

Interview of Maureen Cavanaugh with John Polkinghorne, Nov 10, 2010

([transcript](#) revised by John Hobbins of [Ancient Hebrew Poetry](#))

MAUREEN CAVANAUGH: I'm [Maureen Cavanaugh](#), and you're listening to [These Days](#) on KPBS. Just a few years ago, we were hearing about the so-called "war against science." Conservative religious leaders began taking political stands against concepts like global warming and evolution. And in recent years we've also heard from scientists criticizing organized religion, writing books advancing the argument for atheism.

In the middle of all this, many people find little conflict between science and religious faith. One of the most prominent voices for the peaceful coexistence of religion and science is my next guest. The Rev. Dr. [John Polkinghorne](#) is a fellow and former president of Queen's College at Cambridge University. In 2002, this renowned British scientist was awarded the [Templeton Prize](#) for his contributions to research on the connections between science and religion. Dr. Polkinghorne will be in San Diego starting Sunday for [a series of lectures](#) at [Point Loma Nazarene University](#). And it's a pleasure to welcome you, Dr. Polkinghorne.

DR. POLKINGHORNE: Thank you. I'm very pleased to have the chance of talking.

MAUREEN CAVANAUGH: Now, science was your first career. Can you tell us what inspired you to pursue a career in science?

DR. POLKINGHORNE: Well, I think two things. First of all, I was good at mathematics and I work from the mathematical side of physics and that was a very enjoyable and interesting thing to do. The other thing is I'm - very much see that science helps us to understand the world in which we live. And I think all my life really I've been seeking truth and understanding. But science doesn't give you all the truth or all the understanding - it certainly gives you some of it. So I'm - was very glad to spend 25 years working as a theoretical physicist, and indeed regarded it as being a Christian vocation to do so.

MAUREEN CAVANAUGH: And indeed, you decided in 1979 after those 25 years to resign from your professorial chair at Cambridge University to study for the ministry in the Church of England. What motivated you to make that change?

DR. POLKINGHORNE: Well, I want to make clear, I didn't leave physics because I was disillusioned with it. But in these very mathematical subjects, you do your best work when you're young. And I felt that after 25 years, I had done my bit for physics. The time had come to do something else, but because Christian belief has always been central to my life, the idea of seeking ordination and eventually becoming an Anglican priest seemed to be the right thing to

do. And so the second half of my life, I've - that's what I've done. And my main intellectual interest for the last 25 years has been trying to understand how the insights of science and the insights of religion in my view fit together with each other, reinforce each other, rather than being at war with each other.

MAUREEN CAVANAUGH: Even before you began your second career, if I can say it that way, in the ministry, did you see that -- did you see that there was an affinity between science and religion? Did you *always* feel that way?

DR. POLKINGHORNE: I think I've always have felt that way since I was old enough to think about these issues. I mean I think they're friends and not foes because they're both concerned with the search for truth. The question of truth is as central to religion as it is to science. Of course, they're looking at different *aspects* of the truth. Science is essentially asking you *how* things happen in the world, or the process of the world. Religion is asking, in my view, a deeper question, which is *why* things are happening, if there is meaning or purpose at work in the world. If I'm going to understand the very rich and remarkable world in which we live, I need to sign on to both of those questions. So I think that science and religion have things to give to each other.

MAUREEN CAVANAUGH: Now why do you think it's important for people to study and consider *both* scientific theories and religious teachings?

DR. POLKINGHORNE: Well, basically I think because I believe that knowledge is one and truth is one. And though science doesn't give us all the truth, it certainly gives us some of the truth. And it grieves me when I sometimes see religious people who somehow fear the truth of science. I'm sure they're sincerely wishing to serve the God of truth. And they should welcome, in my view they should welcome truth from whatever source it comes. And some of it certainly does come from science.

MAUREEN CAVANAUGH: I'm speaking with the Rev. Dr. John Polkinghorne, he's a fellow and a former president of Queen's College at Cambridge University. He's also been awarded the Templeton Prize for his contributions to research on the connections between science and religion, and he's coming to San Diego starting on Sunday for a series of lectures at Point Loma Nazarene University.

Now, Dr. Polkinghorne, I read that you're a founding member of [The Society of Ordained Scientists](#), and you were the first president of [The International Society for Science and Religion](#). So what is the mission of these two organizations?

