

James Gregory After Dinner Discussion October 9th 2008

Eric Priest: Let's first go round the table introducing ourselves – I'm work at the junction of mathematics, physics and astronomy in the applied maths division, especially on the subtle complex interaction between the Sun's atmosphere and its magnetic field. I am also interested very much in the way science and religion complement one another and attend a local Episcopal church.

Julia Ogilvy: I'm a mix of things – business woman I suppose - but also, because of a renewed faith, perhaps a social activist. I work a bit for the government in London and up here founded an organization called Project Scotland. I am an elder in a local church and passionate about doing something about the state of the Church of Scotland. I'm shocked by a lot of what I've found in the church in lots of ways: in terms of its management, its structure, and the way things work today. As for what we were hearing today, I'm going to Rwanda soon and became closely involved with somebody who'd lost her family in genocide there. I am really intrigued by why it is that in Africa extraordinary things are happening, why in Rwanda the church is so powerful -- there is such a sense of forgiveness there -- why there are more and more Christians coming out of Africa, a country that seems to have suffered the worst of everything in this world. A question that was sparked from the lecture was to do with God acting providentially and regularities in the world, such as the seasons following: I was thinking about climate change and our impact on the seasons.

Robert Crawford: I'm Professor of Modern Scottish Literature here at the University of St Andrews. A couple of years ago I edited a book on 'Contemporary Poetry and Contemporary Science', and I'm interested in T S Eliot and in modern religious poetry.

Fiona Bond: I'm an advisor to this project, and my 'day-job' is to advise small and medium sized charities in business planning and funding strategy. I really enjoyed the lecture. I thought it was fascinating. I'd be interested to know in our 'pre-Socratic flailing' what the role of prayer is – what is the nature of God's interaction with the world?

Norman Stone: I'm Norman Stone – known in Scotland as Norman Magnusson. I'm really sad because I'm the son of a strict Baptist minister who was also the son of a strict Baptist minister, but I still drink wine and I make films. I was interested in what you were saying about experiment and experience. I was just reading that C.S. Lewis was interested in comparing experience with experiment. So, I'd like you to unpack that a little bit more at some point, rather than just being coolly experimental.

Eric Priest: But it's not just any films that you've directed – for example, *Shadowlands* and recently *Florence Nightingale*.

Norman Stone: Ah, yes.

Eric Priest: Great.

Alan Torrance: I teach theology here in the University. What intrigues me is the extent to which God just leaves the world to run itself, but you're obviously not saying that. What about open theism, in which God allows us to make ourselves or destroy ourselves?

Ian Church: I'm a first year Ph.D student in Philosophy here at St Andrews, and my main interest is in epistemology. I was fascinated by your comment of epistemology corresponding to ontology, so I was

wondering if you could elaborate on that further, and particularly how we make sense of that in terms of when we make mistakes.

John Walton: I'm a professor of organic chemistry here. I came into science really because I thought it would be a good way to find out how nature works. And I still have a tremendous kick out of either discovering something new about nature or having an idea myself. I was fascinated by your complexity theory and your array of bulbs, and how you find spontaneous self-organizations from that. You talked a lot about God interacting with the universe, but can God interact with individuals, and if so, how does He do so? Also, you said there were regularities in nature and so it wouldn't be legitimate to pray for certain things, and so that intrigued me as well. In particular, consider somebody who's reaching seventy-five/eighty years old -- there's a natural rhythm which says that his or her life is coming to an end. Would it then be legitimate to pray for an extended life when you're reaching that kind of a stage in your existence?

