying this is where I find inspiration.

b) a second aspect is that I continually have a sense of awe and wonder at nature. Several examples.

i) In wildlife surveys, I've trapped some small skinks (lizard), that weigh <2 g (i.e. much less than a 5c piece). That small skink (<2 g) has a skeleton, heart and circulatory system, nervous system and brain, digestive system, muscles, eyes and visual system and so on. Such extraordinary complexity in such a tiny creature.

ii) Human DNA – that makes up our chromosomes. It occurs in the form of a tightly wound, double helix structure that consists of about 3 billion base pairs (or nucleotides, ACGT). This is the code of life – the sequence of these base pairs makes up genes, that have the instructions that control the way our body functions. It's reported that if you could unravel this tightly twisted structure from a single cell, it would be >2 m long – and that's from a cell much smaller than a full stop on a page! And you and I have about 30 million million (30 trillion) cells in our body. Each one of those cells has a nucleus with a copy of your DNA. And each copy of DNA has the complete instructions for making a human being. Astonishing.

Johan Kepler (a German astronomer, mathematician and Christian) who described the elliptical orbit of planets around the sun, is credited with the term 'thinking God's thoughts after him'. That appeals to me – and it's a way in which I connect my science and Christianity. Walking around in the bush, I sometimes think like that – how does this world that God created really work? How can I see this ecosystem the way God sees it, to understand it?

Do contradictions arise and if so, how do I handle them?

I don't see contradictions between my Christian world view and genuine science. I note several points.

1. From a Christian perspective, all truth is God's. I have nothing to fear (in my faith) from seeking to learn and understand how the world works. My Christian faith / worldview is not about a set of rigid things I must believe, regardless of evidence.

2. It's helpful to realise there can be different answers to the same question. You may have heard this example before. Let's say have an electric jug that I fill with water and switch it on. Soon the water is boiling. Question: why is the water boiling?

Well, you might say, the electric energy from electricity is transferred to the water molecules, and they get hotter and hotter and move around more and more till at ~100 C bubbles of water vapour start forming and the water boils.

But I might say, that all sounds interesting – but the water is boiling because I want to make a cup of tea! Which is correct? Both answers are correct, but they respond to the question in different ways.

One answer is about the mechanism (how), while the second is about the purpose.

This illustrates how science and a Christian world view can offer different, but complementary perspectives. For example, we can recognise God as creator of the world (purpose), while at the same time recognising and studying evolutionary processes (mechanism) that produces new species of plants and animals.

Science – helps us understand *how* the physical and natural world work? It provides explanation.

Christianity helps us understand issues of ultimate meaning and purpose. We all have deep questions about meaning and purpose at some stage in our life? Why am I here? What is the purpose of my life? Science can't answer those questions; or if it tries to, it's going beyond its scope.

3. There are limits to science

In past years in teaching ecology to first year students, near the start of the semester one of the questions I asked was 'Should whaling occur in the Southern Ocean? It's a contentious issue, with Japanese whalers hunting and killing whales down near Antarctic and NGOs like Greenpeace seeking to prevent it.

Science (ecology) can provide much knowledge to help with making decisions (e.g. how many whales are there? where do they move? what do they feed on? are populations breeding successfully etc). But ultimately the answer to the question 'Should whaling occur' is a value judgement, that can only be answered in relation to a set of values, our morals, from our worldview. Science can't make such value judgements.

I find issues are most likely to arise when people go beyond science (i.e. answering the 'how' questions), into what can be called 'scientism'. For example, making pronouncements like 'God does not exist', or 'there is no need for God', or 'Science is the only form of knowledge needed in the world today'. Science simply can't answer the question 'Does God exist'? One can't prove, or disprove, the existence of God on a scientific basis.

There are limits to the scope of science that we all face. Think about a simple question? What is the best thing for me to do today? Science can't answer that question – it requires a decision based on what I value, what my priorities are (and why), and how I see my purpose in life.

So, to conclude, science and a Christian world view are both important to me. Both contribute greatly to who I am, how I live and how I interpret the world. I don't find a conflict – rather, their complementary nature enriches my life.

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