

OLIVER R. BARCLAY

**Reason and Reality: The relationship
between science and theology by John
C. Polkinghorne (SPCK, 1991. 119pp., £6.95)**

Any new book by Dr. Polkinghorne is worth careful attention and this one again is packed with stimulating and perceptive material. Its style is rather compressed, often summarising perspectives that he has developed at greater length before. That leaves the reader unsure of how convincing the point is unless he has read the fuller treatment. In a few cases he is clarifying previous points and responding to criticism. The book is quite wide ranging and the following are perhaps the most important new positions developed here.

The first chapter headed 'Rational Inquiry' discusses the similarities and differences between science and theology in terms of their logical status. He argues that 'theology is to be found with science in the same spectrum of rational inquiry'. In both fields he defends a 'critical realist' position even though the differences of subject matter mean that 'science is easy and theology is hard'. Therefore science can arrive at more generally agreed conclusions more quickly. But theology is not merely powerful and useful. As best it can, it describes reality.

In the chapter on 'Rational Discourse' he discusses models in science and theology and argues that whereas in science models can lead on to theories which are 'candidates for the verisimilitudinous description of what is actually the case', in theology models lead only to symbols. 'A symbol is the most intense form of metaphor' (page 31). At the same time he insists that the incarnation, for instance, is more than a symbolic story. It 'actually happened'. Theological statements *can be true* even though symbolic. If science uses 'universe assisted logic', theology uses 'liturgy assisted logic' and his emphasis on the power of the liturgy, especially the communion service, explains perhaps this relatively vulnerable position. If one were to press him about the truth content of theology, it is not clear how he would reply because he has a repeated fear of theological propositions. This seems to arise from the danger that they could be taken as *exhaustive* descriptions of the truth that he nevertheless insists has objective reality. The Bible does seem to be full of propositions, as does the liturgy. These are not mere symbols with all their ambiguity and potential for distorted meaning. The history of 'the liturgy' surely underlines the weaknesses when its symbols (eg. bread and wine) are separated from interpretation in terms of biblical propositions such as 'God is love', 'God so loved the world that he gave his only son', 'all have sinned', 'Christ Jesus came into the world to save sinners'. 'The symbol', he says, 'carries a cloud

of allusion and suggestion which enables individuals to respond to it in their own way'. Few people are happy to think that the New Testament Gospel is merely such a 'cloud of meaning' and in fact Dr. Polkinghorne's own position seems much more substantial than that.

In a later chapter on 'The use of scripture' he is again somewhat ambiguous about how exactly scripture is meant to operate. He describes it as 'the vehicle of a personal encounter, demanding a response' (page 64). He says that it is 'a matter of experienced fact that the Bible . . . does actually succeed in speaking to us across the centuries' and describes it as having 'evidential value'. He speaks as if what he called 'a propositional-cognitive view of theology' means that theology is nothing but propositions and he is rightly arguing that the central feature of the Christian faith is personal encounter. The question is whether personal encounter with someone whose character is undefined by any propositions whatsoever leaves one with an experience where there is any clear distinction between Christian and non Christian encounter with the numinous. Again it seems clear that Dr. Polkinghorne's position is more solid than his theoretical position would seem to demand.

He refutes the charge, made by some against his earlier writing, that his use of sub-atomic indeterminacy as 'the gap' in a mechanistic world that allows human choice and divine activity, means that he is advocating a God-of-the-gaps approach. That approach saw God only when we were ignorant of process in some particular area of knowledge. It was *ad hoc*. His approach sees 'gaps' as intrinsic to the nature of reality because he believes that at the sub-atomic level there is true indeterminacy (and not just human inability to discover the causes of events). Here he has developed his argument and strengthened his position. He now suggests that God might interact with his world by 'information input' (not 'energy input') at this sub-atomic level and thus influence events in a way that is at least analogous to human ability to influence events. This is an advance on his earlier analogy of a ball at the top of an inverted U-tube that could equally fall either way, because under perfect conditions the ball surely would not fall at all without energy input. Not everyone, however, will find a fundamental difference between energy input and information input. Both are active interference.

Apart from such interference, the author finds the combination of law-like process and chance to be the source of needed novelty. Chance, however, is something very different from 'input' of any kind. He does not here reply to those who suggest that his approach (which leaves even God not knowing what the future holds) is too far removed from the biblical view of God. The Bible speaks of a God 'who accomplishes all things according to the counsel of his will' and who, as Peter says on the Day of Pentecost, 'delivered up (Jesus) according to the definite plan and foreknowledge of God'.