Ian Bradley: I teach practical theology and church history here. I'm also a Church of Scotland minister. There are three areas I particularly warm to in what you've been saying. One is in terms of the nineteenth-century reaction to evolution, which I've worked on and written about quite a bit. Tennyson's 'In Memoriam' comes to mind and the whole sense of the waste of evolution and how we square that with a God of love. A particular hero of mine is George Matheson, the blind Church of Scotland Minister who wrote the book *Can the Old Faith Live with the New?* -- the 'old faith' being Christianity and the 'new faith' evolution. For Matheson, there was a very clear synthesis between evolution and Christianity on the basis of the doctrine of sacrifice, which I, myself, have written a lot about and proposed a kind of natural theology of sacrifice. I'm interested God's creation as a work of God's sacrifice and God's self-limitation. Also, how does evolution work through a whole process of sacrifice, whereby species decay and die so as to give way for other species.

I also warm very much to what you said about openness and the idea of an open future. I'm working on a book at the moment, which is called *Grace, Order, Openness, and Diversity*, which is looking at the attributes of God, and so the openness of God seems to be very fundamental. In a sense is God open to himself? Process theology has the idea of God as the self-surpassing surpasser -- God himself in process and change. This interface between order and chaos, between openness and designed providence seems to me to be where where everything is at.

Wilson Sibbett: I'm professor of physics at the University. My main research is on the area of lasers, and I've spent quite a lot of my life in optical communications area, but more recently, I've been involved in trying to apply lasers in biology and medicine. The area I wanted to touch on was the education secretary at the Royal Society who lost his job recently due to controversial statements about teaching creationism along side evolution. Having been involved as science advisor for over five years in Scotland, I'm aware of some of the interfaces with schools and how you present various things. So your lecture was exceedingly helpful because you were setting up the whole range of structures around which you could discuss public issues.

Eric Priest: One difficulty over the Royal Society issue was how the media took advantage of it.

Wilson Sibbett: Well absolutely, but I think they could have been prevented from doing so with a bit of wisdom.

Leslie Stevenson: I'm a retired philosopher from this university where I've been for 40 years now, probably best known for a book on theories of human nature. There's a big difference between Kant and Wittgenstein.

John Polkinghorne: My mind is a whirl. I haven't been making notes.

Leslie Stevenson: You've sketched a picture for us of God interacting with the world in little sub-atomic objects, in ways we can never know – so there is an epistemological lack. My question is: how does that picture really differ from the picture in which God doesn't act at all? Are these matters of truth or falsity, or matters of picture reference or language-game choice?

Eric Priest: Leslie always was good at asking questions. We shared a flat early in our careers. He may have retired but he hasn't stopped thinking.

Sally Magnusson: I'm a journalist. One of the reasons I'm here is to make a little package for my Sally on Sunday radio programme about this whole lecture series – the reasons for it and why it's so successful -- why it's the best attended set of lectures that the University's ever had. Earlier this afternoon, I had a great interview with Eric and Alan about that. I've also pursued John twice (laughter) -- we did a full interview for the radio programme in the last series, and I also nabbed him again this afternoon. I was thinking around the table that if I were him, my heart would be sinking with each loaded question, so I'm not going to add to them.

Eric Priest: Okay great. Well, as Leslie said, we're going to be here all night if we're not careful, but please do put in your questions again as we go along. I thought maybe we could just start with the one that John and Fiona raised about prayer – the role of prayer in this. What kind of things should we pray for?

John Polkinghorne: There are lots of different ways of praying of course: there's meditative prayer and praise and petitionary prayer, but why should we have to ask at all since God knows what's happening? God knows what's best for us better than we do, so why doesn't God just get on with it? First of all, I think we have little room for maneuver in bringing about the future, but God has retained a providential room for maneuver in bringing about the future. I'm expressing a very traditional thought, but in slightly non-traditional language. When we pray I think we offer our room for maneuver to be taken by God and used in conjunction with the divine providential will. There are things that become possible when human and divine wills are aligned which are not possible when they are at cross-purposes with each other. I'd like to say we are looking for a laser-like coherence so that they add up and don't cancel each other out.

This means of course that prayer is not a substitute for action but a commitment to action. If I have an elderly neighbor who's continually telling the same old stories about the good-ol-days, I don't fulfill my Christian duties for that person by simply saying how I'm praying for him or her. I have to be prepared at least sometimes to go around and hear the old stories again.

