

This text retains the original pagination from the printed edition in which English and Slovak texts appear on alternating pages.

Science and Spirituality¹

Michael Ruse

What is the relationship between Christianity and today's science? It is obvious that there is no simple or single answer to this question. If one is thinking of the Christianity of our absent friends the fundamentalists, the Creationists, then there is simply massive conflict. You cannot believe in a six-thousand-year-old earth, a six-day creation, a worldwide flood, and at the same time accept modern physics, modern biology or modern geology. But fundamentalism is not the only form of Christianity and has little lien on the traditional form of the religion. If you follow the route marked out by Augustine and Aquinas, by Luther and Calvin, then the answer is very different. The basic, most important claims of the Christian religion lie beyond the scope of science. They do not and could not conflict with science, for they live in realms where science does not go. In this sense, we can think of Christianity and science as being independent, and we can see that those theologians who have insisted on the different realms were right in their view of the science-religion relationship.

This is not to say that there is no relationship at all between Christianity and modern science. Given that Christianity is, after all, a religion about the nature of

this world and the place of human beings in it, such would be a very odd state of affairs indeed. At the least, a great deal of negotiation has been needed (and most probably still is needed) to work out the boundaries between science and religion. This is not something that can be decided a priori, before inquiry begins, but needs constant assessment, especially as science unfurls and develops. Also, even when boundaries are found, science and religion reach across to each other. Christianity cannot simply ignore the rules and norms of science, especially the standards of reasoned argument. Conversely, it is expected and appropriate for Christianity to make claims about the world of experience, for instance, in the moral sphere. It is simply that when this does occur, as with the application of natural law theory, great care must be taken to see that the theological conclusions are infused with the findings of really up-to-date science; as the science changes, so also may these conclusions. A delicate balancing act is needed. Today, no one who takes modern science seriously is going to deny some form of organic evolution. It is surely legitimate, therefore, for a religious person to think about ways in which God might have created in such a fashion, and turn-

¹ This essay appeared as the "Conclusion" of *Science and Spirituality: Making Room for Faith in the Age of Science*. Cambridge University Press, New York, 2010.

This text retains the original pagination from the printed edition in which English and Slovak texts appear on alternating pages.



Richard Krivda, foto: Miro Nôta

ing for insight to St. Augustine's thinking about how a non-temporal God might have created a time-bound universe is surely an open possibility. I engaged in precisely this kind of argument in the last chapter.² On the other hand, identifying the creation with the Big Bang is fraught with problems, not the least of which is

the possibility that there might have been something prior to our Big Bang.

In a like fashion, there still are, and probably always will be, some grey or contested areas about the domains of science and religion. Take miracles, for instance. Logically, you cannot deny the stance of those who embrace the order-of-grace

2 In the last two chapters of his book, Ruse focuses on what he takes to be the four essential articles of Christian belief: a) that there is a God who is a creator, b) that humans will be judged, c) that humans have souls and are made in the image of God, and d) that there is an afterlife. Unlike the radical theologians discussed elsewhere in this volume, Ruse takes these four articles seriously. His main argument is that religious faith responds to different question than science. And while he allows that claims by theists might be contested on theological or philosophical grounds he holds that science cannot refute them. As long as they are logically consistent, and as long as they do not offer "science-like" answers, they might serve to provide a plausible alternative to scientific modes of thinking. [B.E.]

option, arguing that miracles stand outside the order of nature and are performed by God as an end to our salvation. Water could turn into wine. However, quite apart from the theological issues - is God really a high-class vintner? - naturally, water simply does not turn into wine. To claim otherwise is to violate the norms of science. Hence, one might argue that if religion insists that this must be true, then it is encroaching illegitimately on the realm of science. Noting in passing that this is a conclusion shared not only by non-believing scientists but also by many Christians - who take seriously the points to be made in the next paragraph - here I will leave the matter unresolved. The answer clearly depends on the allowable scope of science. If it is insisted that the scope is the whole of the natural world, without exception, then the order-of-grace option is disallowed. If, however, it is agreed that theological demands can enter into this discussion - an all-powerful Creator can do what he pleases - then the order-of-grace option has legs.

Is it a sign of weakness that it is almost always going to be Christianity that must accommodate itself to the findings of science? Once it was possible to read Genesis fairly literally, because that was the direction in which the science pointed. Now such a reading is illicit. Once, many thought that Saint Paul's views on women, on homosexuals, on slavery were fully acceptable. Now, in the light of modern social science, all of these assumptions have been (and are still being) challenged and reevaluated. Things do not go the other way. No physicists working as physicists are going to be bothered by reinterpretations of the Trinity. There are good reasons why Christians do not and should

not see this asymmetry as a sign of weakness. Apart from the fact that there will almost certainly always be the major areas into which science cannot move, remember that for Christians reason is one of God's greatest gifts, the sign that we are indeed made in His image. Science therefore is a sacred task. It is also a difficult and challenging task, befitting creatures of our nature. Only slowly and with much effort will we discover the true nature of our home. As we do, our understanding of God and His nature and His works will obviously likewise change and mature. John Henry Newman had the right idea on this. The essentials of the Christian faith were revealed two millennia ago. Since then, theologians and scientists have been working to show exactly how these essentials play out in the creation. Theological understanding is always on the move. It is not evolutionary in the Darwinian sense - you could never drop or modify the initial faith claims - but it is developmental in a very real way. (Historically, Newman, who was always interested in science, was much influenced by anatomist Richard Owen's thinking about archetypes, the underlying Platonic ground plans of organisms, and about how they become ever-more adaptive as they are incorporated in real organisms having to survive over time.)

One doubts very much that today's frenetic partisans, from science and from religion, are going to change their minds very much. But the challenge of seeing the proper relationship between science and religion is there, and, both politically and intellectually, it is an important challenge. The hope is that the ideas and conclusions of this book will inspire others to join with the author in working on the task before us.