

Science

At arm's length: the interaction of science and faith

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This year marks the 150th anniversary of Darwin's *Origin of the Species*, as well as 200 years since Darwin's own origin. The theory of evolution remains influential, and debates on creation and evolution are far from over. CC talked with Christian biologist Dr. Jitse van der Meer on belief, modern science and Darwin.

CC: *You have three degrees in biology and one in the philosophy of science. What first drew you to this area of study?*

Dr. Jitse van der Meer: The biology goes back to when I was young, in the Netherlands. In the summers we would always go on vacation to the islands, and my parents gave me a little booklet of what you can find on the beach. That's how I got interested in biology. I am fascinated by the beauty, the colors and shapes of shells. Well, those shells are dead things, and I was beginning to ask about the living things behind it.

In high school, also in the Netherlands, we had a biology teacher who turned out to be the first scientific creationist in Europe – Nicolaas Rupke – and he introduced me to questions of creation and evolution. I found out that you can't really answer all these questions on a scientific basis; this is where my interest in history and philosophy of science comes from.

Can you define scientific creationist?

There are many different kinds. But to keep it simple, let's say that there are old earth creationists and young earth creationists. Scientific creationists think that you can use texts in the Bible as information in science.

Why do you think Christians hold such a variety of views on creation and evolution?

I think the main reason is not to do with the science, although that is usually where the debates are taking place. The real reason is the concern about the interpretation of Scripture. Some people say, "If Genesis 1 is not literally true, then is the rest of the Bible really true?" And if you put it that way, then that would be a genuine concern. That's where the real issue lies.

It seems like Darwin's ideas are still powerful. Why do you think he has been so influential?

I think it's because the biological theory of evolution has been taken to imply all kinds of things for the meaning of human life. It's taken not merely as a theory, but as something that supports a certain kind of worldview that speaks to who we are, where we are going and what our aim is in life. The difficulty is to distinguish between the theory and the interpretations in terms of worldviews. Atheists and materialists, for example, use Darwin's theory to defend an atheist or materialist worldview. This is another reason why many Christians have negative ideas about his theory.

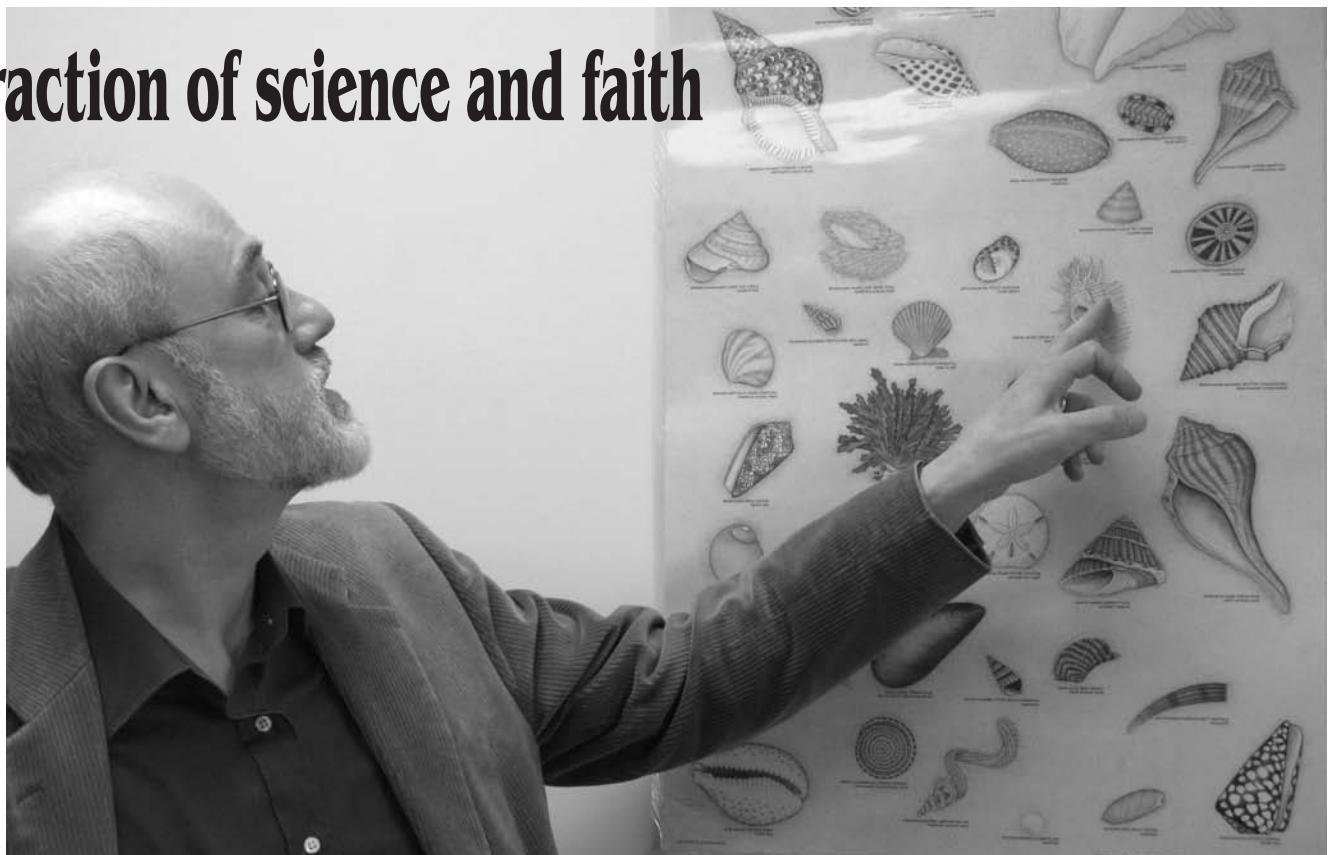
Can you briefly summarize what you mean by his theory?