There's another thing I think we do when we pray. John Lucas book called *Freedom and Grace* says one of the things we are doing when we pray is to commit ourselves to what we really want. God allows us to assign a value; that's not overruling, not just filling out a blank cheque for Heavenly-Father Christmas, but God takes seriously what we want. And I think that's both an encouraging and a sobering thought about prayer; it de-trivializes prayer in a sense. In the gospel, a blind man Bartimaeus comes to Jesus and stands before him and Jesus says to him, 'What do you want?'. It's perfectly obvious what he wants: he's a blind man for heaven's sake! He wants to be able to see, but he has to commit himself before he is actually healed.

Eric Priest: If we're trying to align ourselves with the will of God, that also means that an important part of prayer is not petition but just simply being in His presence -- so that we can align ourselves more.

John Polkinghorne: Yes. Absolutely. Prayer is a natural and even indispensable part of action. In my training as a theological steward we had to visit people in a ward in a Cambridge hospital, with people that had acute leukemia, and you couldn't believe that because you went around and prayed for them they were all going to miraculously recover. So, what you're trying to do is in some small way to be with them and perhaps help them be aware of the presence of God with them.

Sally Magnusson: I was just wondering what are you understanding by the answering of prayer in terms of God's interaction with the world?

John Polkinghorne: Well as I say, partly it is aligning our will with God's will. And once again I do think God graciously takes into account what is the longing of our hearts. I mean, in some sense we pray for our hearts' desire, though often we are mistaken about our hearts' desire. Was it Aquinas who thought that everybody seeks the good but we are often grievously mistaken about the nature of the good? One of the things we're trying to do in prayer is to allow God's grace to come and purify our notions of the good.

Sally Magnusson: But how does he take into account things which are current? What does that mean in terms of what you're outlining?

John Polkinghorne: What I'm struggling to say there, I think, is that all our interactions with God are more properly spoken of by analogy as being personal rather than impersonal. I mean in personal inter-relations there is give and take of value between the people who are participating. Not an equal give and take between us and God, but there is some form of mutuality involved here. Perhaps that's a mysterious idea, but I think it must be true.

John Polkinghorne: There's a parallel there too, you see. Another interesting comparison is between Christianity and Buddhism. Part of the concept of Buddhism is extinction of desire, but in Christian thinking you see from Augustine the purification of desire is the key. Desire is a good thing, part of his perfect purpose.

Leslie Stevenson: You see there are two different stories going on: one is the story of personal interaction and spiritual development. The other is the physical stuff -- God intervening in some way or other.

John Polkinghorne: They are complementary aspects of the same thing: for example, suppose God does interact with me in some way by an input of information to my brain. Quite a lot of people think that God only interacts with consciousness, but God can't interact with my consciousness without interacting with my brain.

Leslie Stevenson: So you think the way God interacts with us is by jiggling the little things.

John Polkinghorne: That's a very crude way of putting it but I don't think God does it by jiggling or scrambling around in the subatomic world but within the openness of the world. I certainly don't know exactly how God acts in the world, but I know the direction in which I am trying to think about these things; I know the direction in which I want to wave my hands. And it is an open process where there are a whole variety of different causal principles to bring about the future.

Leslie Stevenson: We interact by speech, by action, by tone of voice, by facial expression, all these things. God clearly doesn't do it that way.

John Polkinghorne: Well we interact first of all I suppose by forming mental intentions of what we want to do. Now that certainly has a physical aspect in neural processes, but I don't think it is simply a concatenation of neural firings. I can't solve these problems, but I don't want to deny either embodiment or the fact that we have aspects of our lives that are properly considered under the rubric of mental and spiritual. That seems to me actually just fundamental human experience, in talking about experience – and most of the things that we know we don't know through experiment. We don't by experiment know that Bach's Mass in B minor is a great work of art; we can see that discernment and perception are very important gifts. But almost all our personal understandings of friendship or the value of beauty or of moral imperatives, it seems to me, are forms of discernment, which are certainly not experimental. Experiment is great but it's a very limited technique.