Dr. Polkinghorne's position would seem to mean that, whereas the gaps

allowing human and divine interaction with the material world are intrinsic to the whole structure of reality, the activity of God in bringing about his purposes is *ad hoc* and concerns only certain features central to his purposes, leaving the rest either to chance or to human interaction. Otherwise God is at the mercy of chance. If God controls some 'chance' events, it is not clear why he does not control all.

Dr. Polkinghorne gives the impression of operating here within the view of nature as a machine that does things more or less 'of itself', but has some built in gaps for chance events. Some other writers, such as Donald MacKay, avoid this by stressing the God-given nature of all events—both regular (and predictable) and the irregular. Dr. Polkinghorne believes that his approach avoids some of the problems of evil. He repeats here his suggestion that God not only allows human freedom (and so allows, but is not morally responsible for man-created evil), but that God also allows chance processes to take place so that 'natural evil' is similarly allowed. The first (the free-will defence) is widely accepted as a necessary price for the existence of truly moral beings. The gains outweigh the cost, especially when there is a way of salvation and restoration of all things. The second freedom (which he has called the free-process defence) certainly gives a fresh approach to the problem of natural evil. It is not clear, however, what is gained by this second freedom except a particular type of novelty within the natural order. This seems a small gain to achieve at the price of all the disease and other human and animal suffering that is not the result of human wrong choice. There are, of course, other solutions to this problem, classically in terms of the Fall and/or the activity of non-human forces of evil (as in the book of Job). Hopefully Dr. Polkinghorne will develop his suggestion more fully before long. As he has admitted elsewhere, this view depends on a still debated aspect of our present state of knowledge, which is itself unlikely to be final. But it is original and well worth further discussion.

There is another not unrelated fresh idea in his arguments which is certainly worthy of further development. He points out first of all that our experience of responsible choice (for instance) and our experience of the law-like nature of the world are every bit as 'real' as the almost indescribable reality of sub-atomic phenomena. There is no fundamental reason for thinking that physics represents the ultimate nature of reality and that therefore we should work in a bottom-up direction to understand our experience and talk of human responsibility as 'emerging' as we go up. We could and should equally work in a top-down direction and then we shall see indeterminacy as 'emerging' at a sub-atomic level that may have little or no effect upon our experiences as people. One can only hope that he will explore this point further as it seems to have very considerable possibilities.

If this review seems to have concentrated on some critical points, it must be repeated that this book contains some major and important 'input' into the whole science and faith discussion. It deserves careful attention.

Dr. Oliver R. Barclay is a Zoologist, was for many years Secretary of 'Christians in Science' and is one of the founding editors of 'Science and Christian Belief'.

Response by John Polkinghorne

I am grateful to Oliver Barclay for his thoughtful review of *Reason and Reality*. There are a number of points on which I wish to comment.

The first is the use of symbol in theology. This seems to me to be a necessary rational strategy to take into account the transcendent mystery of God, which will never be caught in our logical nets. My 'repeated fear of propositions', if that is what it is, is a wariness that too matter-of-fact a way of talking will reify and diminish the divine. There is nothing 'mere' about symbols. They express truth and are an appropriate way of articulating our Christian belief, which though anchored in history, yet transcends the simply historical.

Concerning scripture, I wish to use words like 'normative, authoritative, inspired' but I wish also to take account of the timebound perspective of its human authors. My exploration of the concept of the 'classic' is intended as a means to that end.

I believe that divine agency operates in the world, not simply or principally at the subatomic level (as Oliver Barclay implies), but overall and at the macroscopic level, as the openness of physical process displayed by chaotic dynamics powerfully suggests. I do not like the word 'interference' for this activity; my preference is for 'interaction'. I think the concept of 'downward emergence' (that the microscopic laws of nature are approximations to some more subtle and supple totality) is helpful here and I am grateful for the reviewer's encouragement. I intend to take this further. My next step is a contribution to the proceedings of a conference at Castel Gandolfo, due to be published in early 1993. I do not think it is contradictory to Christian faith to believe that God brings about his determined purposes through contingent paths. As to his knowledge of the future, biblical passages like 2 Kings 20:1-7 and Ezekiel 33 do not seem to me to suggest a picture of a God who sees the whole of history 'at once'. It seems that we have to steer a path between the two unacceptable extremes of a Cosmic Tyrant who grants no true independence to his creation and Deistic Spectator who watches it all happen in indifference or impotence. Neither is the Christian God.

My intellectual endeavour continues to be to try to take with all necessary seriousness, both scientific understanding and the insights of traditional Christian belief.

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