Darwin believed that all living things had evolved from one or a few ancestors by means of variation and natural selection.

So if we go back simply to Darwin's theory, without how it was later interpreted, then it is not such a threat to Christians or to Christian beliefs?

No, I don't think so. First of all, contemporary evidence for his theory is very strong. But secondly, there are ways of dealing with the concerns about the interpretation of Scripture. There is internal Scriptural evidence in Genesis 1 showing that it is not to be used as if it satisfied the requirements of the natural sciences. As far as I'm concerned, that solves the problem.

The natural sciences don't threaten the Bible; what threatens the Bible are ideologies that abuse historical or scientific scholarship to promote their quasi-religious agendas over against the Bible.



What would you suggest is the least that Christians should know about Darwin in order to converse intelligently with loyal followers of evolution?

Many people think that Darwin lost his faith because of his evolutionary thinking. That may have been part of it, but there were two other events. On a trip around the world, he experienced other cultures and other religions. It raised the question, "If there are other religions, how do I know that my religion is true?" which is a question that many people struggle with today.

The second one was a tragic event. After he came back from the voyage, he married and had children. His daughter died early in life. I think that pushed him to say, "I can't believe in God." These two events go a long way in explaining his spiritual development.

So you can fit his theories into your faith?

I don't think it's wise to have science and faith very closely connected. I also don't think it's wise to have them not connected at all. But to have them at arm's length has become my approach. This does not mean I have answers to all problems. My faith motivates me to interpret Scripture as well as nature with utmost integrity. It is better from a Christian perspective to live with unresolved issues than to distort the interpretation of Scripture or of nature for the sake of harmony. After all Darwin does not have the last word about how living things develop and biblical scholars cannot agree on the interpretation of Genesis 1.

I know Darwin was hoping that his findings would be confirmed later – that more fossil evidence would appear –

There are hundreds of human fossils now and in his time there may have just been a few. But there is also a different kind of evidence now that is far stronger than that of fossils. For instance, one half of one chromosome in humans (number 12) has a gene sequence that is identical to one of a chimpanzee's chromosome. The other half of that human chromosome is identical to another chimpanzee chromosome. The chimp chromosomes seem to have fused in the human chromosome.

How could we explain that? Well, perhaps if there was a common ancestor, these two chromosomes fused at their tip. If that is true, there are some predictions you can make. Chromosomes have a special kind of structure at their tip which is very easily recognizable. If they have fused, you should see those two structures in the middle of the human chromosome. And scientists found it. That's what I call strong evidence.

Some people misunderstand this: it isn't saying that humans have apes as ancestors; it says there was a common ancestor – whatever kind of organism that was. And that's how you can explain the similarity. That's the kind of evidence that Darwin did not have. It's only been available recently.

Is that an example of macro evolution?

Well, that's a difficult question because macro evolution spans the development from the first single cell to us. I think that still is a very large step. When you compare these kinds of similarities on the level of chromosomes, you also have to ask, "How dissimilar are chimpanzees and humans?" Chimpanzees can't reflect on themselves. We have self-awareness, language and all these other things that chimpanzees don't have. That means that a simple comparison of genes doesn't tell the whole story. There must be other reasons for the difference. But certainly we have been created to be able to have a relationship with God. That's obvious.

You said a few minutes ago that you think it's wise to keep a certain distance between faith and science. Does modern science, which seems set on proving that God doesn't exist, bring those too close together?

I don't think so – Scientists who have a good feeling for what they're doing know that, strictly speaking, science cannot say anything about the existence of God or about religion. Scientists deal with things that have material causes and can be explained in material ways. But there are others who have a philosophical interest in a particular kind of worldview and they will take those theories and interpret them in that way. They hijack the cultural authority of science for their own purposes. In our culture, any trustworthy, legitimate knowledge is defended in the name of science – just look at TV commercials for pharmaceuticals.

So the advances of science have never threatened your faith?

No, never. One student commented that the single most important thing she learned from me was that I wasn't fearful of science. I was very happy with that comment, because I believe that if you're Christian, this is God's world. Why should I fear understanding that world?

Recommended reading:

The Bible, Rocks and Time by Davis A. Young (IVP Academic, 2008).
Redeeming Science by Verne Poythress (Crossway Books, 2006).
Science and Faith: Friends or Foes by C. J. Collins. (Crossway Books, 2003).
Origins: A Reformed Look at Creation, Design, and Evolution by Deborah B. Haarsma and Loren D. Haarsma. (Faith Alive Christian Resources, 2007).