

A Biblical Perspective on the Philosophy of Science

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I. Christianity and the Nature of Science

There is reason to believe that Christianity provided the ideal culture for the origin of modern science (Polkinghorne 1994, Ratzsch 2000). The creation of the universe by a rational, intelligent God explains why the universe is so intelligible and open to our scientific investigation. Many great scientists in past centuries viewed their scientific work as thinking God's thoughts after Him (Moreland, 1989, p.24), but science as an institution has now rejected the creation account as its foundation.

As modern science developed in the 17th to early 20th centuries, early views of the philosophy of science maintained that a theory is valid science only if empirical data verify, or indicate the truth of the theory. In this materialistic outlook the material and physical were considered to be real, but there could not be any human religious or ethical knowledge unless such knowledge was independently verified by science (Murphy 1990; Ratzsch 2000).

But it became evident that science is rarely that simple and clear cut. Philosophers of science have increasingly recognized that although science is an effective way to discover new principles of how natural phenomena function, scientific conclusions are always open to change because of new discoveries (Popper 1959, 1963; Kuhn 1970; Laudan, 1977; and Lakatos 1978). Science is always a fascinating, continuing search, but it does not reach absolute truth.

Science is still perceived as an important rational activity, but it is now recognized that science is affected by sociology, economics, and other very human factors (Kuhn 1970; Lakatos 1978; Murphy 1990). Because of these human factors, theories at times seem more strongly supported than they really are. If at a given time there is a strong consensus among scientists regarding the truth of a particular theory, this consensus in some cases may result from philosophical or sociological factors, rather than from a body of evidence demonstrating the truth of the theory.

For example, the scientific consensus that all life forms resulted from evolution is based on a common scientific commitment to an anti-supernatural philosophy, rather than from the adequacy of the evidence. If so, then it is reasonable to call for a reevaluation of the evidence and for a new, more open philosophical framework for interpreting the evidence. Judeo-Christian theology makes many historical claims about the existence of persons and the occurrence of events that should be testable by empirical methods (Laudan 1977). If the use of biblical concepts for suggesting testable hypotheses leads to improvement of knowledge, then it is beneficial to science. Theology and science are still, in important ways, quite different, but I believe there are reasons to propose that theology and faith can play a legitimate role in influencing science.

The problem of evil, in the form of pain and suffering, according to Laudan, "is at its core an empirical problem *par excellence*: how can one maintain one's belief in a benevolent, omnipotent deity in the face of all of the death, disease, and natural disasters which are a daily element of our experience" (Laudan 1977, p. 190)? As we will see, the solution of this problem is crucial if theism is to be defensible to many people in this scientific age.

II. What Should Be the Relationship Between Science and Religion?

There are various ways to define the types of possible relations between science and religion (Barbour 1990; Murphy 1990; Peacocke 1993; Ratzsch 2000), but I am going to compare a set of three models for this relationship. The three models differ in how they view theological knowledge. In model one theological “knowledge” is not really knowledge, and is not allowed to influence scientific thinking. In model two theological and scientific knowledge are both accepted, but are kept separate. There is still little influence of theology on scientific thinking. Model three encourages integration; religion can, and should, influence scientific thinking.

Model 1: Separate Domains

Science and religion remain isolated from each other. The philosophy of naturalism dictates that science must reject any explanations involving the supernatural in the origin of life forms, or in any other process. Religion is at most an emotional experience and is not relevant to scientific issues. This entirely secular approach (naturalism) appears to be the closest to what could be thought of as an “official” description of science as practiced in the 20th century and the beginning of the 21st century.

Following a naturalistic model to its logical conclusions implies that pain, suffering, and death are a natural result of the laws of nature, and there is no other meaning for them to be found - we need to grow up and live with this.

Critique of Model 1. Is science an open-ended search for truth, wherever the evidence may lead? Or is it a game, defined by a set of rules, that seeks to find answers as far as it can go *within* those rules? For many scientists the relevant rules in the study of origins are defined by naturalism, and even if life was actually created by God, the rules determine that science can never consider that hypothesis, no matter what the evidence indicates. But although science may have limits in evaluating hypotheses that imply a designer, advances in molecular biology make it increasingly difficult to justify excluding the hypothesis that life requires an intelligent inventor. That idea must be at least open for candid discussion (Behe 1996; Johnson 1997; Dembski 1999).

