

Can We Believe in Both Science and Religion?

NANCEY MURPHY: Science can tell us how chemicals bond but only religion can answer the why questions, why do we have a universe like this at all?

MUZAFFAR IQBAL: You have a scientific world view and you have a religious world view, you have God and you have science.

MICHAEL SCHERMER: Here's the deal, there is no conflict between science and religion as long as the God you believe in doesn't do anything.

NANCEY MURPHY: Exactly right.

LAUGHTER

MICHAEL SCHERMER: If God is intervening in the world, if He's, you know, answering prayers, or whatever, there must be some way to measure it, and if you can measure the effect of God's influence in the world, then that's science.

SHOW OPEN

ROBERT KUHN: Over the centuries science has been advancing and religion seemingly in retreat.

MICHAEL SCHERMER: Has religion been retreating? I don't think so, I think it's as powerful as it's ever been. I don't think it's our accepted world view, I think science is, we live in the age of science, but levels of belief haven't gone down.

NANCEY MURPHY: I think that the warfare of science and religion is now conclusively shown to have been a myth, while for a hundred years or so it was quite common to understand, Christianity in particular as being opposed to science and always losing the battles and we have some very dramatic instances of that with the Galileo affair and later the Darwinian revolution. Those incidents have been highly played up in the literature, and other more cooperative and fruitful interchanges between science and religion tend to get left out.

MUZAFFAR IQBAL: I did science for most of my life and I mean that, for me it's just one single thing, it's not, you have a scientific world view and you have a religious world view, you have God and you have science, no, it's just one single thing.

NANCEY MURPHY: None of the findings from science provide independent reasons to become a believer. But I would argue that some of the findings from science add intellectual credibility to religious belief if they are used judiciously and properly.

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MICHAEL SCHERMER: Here's the deal, there is no conflict between science and religion as long as the God you believe in doesn't do anything.

NANCEY MURPHY: Exactly right.

LAUGHTER

MICHAEL SCHERMER: If God is intervening in the world, if He's, you know, answering prayers, or whatever, performing miracle, there must be some way to measure it, and if you can measure the effect of God's influence in the world, then that's science.

ROBERT KUHN: Can science enrich religion?

MICHAEL SCHERMER: I think if you are already a believer, science can inform your faith by providing additional reasons to believe if you want to find them. If you're not a believer, none of these arguments that are scientifically based are, in my mind, arguments for God or against God, they're not proof, they're not evidence. To me science and religion are largely two separate spheres, although they're interdigitated and close on some of the big questions, the big cosmology questions.

MUZAFFAR IQBAL: When we are talking with science it would be helpful if we are more specific. Because science, what do we mean by science?

MICHAEL SCHERMER: Well naturalistic explanations for all phenomenon, and testable hypotheses, it's not really science yet until you have some way to test it, that's really the two cord, naturalism and, and ability to test hypothesis.

MUZAFFAR IQBAL: Let me make it more concrete because science is such a huge domain, it investigates whole range of subjects, and only some of them at the border edge, at the cutting edge of science, come close to having either conflict or non conflict with religion. Give you one example, this glass of water sitting here, this water is a product of oxygen and hydrogen. Only oxygen and hydrogen have one specific thing, which scientists and chemists would tell you, called hydrogen bonding. Hydrogen bonding means that these two hydrogen atoms are sitting at 104 degree angle, they do not allow other molecules to make it so dense that, unlike any other solid, which will be more compact, ice is less compact than water.

MICHAEL SCHERMER: What are we getting at here, this was designed?

MUZAFFAR IQBAL: That's the next step. Ice being less dense than water, therefore ice floats.

MICHAEL SCHERMER: Let me ask you something...

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MUZAFFAR IQBAL: Ice floats on water...

MICHAEL SCHERMER: Do you believe in God? Let me just ask you, do you believe in God?

MUZAFFAR IQBAL: No, no, let me finish....

MICHAEL SCHERMER: And is this why?

MUZAFFAR IQBAL: No, let me finish it. No, I'm just going back to the question of science and the relationship between science, no science has taken us to a point where we know that because of hydrogen bonding, ice is not as compact as water, therefore ice floats, therefore all underwater life in oceans in winter remain alive. Science stops there. Why hydrogen bonding exists here? Science has no answer.