DR. POLKINGHORNE: Well, I think they both have a future and quite an important future. The Society of Ordained Scientists is for people who are in the ordained ministry and who have a

serious scientific background. And we are I think people who *can* help others to take seriously both what science has to say and what religion has to say. I was very pleased to have an association with the founding of The International Society for Science and Religion because a lot of the work on how science and religion relate to each other has been done in Europe and in North America. But there are insights that we need to draw on from all over the world - and indeed from all faith traditions. And the International Society is seeking - it's a slow business - but it's seeking, to be truly international and truly interfaith, in that sense. And that I think that gives it strength and relevance.

MAUREEN CAVANAUGH: Now, as I was introducing you, I referred to the conflict that has developed over recent years between science and religion - some very conservative religious figures disputing some scientific theories and findings, and some notable scientists basically promoting atheism as the only reasonable approach to studying the world. What do you think is fueling the current conflict that's taking place between religion and science?

DR. POLKINGHORNE: Well, I think what's fueling it is the high profile, rather loud and assertive comments that are being made by two extremes, two *fundamentalist* extremes. There are religious fundamentalists who think that religion and usually and particularly the Bible, tells you the answer to everything. And I don't think that's true. I think the Bible is very important, but it isn't addressing, for example, answering the sort of questions that science asks. Equally there are scientific people, the New Atheists as they're often called, who somehow think that science, which is very successful, is *so* successful it will answer every question worth asking. And I think that's clearly untrue, too. Science is very good at asking the question of *how* things happen. But it - by its very nature, it doesn't address the questions of *meaning* or *value* or *purpose*. And those are the questions we also have to address. So the two extremes are at war with each other in a way that distresses me about both of them. But I think sensible people, if I may say so [laughs], are in the *middle*, trying to learn, and take seriously, the insights of science and the insights of religion, and I think we have a broader and a deeper view of the world by doing that, than we would have with either extreme on its own.

MAUREEN CAVANAUGH: We here in America are very attuned to the debate that has been going on in recent years between science and religion on several important subjects. But is the same kind of debate happening in Britain, in other parts of Europe?

DR. POLKINGHORNE: Well, to a much lesser extent, I think. It's one of the things that puzzles those who come from the other side of the Atlantic, how polarized much of the discussion is in the United States. Of course, there are fundamentalists of science and fundamentalists of religion in Britain and Europe, too. But they're really quite a small section of the population. But in the

States, they seem to be really quite a substantial section of the population. And I'm puzzled with that, I don't know why that should be so, and of course, I'm saddened by it as well.

MAUREEN CAVANAUGH: We have had quite a track record when it comes to the theory of evolution here in the States, and we also have had a number of iterations of creationism that have challenged the theory of evolution, and many people want some form of creationism taught in schools. What is your feeling about that?

DR. POLKINGHORNE: Well, I think -- I think that science lessons should teach science, and I think so-called creation science actually is not really scientific - it seizes on the answers it thinks it knows beforehand. But I am certainly in favor of people exploring, in a suitable setting, the question of how science and religion relate to each other.

Actually, you know, when Darwin published his great book, [The Origin of Species](#) in 1859, from the very start there were religious people who welcomed his insights. One of them was a clergyman friend of his called Charles Kingsley. What Kingsley [essentially] said was this, he said: no doubt God could have snapped the divine fingers and produced a ready-made world, but Darwin has shown that God had done something *cleverer* than that, by bringing into being a creation so endowed with fruitfulness, with potentiality, that creatures could be allowed, within certain limits of course, to be allowed, to *make themselves* [for Kingsley's exact words, expressed in a letter to Darwin dated 18 Nov 1859, go [here](#)]. And that's the theological way, the religious way, of thinking about an evolving world. I find that a very helpful insight to hold on to.

MAUREEN CAVANAUGH: I'm speaking with Dr. John Polkinghorne. He is a former president at Queen's College at Cambridge University, was a theoretical physicist for 25 years, and then decided to study for the ministry in the Church of England. He's coming to San Diego for a series of lectures on "The Search for Truth in Science and Theology." I'm going to ask you though, sir, aren't there some things that really don't mix very well between science and theology? Are there any personal struggles that you've had that you share in your series of lectures in trying to reconcile science, what science, what we're discovering about the world through science, and what we are told, sometimes, to believe, in theology?

