



## An interview with John Polkinghorne

Finding a  
balance between  
Christianity  
and  
science

By KITTY FERGUSON

*John Polkinghorne, theoretical physicist, Anglican priest, theologian, author, and until his recent retirement, president of Queens' College, Cambridge, is one of the foremost apologists for a world view that encompasses both science and the Judeo-Christian religion. He has titled a recent book *The Faith of a Physicist: Reflections of a Bottom-Up Thinker*. He was interviewed recently by Kitty Ferguson at the General Theological Seminary in New York City, where he was on sabbatical. Ms. Ferguson, a resident of Chester, N.J., is author of *The Fire in the Equations: Science, Religion and the Search for God*.*

**KF:** Let's begin with some background. Where did you grow up? Did you have a religious upbringing?

**JP:** I was born in Somerset in England and grew up in the country. My mother and father were both religious people, and we went regularly to [an Anglican] church. My parents didn't talk a lot about religion, but it was clearly important to them.

**KF:** In your student days, at school and at university, were you already thinking about religious questions?

**JP:** Yes. I've always been part of the worshipping and believing community. I've never been outside the faith or set it aside. When I was an undergraduate at Cambridge, studying mathematics, I was much influenced for a while by the Christian Union group there, who are rather conservative, evangelical people, and I learned some important things from them, about treating scripture seriously and making a commitment to Christ. But there was also a certain narrowness to their point of view, both intellectually and culturally. As I grew a bit older and a bit more independent perhaps, I moved away from that.

**KF:** When you chose physics, did you have a sense of making a choice between that and a religious career?

**JP:** No. Certainly not. I had some talent for mathematics and I wanted to use that talent, and I became interested in how you could use mathematics to describe the physical world. So I moved from mathematics pure and simple into theoretical physics, where I did my Ph.D. I worked in that area for a further 25 years, at Cam-

bridge most of the time, much enjoying it and feeling it was a Christian vocation. But then there came a time when I thought I might do something else.

**KF:** When did you begin to think a career change was in order? How did that come about?

**JP:** I'd long thought that I wouldn't stay in theoretical physics all my life, because though you don't always make your best theoretical discoveries before you're 25, you probably do before you're 45. I had passed that date. I'd seen senior friends of mine get a little bit miserable as the subject moved away from them. I thought I wouldn't let that happen to me. I began to think about what it was I was going to do next and I talked to my wife, Ruth, about it, and very quickly, without any great drama, the idea of seeking ordination as the next step seemed the right thing to do.

**KF:** Could you briefly describe the path your life has taken since then?

**JP:** I went to seminary in Cambridge, at Westcott House. I was older than the principal. And then I was ordained and after that was a curate in a large working-class parish in South Bristol. After three years of that I went to be a vicar in Kent, looking after a largish village. Then, out of the blue, I was asked if I'd like to return to Cambridge as the dean of Trinity Hall, which meant the parish priest of the college, so it was a partly academic, partly pastoral job. By then I'd come to the conclusion that thinking and writing about science was the thing I ought to do. I'd done a little publishing in the area. I had more things I wanted to write and it's hard to do it in parish life. So when this unsought opportunity came, I decided, again talking to Ruth, to come back to Cambridge.

After three years, I became president of Queens' College — the master of the college, for seven years.

**KF:** In my experience, those who write in the field of science and religion fall into several different categories. Perhaps you ought to tell us where you see yourself in this picture.

**JP:** I see myself as someone who wants to take very seriously what science has to say about the history and structure of the world, and also to take very seriously what religion has to say about God and God's revelation of the divine nature to humankind — which for me as a Christian of course is focused in Christ.

I'm a consonance kind of person. I want to see how the religious view of the world — the Christian view of the world and the scientific view of the world — fit together. They aren't just alongside each other with no intersections. But one isn't really the clue to the other either. They have their own domains. Yet they have to fit together and that's what I like to explore.

**KF:** Do you see your task as helping people know that science is not an obstacle to belief?

**JP:** I think I go beyond that. I think science is quite encouraging in this sense: that the beautiful pattern and the fruitful history of the universe do suggest a Mind behind it all. Particularly significant is the fact that in some sense that fruitfulness and pattern had to be built into the laws of nature from the start — it does suggest that something is happening through cosmic history, that there's a purpose behind it. Of course, that doesn't get you very far, even if you were to think those arguments absolutely watertight. I think they are insights rather than demonstrations. But even if you were terribly convinced by them, just to believe there is a mind and purpose behind the universe wouldn't get you very near the Christian God. I don't want to stop there. There is a very deep human longing to know if reality is on our side. And I believe that's where we need some form of personal encounter with a God who, of course, is beyond personality but is more fittingly described in personal terms. That's where Christianity comes into it.

**KF:** Would you tell us what you mean when you call yourself a “bottom-up thinker.”

**JP:** Scientific habits of thought, which I call bottom-up thinking, are also a way of approaching theological thinking. Bottom-up thinking means moving from experience to understanding rather than from some sort of general principles downward. It’s the way scientists think about science, and I believe there’s merit in it as a way of approaching theological thinking.

**KF:** Let me ask you this: If someone started out without any religious background, not believing in God at all, spiritually illiterate — as many young people today seem to be, just assuming that “nobody believes those things any more” and not even sure what “those things” are — could bottom-up thinking get them to the level of belief you have today?