Julia Ogilvy: Can I ask also about the role of Jesus in this as God's demonstration of a way of interacting with us?

John Polkinghorne: It's an extraordinarily mysterious and true idea that God has acted in Christ to show us in the most accessible way -- not the totality of the divine nature but significant aspects of it. I believe that in Christ God also participated in the suffering of the world.

We can't attain certain knowledge. You have to go for the best explanation, which is sufficiently well motivated to commit yourself to it, knowing you might be wrong. That's where corrigibility comes in. Of course, in truly deep science, correction is never simply abolition of the past: Einstein didn't show that Newton was wrong, he showed only that Newton didn't tell the whole story. So there is a sort of refining and perfecting of knowledge, but not a complete abandonment of the past. The history of science is the clue to the philosophy of science, but you have to see how it actually happens and to see the whole history of science not just Galileo. Most of science has happened because in the twentieth century because of the cumulative character of science.

Robert Crawford: If I understood what you were saying earlier correctly, it seemed to me you were talking in terms of a kind of alignment that the individual had to find with God's will, a kind of Dante-escan relation almost where in his will is our peace. Could you talk a wee bit about the difference between that and simple fatalism?

John Polkinghorne: Oh I think there's a great debate there. First of all, simple fatalism seems to me is to say "OK, what's gonna happen's gonna happen; it's in God's hands, let God get on with it." An attempt to align human will with the divine will is then going to be problematic, to involve struggle and revision. The Psalms are relevant here – they are full of the most extraordinary questioning, with a huge range of human spiritual experiences represented in them, including lots of protests.

Eric Priest: Very human.

John Polkinghorne: Absolutely, very honest about feelings and doubts -- so it's a complex process.

Ian Bradley: The new Church of Scotland hymnal is full of protests. One thing that's slightly worrying me as you talk is this: you've a very kind of Whig-view, if I may put it that way, of progress -- of everything getting better. I broadly share it, but I kept thinking when you were talking this afternoon about global warming and the prospect of catastrophe in the natural world, of the profound pessimism that's around among many young people today. I just wonder whether what you're articulating is not a kind of twentieth-century view. How do you square global warming with God as providence, because it could all be about to collapse?

John Polkinghorne: Well, that's a very good example. The fatalist view would say "global warming's gonna happen, we have to make the best of it", or you could take the view "OK, that's God's sovereign act by some poking of the divine finger". We know a lot about global warming; we don't know everything and we don't know everything about how we ought to respond to it, but we have some pretty good ideas about the necessary things that we have to do. What we don't possess as a society, either nationally or globally, is the political will to do those things, because we feel that people who have the power to make the decisions are politicians for whom the horizon of expectations is the next election. So, if the world does heat up beyond some unpredictable tipping point, and the whole thing really roars away, then that's not God's fault – it's ours. We have the knowledge but we don't have the will to at least ameliorate it.

Eric Priest: This is very much the topic of our next lecture in February, so please come along then.

Julia Ogilvy: But John you talked about fixed things with the seasons changing.

John Polkinghorne: One of the fixed things would be for example that, if we keep on pouring carbon dioxide into the atmosphere, the earth is almost certainly going to continue getting warmer, but it's subtle because, as the earth warms, more water evaporates and more clouds form which tends to stop it warming. But the most likely projections into the future are of the overall effects of the earth getting hotter, but we can't expect God to change the laws of physics. It's just like Origen. If you want the cool of twentieth century earth in the twenty-first century you have to be prepared to do something about it.

Eric Priest: So to what extent is God outside time? Does he know the future? Does he know what's going to happen with global warming or not?

John Polkinghorne: Well there are two attitudes here. In classical theology, Aquinas would say that God is totally outside time – he sees the whole of history laid out before the divine gaze all at once. God does not foreknow the future; every moment of history is contemporaneous to God. So God knows everything that happens and is outside time. And since God knows things absolutely in accordance with their nature, that would mean that Einstein was right and we live in a block universe in which the true reality is the space-time continuum. In this view, human experience of the passage of time is a psychological trick of perspective.