Model 2: Parallel but Separate

This model seeks to understand the relationship between science and religion, because they are both accepted as sources of truth. However, religion is not allowed to influence science. Religion and science remain separate, searching in parallel to each other.

The writings of Peacocke (1993), Polkinghorne (1994, 2000), Barbour (1990) and Murphy (1990, 2002) illustrate what I mean by the *parallel but separate* model. All four authors believe in God as the ruler of the universe and in Jesus Christ as God’s supreme revelation to humankind. They seek to understand God’s revelation and how it gives us hope and salvation.

They also accept the entire theory of evolution and of the origin of life from non-living material as understood by science today. They agree that evolution through hundreds of millions of years has been God’s method of creation, including the evolution of humans and apes from common ancestors (theistic evolution). They do not accept any kind of literal reading of Genesis (Polkinghorne 1994, p. 21-22), and they deny that religion has access to any privileged source such as revelation. They also insist that science must generally proceed without interference from religion. Thus in practice they actually accept methodological naturalism in the study of origins, but are different from Model 1 in that they do see the search for religious truth to be a valid scholarly exercise. These authors’ conclusions well portray the theological implications of theistic evolution.

In their belief system there was no literal Garden of Eden or Adam and Eve. There was no fall into sin as many Christians believe. Evil, pain, suffering, and death did not result from human sin, but are a natural part of the evolutionary process, as seen today and in the fossil record.

They propose that life arose through the laws of nature, and then evolved into many different types of plants and animals, including humans, through the action of “chance and law” - mutation and natural selection. How can this theology explain pain and suffering, disease, death, natural disasters like earthquakes and floods (natural evil), and cruelty, concentration camps, and murder (moral evil)? All four of these authors conclude that if God had imposed his will on the world, nature and humankind would not have been free. God could only give the gift of freedom by letting the world “make itself” through the operation of chance and law - mutation and natural selection, and/or processes at the microscopic and sub-atomic levels. The uncertainties in these processes were what allowed freedom to emerge in nature generally and in humanity specifically. The chance element in this process not only produced the freedom necessary to realize the full potential of self-conscious, God-conscious beings, but the same process also of necessity produced the natural evil that is so destructive, because mutations are random and do not know what the organism needs. The freedom and the evil came as a package deal, and “even god cannot have one without the other” (Peacocke 1993, p. 125).

Critique of Model 2. This concept has many theological consequences. Death and evil were not the result of any human action, since there was no Adam and Eve and no human fall. Thus the classical explanation of the redemptive work of Christ in saving us from the effects of sin is not correct, and pain and suffering were the result of God’s method of creating by evolution. These authors then explain that God does not walk away and leave us to suffer, but He suffers with us. Jesus hanging on the cross was God (but, for some authors, in a merely human form) suffering with us in our pain and suffering.

However, their conclusion that pain and suffering are inevitable natural results if God allows us to have freedom depends entirely on their assumption that all life is the result of evolution. It is not clear that science has demonstrated the truth of this assertion (Brand 2006a, 2006b). It seems likely that human free will operates through the features God built into the amazing complexity of our brain cells.

The world of cancer, earthquakes, accidents, death, child abuse, and Auschwitz is not “free” at all; it is just dysfunctional. If evolution, with its inevitable result of pain and suffering, was God’s way of creating, this is inconsistent with the Christian view of a God who has a personal concern for individual humans. If their theistic evolution model were correct, I would have to wonder why Scripture and its “god” would be interesting to me at all. The conclusions reached in this *parallel but separate* model do not come from Scripture, but are imposed on Scripture by a particular philosophy of science and religion.

There may be many honest Christian believers who accept theistic evolution, but if we carefully consider the logical implications of this model, it is very destructive to Christian theology.

Model 3: Interaction, with God Having Priority in Our Thinking

This model encourages active interaction between science and religion in topics where they make overlapping claims, because both are accepted as sources of cognitive knowledge about the universe. Feedback between them encourages deeper thinking in both areas and provides an antidote to carelessness on both sides. Both religion and science can make factual suggestions to each other, which can be the basis for careful thought and hypothesis testing. This model respects the scientific process, but also recognizes truth in Scripture. There are pitfalls to be avoided in any such integration effort, but these are human problems, not religious problems, and there are ways to minimize the risk (Brand 2006b).