MICHAEL SCHERMER: Okay, let's say you say because God did it...

MUZAFFAR IQBAL: No, I'm not, I'm not going to the next step...

MICHAEL SCHERMER: Well, why not?

MUZAFFAR IQBAL: I'm just going to stop here.

MICHAEL SCHERMER: Aren't you curious? Don't you want to know? I want to know. And that's what science is all about, I want to know the next step, it's okay to ask that question.

MUZAFFAR IQBAL: Exactly, that's where the relationship between science and religion comes into existence.

NANCEY MURPHY: So are you making the distinction between the how and the why question. Science can tell us how chemicals bond, but only religion can answer the why questions, why do we have a universe like this at all?

MUZAFFAR IQBAL: Well the Islamic religious tradition doesn't deal with the how, it just states why. It was left to the scientists and the philosophers to deal with the question of how. And, you know, these are two very, very clearly distinguishable questions, why and how?

MICHAEL SCHERMER: But aren't you curious, if you say well God started the universe, aren't you curious how he did it?

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MUZAFFAR IQBAL: Exactly, exactly.

MICHAEL SCHERMER: Well don't you want to know, what forces did he use, did he use all four forces combined and how did he do that? Well that's just science.

MUZAFFAR IQBAL: That's exactly, that is the domain of the intellectual tradition, and that's where the philosophers and the scientists have been working on. But the why question, why question is outside the domain of science. Why did he create it? The faith tradition tells you that God created it and at the same time he says go out and find out how he created it. Go and study oceans, look at the mountain, look at the, look at the camel how it is created and in this creation are signs for humanity. The Koran gives the example of the honey bee and says at the end of the refrain, at the end of all these verses is, in these are the signs of people who think, in this is the sign for people who ponder, in this is the sign for people who reflect, this is a refrain, constant refrain in the Koran and that was the guiding principal.

ROBERT KUHN: The same is true in the Old and New Testament as well.

MUZAFFAR IQBAL: That was the guiding principle for the Islamic scientific tradition, to go out and find.

MICHAEL SCHERMER: I disagree with your distinction between how and why questions, evolutionary biologists ask ultimate why questions, why do we like sweet fatty foods? We haven't answered that.

NANCEY MURPHY: That's the ultimate question in your life?

LAUGHTER

MICHAEL SCHERMER: At the moment it is because I'm trying to lose some weight here.

MUZAFFAR IQBAL: That's a good one. Well if that's the ultimate question...

MICHAEL SCHERMER: I'm a basic kind of guy, I just, you know, I like my food...

ROBERT KUHN: Continue, the point is a significant one though, it's a serious point.

MICHAEL SCHERMER: Yeah, yeah, because, you know, we can answer it on a how basis, you know, the physiology of taste and so on, but we want to know why is it we have that and it has to do with our evolutionary history, that foods that are nutritious are at once sweet tasting and high in fat content because they are rare and they are hard to get and in an evolutionary environment there's long periods of drought where you don't get

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those, and so you want to store them up as much as you can, you eat as much, there's no satiation point on those kinds of foods, so that's kind of a why.

NANCEY MURPHY: So you're right to say that you can't make a neat distinction and say that science deals with the how and theology deals with the why, because science does deal with some of the whys, and so we still need to find the kinds of questions that Muzaffar and I believe exist...

MICHAEL SCHERMER: Moral questions, science isn't so good at.

NANCEY MURPHY: Yeah, I think morality is one area, but the basic question, why is there anything rather than nothing?

MICHAEL SCHERMER: I have the answer right here.

MUZAFFAR IQBAL: I like to, I like to distinguish between two kinds of why questions, the science does the science does deal with the why questions, science does deal with why there is hydrogen bonding, why there is 104.5 degree angle between this, why all honey bees all over the world since centuries have always made these hexagonal honey cells?

MICHAEL SCHERMER: Because they tried lots of different shapes and sizes and that was the best one that evolved.

ROBERT KUHN: But therefore...

MUZAFFAR IQBAL: Therefore, this why question which is the subject of science, is one kind of why question, why does the universe exist is another kind of why question, so there are two kinds of why questions.