But I think we live in a world of true becoming, in which the future is not there already, but we make it as we go along. And if that's true, and God knows things truly, I think God will know that world in its becomingness. God will not simply know that events are successive, but God will know them in their succession. If that's right, then there is both time and eternity present in the divine nature. Of course, there must be a timeless aspect to God; God is not in thrall to time as you and I are, but God participates in a temporal world when God brings the temporal into being. I think God acts through time. This is highly contentious, but I actually don't think that God does know the future in the sense of knowing it in detail already. Of course God sees how history is moving rather more clearly than you and I do, but I don't think God sees the unformed future. However, there's no imperfection in the divine perfection, because if we live in a world of becoming the future is not yet there to be known. God knows everything today that is knowable today, rather than having absolute omniscience and knowing everything that will ever be knowable. Obviously that's highly contentious, but I think it's actually true.

Robert Crawford: So God sets up providentially these developmental laws and then it's up to us in conjunction with all sorts of other forces and information to make of them what we will?

John Polkinghorne: Well I think there's a little bit more to it than that. I do think God respects the regularities of nature, which includes the highly fruitful propensities that are present in nature and which are explored and brought into being by evolution. That's part of the story, but I also believe, along with my friend Arthur Peacock, that God is in improvisatory relationships with creation, that God reacts to creation - the history of creation as it happens. Is Pharaoh going to come out of Egypt and drive away the Babylonian armies besieging Jerusalem or not? God foresees that's not going to happen, because he can see that Pharaoh was not thinking in that direction and so he sends Jeremiah to the King of Judah. But I don't think God foresees, as I said to Eric in the car heading over this morning, which particular Babylonian soldier is the first to put the torch to the temple to burn it down.

Ian Bradley: Well, that's process theology isn't it. I mean, if God is reacting to creation then God is changing.

John Polkinghorne: Well it is a theology of process, but not technically a process theology. I think it's cousin to it.

Ian Bradley: So does God choose to react to creation?

John Polkinghorne: According to process theology, God has no other choice, but I believe that God has graciously chosen to act in this way.

Ian Bradley: We are then actually saying something very different from an omnipotent and omniscient God.

John Polkinghorne: Well, you have to qualify what you mean by omnipotent and omniscient. By qualified omniscience I mean a current omniscience rather than an absolute omniscience. Qualified omnipotence doesn't mean God can do absolutely anything - He can't decree that tomorrow $2+3=5$. God is not externally constrained by anything, but God is internally constrained. God can do anything God wishes to do, but it seems that God will never wish to do what is inconsistent with the divine nature. A good God cannot do truly evil deeds, for example. And I think that the truly loving God cannot create a universe that is a divine puppet theatre.

Eric Priest: Also remember Jesus in Gethsemane -- to me he was in genuine agony there, he didn't know what was going to happen.

John Polkinghorne: Absolutely. I think Gethsemane is one of the most profoundly important parts of the gospel story - it shows us that Jesus has truly accepted being human.

Eric Priest: Norman, you had a question.

Norman Stone: I was just going to ask about the process of becoming. I just wondered on what you based that idea? Was it logic or biblical, or was it a comfort factor, that you feel more comfortable with the fact that you are not predetermined?

John Polkinghorne: Well, it's very consistent with the biblical picture. I mean God really is interacting with this world. Of course, sometimes in the Hebrew scriptures God changes His mind. God says "if you do this you'll be in trouble if you don't you'll be alright; it's a choice you have to decide what to do." With the death of a merely mechanical view of the world we are part of a world of true becoming in which there are many causal principles. I think we certainly have a strong experiential basis for thinking we live in a world of true becoming in which we don't know the future. And I don't think that's just a

trick of our perspective, I think it's a feature of the world, and it's actually quite a desirable feature of the world -- the flexibility and openness of creation, creating an unfolding creation at some point. This is not a performance of some fixed score but is more like an improvisation of some beautiful theme. That seems to be pretty consistent with the character of God.

