

Science and Faith: Enemies or Friends?

Visit any secondary school and ask the question: are science and Christianity enemies or friends and you'll get a very clear answer! Enter some Christian fellowships, particularly in the US, and suggest that you take the scientific theory of evolution seriously and you will have your doctrinal position seriously questioned.

Perceived conflict between science and Christian faith can be a real issue for evangelicals because they have a strong view of the biblical revelation and don't want to see its authority undermined.

I want to argue in this introduction that the traditional hostility between science and Christianity can be avoided by careful attention to our interpretation of science on the one hand and our interpretation of scripture on the other; in fact the two should go hand in hand. So firstly, I want to look at our interpretation of science from a Christian viewpoint. Secondly our interpretation of scripture from a scientific viewpoint and thirdly an attempt at a synthesis.

1. Our interpretation of science

Arguably, science is the most successful of the human scholastic disciplines. We can put a man on the moon, build bridges, replace body organs with spare parts and even prostheses – coronary stents inside my heart and the bionic ears I helped to develop in my research.

Science is successful primarily because it **chooses straight-forward problems where hypotheses can be tested**. Thus it basically consists of assembling a set of observations; constructing one or more hypotheses; and then subjecting the hypotheses to experimental test. Any hypothesis not standing up to the test is rejected or modified. Then the new hypothesis goes round the cycle of testing; and so on. The crucial stage is the testing. A beautiful hypothesis can be slain by an ugly fact, as someone put it. Note two things from this. First, science cannot prove something - it can only disprove. The fact that a hypothesis stands up well to experimental tests simply verifies its value without proving that it's the only hypothesis to fit the data. A newer and better hypothesis may be just round the corner.

Secondly Sciences differ by the degree to which their hypotheses can be tested. Thus physics and chemistry especially allow much more exhaustive testing than biology and these even more so than other sciences like psychology, sociology, anthropology and so on. Sciences like psychology are notoriously theory rich and data poor: it's extremely difficult when you're dealing with human individuals or populations of individuals to conduct ethical experiments to test and therefore reject hypotheses. So some sciences are less reliable than others and shouldn't be given equal weight.

2. Our interpretation of scripture

The Church has had to learn painfully that the Bible is not a textbook of science and cannot always be taken literally.

The most obvious example of this was in the 17th century in the Copernican - Galilean overthrow of the Ptolemaic idea that the earth was the physical centre of the Universe. It's hard for us now to see what the fuss was about! But it's a good example of the way in which the Church unwittingly aligned itself with a particular and flawed interpretation of scripture and nature. From the time of Aristotle to Ptolemy, it was widely believed:-

(1) that the earth was the centre of the universe with the known planets and stars including the Sun travelling in circles around the Earth.

(2) that the heavens were immutable – unchanging.

As far as the church was concerned, the scriptural evidence was in Eccles 1:5: "The sun rises and the sun sets and hurries back to where it rises"; and Psalm 93:1, where it describes the world as "firmly established; it cannot be moved".

So fixed and certain were these views, that Galileo had to employ un-learned shepherds to confirm his observations of the changing positions of the moons of Jupiter that he saw in his telescope, before he could convince even himself of the observations, untainted by theoretical prejudices!

It took a long time for the Church to learn that the Bible uses **every-day language** rather than scientific language and describes natural phenomena as seen by the human observer. We still use the same language: of the sun rising and setting, even though we know it is not **literally** true.

The Bible therefore is **not a scientific textbook**: if it was, it would be incomprehensible to most people and if comprehensible, quickly out of date. The Bible is not to be taken literally always: when it is written as poetry it needs to be interpreted as poetry; when it is written as history it needs to be interpreted as history and so on. This doesn't mean that we ditch the Bible accounts. The Bible is therefore not to be taken literally but seriously, as Jim Packer put it. What does the Bible say of itself? That "all scripture is inspired by God and is useful for teaching, rebuking, correcting and training in righteousness, so that the man of God may be thoroughly equipped for every good work". A textbook of life, not science.

The Church is now in danger of making the same mistake as it did in the 16th century over the question of **evolution**. Evolution may or may not be a very good theory, but the account in the first few chapters in Genesis is clearly not meant to offer an alternative scientific theory to evolution but rather seeks to unfold the mind and purpose of God in creation, whatever the mechanisms involved: evolution or whatever. As far as the scientific explanation is concerned, evolution is not a strong theory being almost impossible to test, but we need to keep an open mind. To do so does not diminish the Genesis passages in any way.

3. Can we make a synthesis?

One problem that we need to deal with, is that we all tend to have what I call an algebraic view of knowledge. If science gives a comprehensive account or explanation of something then that seems to leave little room for theological explanations, or does it? This raises the principle of **complementarity** and it's worth spending a few moments on this.