**JP:** I think it would help. What I want to put to such people if they do cross my path is, first of all, to encourage them to take a very generous and realistic view of the nature of reality — to see that science describes certain aspects of reality but misses others. A good illustration of that is science’s description of music as just vibrations in the air. So I’d encourage them to take seriously not only what science says, but also to take seriously that we have moral knowledge, and to take seriously our experiences of beauty — I think they’re windows into reality of a special kind.

I’d want them to explore this more generous view of the world, and then, having lifted their eyes perhaps a little from rather limited horizons, I’d want to say, well, also you should recognize that there is religious experience and that religious experience is particularly focused on foundational events and foundational people who seem to have been particularly transparent to the presence of God. If you really want to know about these things, you should be open to using this unique, irreplaceable source of evidence. Then I’d start talking about Christ and I’d want to get fairly soon to talking about the Resurrection. I think the thing that’s striking about Jesus is that his life ends in middle age and failure rather than in old age and fulfillment, like all the other religious leaders of the world. If that had been the end of the story, we probably would never have heard of him. That would have been just too miserable an end to leave a mark in history. So I think the Resurrection happened. That’s pretty much what I’d tell them.

**KF:** I gather, then, that you would not agree with Paul Davies (author of *God and the New Physics* and *The Mind of God*) that science is a surer road to God than religion.

**JP:** Paul is very struck with the beautiful order of the world and the fruitfulness of cosmic history, and he thinks that does indicate that there is intelligence behind it all. But he goes on to say that he sees no sign of the personal God of the Hebrews and Christians. I think he’s never looked in the right place. When you look at the structure of the galaxy or the structure of matter, you’re looking at an impersonal realm. You will not meet even human personality there, let alone divine personality. If you’re going to meet the God and Father of our Lord Jesus Christ, rather than just the Cosmic Architect, you’ve got to take the risk and deal with the ambiguity of personal experience and personal encounter. I think that Paul Davies knows very little about any religious tradition and seems to be unwilling to explore any. It’s not surprising that he hasn’t found the God of the Hebrews and Christians. He’s not looking where that God is to be found.

**KF:** You also use the term “motivated thinking.”

**JP:** Yes. Many of my friends think that religious belief is totally unmotivated belief; that it’s something that somebody — the Bible, the church, the pope — whose authority couldn’t possibly be questioned, tells you you’ve got to believe. “Here’s the Nicene Creed. Sign on the dotted line.”

Of course I’m not prepared to sign on the dotted line for that sort of thing! I have reasons for my religious beliefs, reasons that arise from my own experience, from thinking about the record of the foundational events of Christianity and the experience of the church. All that isn’t terribly different from the motivations for my scientific belief, which are partly my own small scientific work and discovery, the discoveries of the community, the fundamental, foundational experiments that have opened up new regimes of science. There are quite strong analogies here.

**KF:** Could you comment on the “inspired teacher” interpretation of Christ and why you reject that?

**JP:** We know that Jesus was indeed an inspired teacher. What I find particularly inadequate in interpreting him as only an inspired teacher is that if that’s what he was, then he just gave us yet more good advice — and we really have quite a lot of other good advice about how we ought to live our lives. So that doesn’t do much for me. The Christian experience has always been that in the risen Christ there is transforming power, that those who commit themselves to him experience new life, transformed life. They have the grace of God working within them in a way that enables them to follow the good advice. That makes Jesus much more than just an example or a purveyor of good advice.

When you read the New Testament, it’s full of people who are struggling to find ways to describe their experience of the risen Christ. They just can’t contain their account of what he means to them in simply human language. So they get driven to use divine language about him — very cautiously because they’re monotheistic Jews and they’re not rushing into believing that there are divine men around. But they can’t describe their experience of Jesus adequately without using divine language about him. And I find that striking. I think that is the experience from which, in a bottom-up way, the church eventually reached the conclusion — the right conclusion I think — that Jesus is the meeting point between humanity and divinity, both human and divine.

**KF:** You’ve written that in no generation have we ever had an adequate concept of God. Could you comment on that?

**JP:** That has been an absolutely key element in theological understanding, that God can’t be caught in human rational nets. That doesn’t mean we can’t think about God, but we have to think in ways that are open to the fact that we are never going to do justice to the mystery and to the reality of what we are trying to speak about.

We know a lot about the physical world, but we certainly don’t know everything about it. For instance, we don’t know everything about the structure of matter. It’s easier to learn about the structure of matter because we can put it to the test, pull it apart and see what it’s made of. We obviously can’t do that to God. But even the physical world seems to be inexhaustible in its richness and structure, and no human understanding of it is final and completely adequate. If that is true of a world that we transcend, it must be truer still of a world that transcends us. □

**John Polkinghorne’s books include:** *The Particle Play* (W.H. Freeman, 1979), *One World* (Princeton University Press, 1987), *Science and Creation* (New Science Library, 1989), *Science and Providence* (New Science Library, 1989), *Reason and Reality* (Trinity Press International, 1991), *The Faith of a Physicist: Reflections of a Bottom-Up Thinker* (Princeton University Press, 1994, Fortress Press, 1996), *Beyond Science* (Cambridge University Press, 1996), *Searching for Truth* (Crossroad, 1996).