The interaction model that I will propose takes Scripture more literally than model 2. In this more conservative approach to the Bible, “reason must acknowledge an authority superior to itself, and heart and

intellect must bow before the great I AM” (White 1892). The events described in the Bible are accepted as actual historical happenings including the miracles and God’s literal communication of ideas and facts to at least some Bible writers such as Moses, Daniel, Paul, and John (not through verbal inspiration, but communication of thoughts).

This model begins with the assumption that science is an open-ended search for truth, and if we wish to ask whether there were unique events (supernatural or otherwise) in the history of the universe, arbitrary rules like the philosophy of naturalism must be set aside so that the search can proceed unhindered. Some statements about the world can be derived from Scripture and can be tested by the methods of science. In this process science and religion challenge each other in areas where they are in conflict, motivating more careful thought and research in both areas and avoiding superficial explanations. The scientific process used will be the same as that used by others and will differ only in 1) the questions that are asked; 2) the evidence likely to catch the researcher’s attention; and 3) the range of explanations open for consideration (Brand 1997, fig. 6.4, 2006b, fig. 2).

This approach is not just a theory, but some of us have been using it for years and find that it works very well. We have space here for just one brief example, the falling of the walls of Jericho. When the walls of Jericho fell down, as described in Scripture, the result would be a pile of rubble. If we can now identify the ruins of Jericho, we can study that pile of rubble. Science would probably not be able to determine whether the walls fell from an earthquake or from a divine push. However, before beginning the archeological study we could use biblical information to predict that the walls fell down suddenly, rather than disintegrating gradually through time, and then test this hypothesis or prediction with the methods of science. This example is theoretical, but several examples of actual published paleontological or geological research that resulted from this same process are described in Brand 2006a.

Theological Implications of the Interaction Model. This philosophy for integrating science and religion yields a consistent, rational explanation for the origin of life and of pain and suffering. A conservative reading of Scripture portrays a cosmic conflict between God and a created being called Satan. Humans were created sinless, but with brains designed by God with the ability to make free choices. Satan and human beings made the wrong choice, and sin, pain, suffering and death for the human race resulted from this choice, along with changes in the geological structure of the earth, producing natural disasters such as floods, earthquakes, and storms. Evil is the result of sin, not a part of God’s plan. These theological concepts cannot be studied by science, but they are affected by one’s philosophy of the relationship between religion and science. For me personally, the coherent explanation of pain and suffering resulting from my application of Model 3, in contrast with the explanation offered in Model 2, is a powerful argument in favor of the epistemological approach underlying Model 3.

Of course this philosophy requires that humans actually originated in a creation event that predated the formation of the sequence of fossils in the fossil record. If pain, suffering, death, and geological hazards like earthquakes and volcanoes resulted from human sin, then humans could not have evolved from ape-like ancestors near the end of geological history, but had to have been in existence from the beginning of life’s history on earth.

This challenges some of science’s contemporary interpretations, and predicts that a number of significant phenomena are yet to be discovered, especially in the areas of geology, paleontology, and radiometric dating. It also accepts the reality of divine creation and God’s involvement in earth history. Jesus demonstrated this ability when He healed people or raised the dead, which required the creation of healthy tissue at that moment.

Many scientists object strongly to such proposed divine interventions that do not follow the normal course of natural processes. However, if these interventions did occur (and Scripture says or implies they did), should

science pretend they didn't happen, or is it better for science to recognize them? Perhaps the reason Scripture tells us about the creation and flood, and gives us insights into the amount of time represented, is because God knew we would have trouble correctly interpreting the complex evidence from the ancient past without these insights.

Conclusions

There is an important relationship between religion and the philosophy of science. However, an incorrect philosophy of science will lead us away from biblical truth, if we are logically consistent. If we do not seek to learn from God's communications to us and even use them to inform our science, then science, not God, has priority in our thinking. A correct philosophy of science facilitates a constructive integration of religion and science, making use of all that we as Christians know from Scripture. We can even utilize that knowledge to open our eyes to potential new discoveries in science. Christians have an exciting opportunity to follow God's leading in this integration process, to demonstrate to a skeptical modern world that Christianity speaks not just to the emotions, but also reaches the mind and challenges it to reach beyond a mere human view of the universe, and to grasp a truly harmonious understanding of its origin and destiny.

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