I have performed this little game before but it's worth doing it again. Hold out one finger and point to my nose. Now close one eye keeping the other open and note where my nose is in relation to your finger. Keep the finger still and now close that eye and open the other. Notice that the finger is now on the other side of my nose. If you asked one eye what does it see it would say the finger is to the left of my nose and if you asked the other eye, it would say the finger is to the right. Now which is right? Or are both wrong? The answer is that they are both right and that their apparently contradicting accounts can only be reconciled by taking into account the standpoint or viewpoint of the observer. The brain of course does this par excellence taking into account the distance between our eyes and from this the brain computes the third dimension that we call depth. The two views are complementary and can be accommodated by taking account of their differing standpoints or viewpoints.

Another analogy is that of a **painting**. If you ask a physicist to analyse a painting s/he will do so in terms of the wavelengths of the light reflected from different parts of the painting; ask a chemist and s/he will say that the different parts had different chemical compositions. Ask a normal person and they will talk about the beauty or the meaning of the picture. Now which one is correct? The answer is that all are correct and all have their place. For most purposes, when visiting an art gallery, we're only interested in the meaning or the emotional impact of the painting. But if you were working in the restoration section of the gallery then you would probably be more interested in the physicist's and chemist's accounts. The point is, that each of these accounts are complementary. Notice that each of the accounts can be exhaustive in its own terms and yet still leave room for other, complementary accounts. Many areas of science and parallel scriptural passages are complementary in this sense, not alternatives. Genesis and evolution may be a case in point. But not all, such as some or all of Christ's Miracles – we may wish to discuss this!

The importance of all this is that it helps us to avoid falling into the 3 traps: first, of assuming that because science gives an apparently **complete explanation** of something, there is therefore no room for a God-

based account. It avoids what Donald MacKay called “nothing-buttery” – “man is nothing but a physico-chemical machine”, for example. He/she **is** a physico-chemical machine at the scientific level, but the Bible (and common sense!) teaches us that there is much more to us than that. Secondly, it also helps us to avoid falling into the trap of the “**God of the Gaps**” where we insert God when we don't have an adequate scientific explanation. It also helps us to avoid the error of **deism**, where we regard God as the cosmic watchmaker designing the universe, winding it up and then stepping back while it on runs according to scientific laws, as the 18/19th century theologians tended to put it. Scripture teaches that God is behind and in all things whether they have a mechanistic explanation or not. Col 1:16 “all things are held together in Him”; Heb 1:3 “He upholds the universe by His Word”; “He has the whole wide world in his hands” as the spiritual puts it. God is both creator and sustainer. Without Him, nothing would have been created, but more than that, continue to exist. The latin word for create - fiat - means let there be: and speaks of both origin and continuation. The biblical picture of God acting in His world is **theistic** rather than a deistic one.

Finally, for a Christian to be a scientist is **wonderful calling**. S/he can rejoice in the reflection of the creator in His creation: thinking God's thoughts after Him. Galileo, Hooke, Boyle, Newton, even Darwin were all Christian believers. A scientist can rejoice in being part of God's revelation to mankind, unravelling some of the unknowns. This was the view of the Puritan Founders of the Royal Society who saw scriptural revelation and scientific investigation going hand-in-hand: as the **two books** of scriptural and natural revelation. As Francis Bacon put it:-

“I want this primary history [science] to be compiled with a most religious care, as if every particular were stated upon oath; seeing that it is the book of God's works, and (so far as the majesty of heavenly can be compared with the humbleness of earthly things) a kind of second scripture”. Science was “rightly given to religion as her most faithful handmaid, since the one displays the will of God, the other His power”.

Even secular scientists recognized the similarity in the scientific and faith enterprises. T H Huxley wrote:- “the great truth which is embodied in the Christian conception of entire surrender to the Will of God: sit down before fact as a little child... follow humbly wherever and to whatever abysses nature leads, or you shall learn nothing.”

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Questions

0. What about the Miracles?
1. Evolution versus creation?
2. Random versus purposeful?
3. Is Science prescriptive?
4. How does God act in the world?
5. How does God answer prayer?
6. Can we believe in the supernatural?
What do we mean by the supernatural?
7. What is implied by "scientific explanation"?
8. Is the material universe "real"?
9. Can we reconcile science and theology?
10. Is our view of God, "the God of the gaps"?
11. is experiential faith like science?
12. Is science a "faith"?
13. What about the problem of suffering?
14. Can God be known independently of revelation i.e. can there be a natural theology?
15. How far is our view of Jesus as human and divine "complementary"?
16. how should we regard psychological explanations of religious experience?
17. Is science necessarily reductionist?