



The Gods of Modern Science

From Soul by Angela Tilby



Scientific truth is sharp and penetrating, but tantalizingly incomplete. Just as it finishes the job and lays down the knife of reductionism, you realize that the thing that has been explained no longer exists in its thereness, in its totality. It has lost its essence, even its name. Religion is about naming and celebrating creation, doing the thing that science cannot do. So how do the scientific story and the religious story hang together?

Finding the “fitting” God

One way that John Polkinghorne suggests is to look at the kind of god who ‘fits’ the various scientific scenarios. I have found myself taking seriously the claim that the revelation of the oneness of God helped to trigger the whole scientific enterprise, though it obviously also controlled and restrained it in a number of ways. What kind of God fits the cosmologies that have been described by the master scientists in this book?

Newton’s ‘fitting’ God was a master mathematician who planned the universe and set it in motion, continuing to oversee and regulate its operation. Newton laid the foundation for the remote Creator of deism, but his personal vision of God was more complex. God for Newton was adorable and sovereign, holy and rational, a God concerned with the heart as well as the head. But the consequence of Newton’s physics was the division of god, with truth going to science and charity to religion. It also led to the division of Western psyche into the rational/reductionist and the holistic/aesthetic aspects. Most people assume they belong to one side of this divide or the other. Religious people have placed themselves on both sides of the divide, with the more literalistic lining up with the rationalists and the more metaphorical and sacramental with the aesthetes. This has had interesting consequences, and partially explains why science assumes that religious people are literalistic. The one the scientist meets often are.

Einstein’s timeless God fits the universe of relativity. Such a God is not separate from the universe, nor is he accessible to human beings. He is the ground of being itself, and all nature is the manifestation of his intelligence and beauty. Yet he knows nothing of us and we can know nothing of him. Einstein’s intuition led him again and again to the throne of the Old One. He often began his thought experiments by imagining how an aspect of nature

would appear to God. Yet his physics confirmed our rift of nature, and left us adrift in a sea of spacetime in which all our personal longings and moral and ethical choices turn out to be unreal and illusory.

The **God of quantum physics** is a Dancing Lord, like Shiva, who plays dice with the seething potentialities of the quantum world. Some have suggested that God’s role in creation is to be the observer of the quantum chaos who ‘collapses’ its wave-function by determining that this particular universe should spring into existence rather than all the other universes that might have been possible. From the quantum sea God calls this universe into ordered existence, much as the physicist evokes sub-atomic articles into existence.

Or the **God of quantum physics** could be the quantum vacuum itself, the unbroken sea of wholeness which strives for self-realization through the random undulations and fluctuations of the vacuum. These begin a process in which God wakes to consciousness through the spontaneous eruption of our world. It is a kind of pantheism, a notion of a God who evolves into consciousness in and through everything that exists. Creation, then is not the bringing into existence of a world that is separate from God, but rather the emanation of our world from the being of God. This emanation from God includes the spontaneous creation of everything that exists, including us. We are embraced by this creative emanation, indissolubly part of God’s being.

The **God of big-bang cosmology** could also be an evolving God, a God who is born in simplicity at the beginning of the universe, and struggles alongside it, evoking higher and higher degrees of order and complexity from it, even as the whole system decays into the heat death of total entropy.

The **God of chaos** could be a God of enormous energy and experiment, finely balancing the universe in its creativity and disorder, permeating nature with the possibility of novelty. Or God could hardly be born. God could be the future Final Observer of whose emergence we ourselves are part and who will resurrect us to eternal life at the end-time.

Soul of the universe

Many of the ideas about God which have come from recent science suggest that God could be reconceived as the soul of the universe, reviving the

idea of the immanent world-soul of Stoicism. That description could have two interpretations. In the first, God could be seen as the source of everything, with nature as a divine emanation. This picture links with some of the lyrical ideas of Hindu philosophy in which our universe is spun out of God's being as part of the divine play. Or, alternatively, God could be seen as one who coexists with the universe and progressively gives shape to matter through time, evoking more and more complex responses from the recalcitrant material of existence. With such a God we could expect to see consciousness emerging in a continuum through nature, beginning with the random behavior of the smallest sub-atomic particle and ending with deity itself.

Transcendence

In the past such ideas would have been firmly rejected by Christians. The traditional Christian doctrine of creation asserts that God created from nothing, *ex nihilo*. Although a number of early Christian fathers used the Stoic notion of the world-soul to help develop their theology of the Word of God, they were highly critical of Platonic ideas that the material world was shaped by a 'demiurge', a semi divine craftsman who worked in ignorance of the true



god. They insisted that God transcends the universe and must not be identified with nature.

Scientifically naïve but philosophically sophisticated as they were, they loved texts which spoke of God's utter transcendence. A favorite was from Solomon's prayer in the Second Book of Chronicles,

'The heaven of heaven cannot contain him...' (2 Chron. 2:6). Yet though they knew that the heaven of heavens could not contain God, they did not picture this transcendence as separation. That would have been to introduce the idea of space between the Creator and the creation. Many of them adopted the notion that God was the 'place' of the world, quoting words ascribed by the author of the Acts of the Apostles to St. Paul, 'In him (God) we live and move and have our being.'

The problem is that the doctrine of God's transcendence has been progressively incorporated into our observation of nature. This process culminated with Newton, who thought he was doing justice to God's transcendence by locating him outside the universe in absolute space and time. Since then our minds have continued to see a transcendent God as 'above' or 'outside' the physical universe. Once this picture breaks down, as it does in modern cosmology, Newton's God becomes superfluous, and the doctrine

of creation-from-nothing cannot be recovered from the wreckage.

Some Christians have responded to this by suggesting that it is the doctrine of creation out of nothing itself which has become redundant. Ideas about God which arise from the new science should simply be incorporated without remainder into Christianity. We should think of God not as one who creates from nothing, but as an evolving deity who progressively gives shape to matter as it moves through time. The discovery of the enormous creativity and innovatory potential with nature means that nature itself now stands for the diversity and variety and endless resourcefulness which has been ascribed in the past to the external Creator. It is for this reason that a movement has developed in theology in recent years called process theology. It claims that God is not separate from nature but evolves along with it. There are two faces to reality, God and nature, and the two coexist.



More recently still there has been the critique of feminist theology. Christian feminists have pointed out that the traditional Christian picture of God as transcendent and wholly external to nature, manipulating the world at a distance, is hopelessly corrupted. Such a God is nothing more than the divinization of the psyche of the Western male which is also manifested in the scientific attitude which regards nature as a machine. Feminists claim that patriarchal religion and science are together the source of damaging dualisms, setting mind against matter, spirit against body, intellect against feeling, male against female. There has been an attempt to rediscover strands in the tradition which point to a less alienating picture of God's relationship with nature, to incorporate feminine language and imagery into talk about God and to heal the divisions and dualisms that have led us to devalue the body, the material world and the emotions. In the process of trying to heal the dualisms some feminist theologians have been drawn to pantheistic or panentheistic interpretation of God, in which God and nature are linked as soul and body.

From **Soul: God, Self and the New Cosmology**, by Angela Tilby, pp. 263-267. The author produced a documentary series for the BBC with the same title. Her book, while not from a believing standpoint, helps in understanding the implications and theological viewpoints that have come with recent scientific discoveries and theories.