DR. POLKINGHORNE: Well, of course. I mean there are some puzzles about how different aspects of these two inquiries into truth relate to each other, just as there are puzzles within science, how different insights – say the insights of physics and the insights of biology relate to each other. I mean, that's just part of the complexity of the world in which we live, and the complexity of the knowledge that we need to understand it. But I don't think there are *real* points of conflict. They can arise from the religious side if people in my view misuse the Bible. When

you read any form of literature, including of course the Bible, you have to figure out what *kind* of literature you're reading. If you read poetry, and think it's prose, you'll meet some very odd confusions. I mean when Burns writes "My love is like a red, red rose" – he doesn't mean his girlfriend's got green leaves and prickles: we understand that. When I read Genesis 1 and 2, I don't think I'm reading a divinely dictated textbook of science to save me the trouble of doing science. I think I'm reading something actually more interesting and more profound than that. I'm reading a *theological* text which says that nothing exists in the world except through the will of God. In Genesis 1 it says, God said, "Let there be ..." - I think it's eight times in there. So it's very important not to abuse the Bible. One of the ironies of an extreme fundamentalist position is that people who are *wanting* to honor Scripture are in fact making the wrong use of it.

MAUREEN CAVANAUGH: Now as you toured the United States and you're headed toward San Diego to begin your series of lectures, I'm wondering, you say that you find that we are polarized over here in a way that you don't find so strongly in Britain or in Europe between this idea of conservative religion and science, the two polar opposites, so to speak. How do we – how would you recommend we begin to bring those two sides together?

DR. POLKINGHORNE: Well, I think it's quite a task. I mean, the way I try to do it myself is to try to discuss some of the issues, for example, to discuss Big Bang cosmology or evolutionary biology, and discuss how that relates to my Christian belief that the world is God's creation. I think we have to do it by showing that you *can* take both science and religion seriously, provided you understand the roles that they're going to play. If you try and make religion answer science's questions or science answer religion's questions, you're going to get right into trouble. But that's just a bad mistake. I think we just have to keep plugging away. I want to show people I can take absolutely seriously the significance of Scripture and the importance of my Christian faith, and I take absolutely seriously what I know as a scientist. I like to say I'm "two-eyed" - I think I see more with those two eyes, further and deeper, than I could with either eye on its own. You just have to keep plugging away at it.

MAUREEN CAVANAUGH: Do you think you were trained to do that? Was there something in your back ground that led you to have those two eyes, one on religion and one on religion?

DR. POLKINGHORNE: Well, I have to say I grew up in a Christian home. And I can't remember a time when I wasn't in some sense part of the worshipping, believing community of the church. But I don't think I was brain-washed by my parents and then not able to recover from that. As soon as I was old enough to begin understanding science, I wanted to use its insights and in a very small way to contribute to its insights as well. I think the desire for truth and the belief in the unity of knowledge - we live in one world of very great richness - many different layers

and levels in world, and I think we need all the insights of human inquiry and truth, if we are going to do justice to the remarkable world in which we live; and indeed the remarkable sort of people that we are.

MAUREEN CAVANAUGH: And I meant that training, not so much as being brain-washed but there needs to be, it seems to me, a sort of a more liberal attitude to the understanding of Scripture to allow an appreciation of science.

DR. POLKINGHORNE: Well, I think that's true. I think that's true. I think there has to be a *realistic* understanding of the nature of Scripture. I'm an Anglican, and Anglicans say that our religious beliefs, we have basis for them, we have a basis in the Scripture, in the tradition of the Church, and in the use of reason. And I want to use all those resources. I think God's given us all those resources to use, and to make use of them. And I think that gives a richer understanding than simply taking one of them the kingpin that answers everything.

MAUREEN CAVANAUGH: Well, I want to thank you for your time this morning. Thanks so much for speaking with us.

DR. POLKINGHORNE: It's been a great pleasure. I've enjoyed our conversation.

MAUREEN CAVANAUGH: I've been speaking with Rev. Dr. John Polkinghorne. He will be holding a series of lectures on the search for truth in science and theology, it's starting -- it starts with [a two-hour lecture](#) this Sunday [November 14, 2010] at 2:30 at the Crill Performance Hall on the campus of Point Loma Nazarene University. For more information on how you can attend the Sunday lecture, you can go to the [These Days](#) page on KPBS.org and indeed, if you want to comment, you can go online, at KPBS.org/thesedays. Coming up, we're taking your calls about "senior pets." That's all ahead as "These Days" continues here on KPBS.