Norman Stone: But that would mean you wouldn't agree with prophesy.

John Polkinghorne: I don't believe in prophecy in the sense that prophets see the detail of the future. I've already said I think that God inspired Jeremiah to realize that Egypt wasn't going to come and the King had to settle with Babylon. He was forth-telling, he wasn't foretelling, in the sense of laying out the detailed picture. And similarly, I believe that, when Jesus went to Jerusalem, he knew he was going to a dangerous place -- he knew there was going to be a showdown with the authorities, bearing in mind the passion predictions of the gospels -- I don't think they're simply prophecies after the event, I think that they are something Jesus did say to his disciples. So he knew there was going to be a showdown, and he trusted that God would vindicate him in some way, but he certainly didn't see the details of holy week -- that's why Gethsemane is so significant.

Norman Stone: Are you saying that they knew that a messiah was coming but they didn't know the colour of his hair?

John Polkinghorne: Yes, there are qualitative things almost happening in the world that I think we can know and God knows, but that doesn't mean a quantitative detailed knowledge. God is the great cosmic grand-master of chess and creatures are the club players, and the club players will make whatever moves they like, but the grand-master is going to win the game because the grand-master understands the game the way the club players don't. So, I, it's perfectly consistent to believe that God can bring about determined ends to contingent paths. David Bartholomew, who wrote a book called *God of Chance*, is very helpful here.

Eric Priest: Does that help, Alan, your question about where you draw the line, where God leaves the world to run and where He acts?

Alan Torrance: Not completely.

John Polkinghorne: I'm talking about free will. It seems to me an intuitional Christian experience of life, that we make our own decisions and have responsibility for what we do, and nevertheless God's at work in our lives in some sort of way, usually in a way that we only perceive properly retrospectively. Some people have dramatic events, but for most of us God nudges us through circumstances, through things that people say to us which are significant but we don't realize it at the time.

Leslie Stevenson: If the future is genuinely open and thus dependent on human actions, then we have ourselves to blame if we fail to do anything about climate change. It's not so very long since we talked of nuclear winter.

Eric Priest: We have a huge responsibility.

Leslie Stevenson: Indeed, if whether these things happen or not depends on human's free will, God has given us this free will, he can't prevent us using it, so he can't prevent human catastrophe.

John Polkinghorne: Yes, just as on the smaller scale, God doesn't stop a murderer.

Alan Torrance: Do you think God never stops the murder?

John Polkinghorne: Well, I'm sure that God is working against murder rather than for it. If there was a genuine gift of freedom to creatures, then it will be a gift that will be abused as well as used.

Norman Stone: But there are cases of God acting -- you mentioned Bartimaeus, for example. There were lots of other blind people kicking around, but Bartimaeus is the one who gains his sight. You talked about the limits to the divine finger of God coming in and interrupting. My question would be: in your view of the world and of theology and of the way God works, do you say God never puts his finger in time or sometimes does?

John Polkinghorne: Well I don't like the putting in the finger idea, because that looks as if it stresses sporadic intervention, but I certainly wouldn't say that God never interacts with the world. No, I was trying to lay out a way to take science seriously together with the view that God is in continuing interaction with the world.

There are two mysteries that I didn't touch on in the talk. First of all, there is the mystery of individual human destiny. If somebody is seriously ill, the church prays for their healing, but healing may come in some form of physical remission or it may come through them being able to accept the imminent destiny of death. There is a mystery of individual human destiny. The other point about suffering is the strangeness of its effect. We all know people who have endured terrible suffering of one sort or another, but who are now in a marvelous, deeply moving way able in some sense to transcend it and are clearly spiritually deepened by their experience. But we also know people who have been absolutely diminished by suffering and are just unable to cope with it. It's easy to start producing little smart one-liners about suffering rather than entering into the pain and mystery of it.

Eric Priest: But I think a lot of suffering is because of us -- it's due to our not caring enough for people or being selfish, self-centered and so on. For that kind of suffering we have a huge responsibility to try to do better in future and produce less of it. But that's only part of the story.

John Polkinghorne: Yes, let's go back to the tsunami. Such natural disasters can be made more terrible by human lack of care. If there had been a proper warning system out in the Pacific, then fewer people would have died. Austin Farrer in one of his books asks, "what was God's will in the Lisbon earthquake?" 1755 All Saints day, everybody's in church, there's a terrible earthquake, churches collapse, 50,000 people died. Farrer's answer is very hard but I think it's true. He said, God's will was that the elements of the earth's crust should behave in accordance with their nature. They are allowed to be, just as you and I are allowed to be. Now, of course, you can't quite talk about the freedom of tectonic plates in the same way you talk about freedom of moral human beings, but there is a sense in which I think allowing inanimate creation to be itself is probably a necessary ground for becoming capable of being ourselves in a moral self-conscious way.

Alan Torrance: I am in a relationship to my children, who are in all sorts of stages now in their development. You know every parent's extremely pleased to see their children develop, blossom, to be free, not contained, controlled, et cetera, but occasionally, one actually does contain randomness, free acts, for the sake of their flourishing. If they dive under a car, they will never be free as human beings.

John Polkinghorne: Yes, well that's true, but on the other hand there is also a stage in development as children grow into adulthood where they really have to be allowed to be themselves and make their own mistakes even if they are disastrous -- and life-destructive mistakes.

There is a problem one must answer. If God does interact with the world, why isn't there more of it around? Noone yet has a convincing answer to that. I'm suggesting that it's better not to think of God as an interfering magician. If you like, the range of divine providential maneuvering is more restricted than we might have thought it was.

Alan Torrance: What was God's role in the Cuban missile crisis in 1963?

John Polkinghorne: God is in some way at work seeking to deter the destruction of nuclear war. So I think God knows what God can do, and we're back to what we mean by divine omnipotence. Divine omnipotence is not so easily turned on and off as we suppose it to be. Divine consistency is important and you need an eschatological hope. It's absolutely true that a ticket to heaven isn't the simple answer to the unmerited suffering, terrible suffering, of a child in this world. Christopher Southgate has just written very interesting book called *The Groaning of Creation*, and it's about animal suffering. Most of theology is actually about human suffering. He compares Genesis 1 ("God saw that all was good") and Romans 8 (creation groaning and travailing until now awaiting the freedom).

Robert Crawford: Let me just ask if you would like to comment on Wilson's point. As a non-scientist the Royal Society came over as being really narrow, because it created an impression of a refusal to engage with a mindset that is other than that of scientific secularism.

John Polkinghorne: Well I did actually write a small piece in the credo column of The Times. I know Michael Reiss actually -- he's a very sensible chap who said clearly and unequivocally that evolution is far and away the best explanation of the variety of animal life and that there is no scientific basis for creationism. He also says that he believes that if creationism is raised in a class the teacher should be prepared to respond and to indicate why it is not scientifically acceptable. All these are entirely rational reasonable responses, but he has been the victim of our sound-bite culture which dominates the media. I regret it and am frankly disappointed in the Royal Society. I believe the initial reaction was to support him and then some militantly atheistic fellows, not just Dawkins, are said to have produced a lot of pressure under which the Society gave in. In my view it was unjust and demeaning.

Eric Priest: Well, I do think we should call it a day, even though we easily could carry on till midnight. To me, one of the tragedies of suffering is the way it can drag us down, to the point when we lose hope and faith. However, what John has done today so brilliantly (both in his talk and in the discussion at dinner) is to give us a much deeper understanding of the nature of the interaction between God and the world and its implications for suffering, and thereby he has given us much more hope; and therefore we can each go out and do our own small bit to relieve suffering and I think that's what we're all called to do. John it's been brilliant to have you with us. Thank you so much.

John Polkinghorne: Thank you all.