NANCEY MURPHY: Michael is right that the current work in cosmology and origins really has muddied the water a bit. It's not as clear as it would have been 100 years ago that science cannot touch the question of where did the universe come from, why is it here, why is it the way it is?

MUZAFFAR IQBAL: But that, I think that is the same kind of why as why is there hydrogen bonding?

MICHAEL SCHERMER: How about, why should there be something instead of nothing, that, I don't know how you get any bigger than that. That's about as deep as it goes.

MUZAFFAR IQBAL: Even in cosmology, we're still dealing with after T-0.

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ROBERT KUHN: The beginning of the universe.

MUZAFFAR IQBAL: The beginning of the universe.

MICHAEL SCHERMER: What would be before that?

NANCEY MURPHY: Well, see it's just gotten so much messier because we are inclined to say that there couldn't be anything prior to the beginning of the universe. But now we've got even the fairly simple model of big bang collapse, another big bang etc., and so it's now meaningful to ask what was there before $T=0$ in our universe.

ROBERT KUHN: But you always need the laws of physics.

MICHAEL SCHERMER: They may not be ours though, they may be different.

NANCEY MURPHY: But you can ask the question, why are the laws of physics just right for us to be here, and one might say that that's the ultimate design question and only a religious answer could be provided. But you can also hypothesize that this is just one of countless many universes and there is no special answer needed, we just happen to be in the one where the laws were right so that we could be here. So that issue is also muddied up.

MICHAEL SCHERMER: Nancey, you know everything I know about this stuff, why do you believe and I don't?

NANCEY MURPHY: It really comes down to my own personal experience, growing up in a Christian home, praying and finding that there seemed to be somebody at the other listening and responding and talking. So it's a matter of, basically it comes down to a matter of religious experience. And, but as you're pointing out, if you hold to a belief position, then you set out to make it rational, that is you set out to find reasons for your belief, but I think my basic motivation for looking for the reasons for rather than the reasons against really comes to that personal history.

ROBERT KUHN: Now what is the Christian traditional nature of consciousness, the Islamic and the new modern scientific brain research related concept?

NANCEY MURPHY: Well this is a very interesting point of contact between science and Christianity. It may look to the outsider as though Christians have been dualists throughout their history, continue to be dualists...

ROBERT KUHN: Dualists meaning...

NANCEY MURPHY: Believing in not just a body, but some other component, generally called the soul, but the concept of soul at certain points in history is equivalent

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to the concept of mind. So a dualist is a person has been thought to be essential to Christianity. Now it looks as though the neuroscientists are coming along and they're saying, ah, there is no soul, in fact there is no substantial mind. It's actually the brain or the nervous system that does all of the things that were once attributed to soul or mind. So it looks like yet another place where science encroaches and religion has to step back. But in the, in the liberal half of Christianity, those who have a higher degree in theology are almost all physicalists.

MICHAEL SCHERMER: Really?

ROBERT KUHN: Physicalist meaning that there is no...

NANCEY MURPHY: We're just bodies.

ROBERT KUHN: There is no non-physical element required to make us human beings.

NANCEY MURPHY: We're just bodies.

| That's right.

MICHAEL SCHERMER: Now when you're resurrected, how old will you be?

NANCEY MURPHY: 30.

MICHAEL SCHERMER: Really? You have an answer.

NANCEY MURPHY: Augustine thought about that, that's when you reach the height of your powers but before you start to disintegrate.

ROBERT KUHN: What does that say about the rest of us? What does Islam say about the nature of the soul?

MUZAFFAR IQBAL: Within Islamic intellectual religion the word nufs is associated with soul. Now nufs is physical, or a combination of physical and non-physical, and when I say non-physical your ideas, thoughts that run through, not the neurons that are running, but the thoughts which neurons supposedly are carrying as neuroscience would tell us. Some element of physicality is also involved because the blood for example is also a carrier of emotions, so nufs is one thing and rue is another thing, and rue is also in Hebrew.

ROBERT KUHN: Ruah... spirit. Or breath...

MUZAFFAR IQBAL: So nufs and rue are clearly distinguished. And the Koran talk about these two as separate entities, totally different entities. Therefore, I think what neuroscience is doing is talking about nufs.

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MICHAEL SCHERMER: But we know how thoughts are generated, you have to have the little synapses, without two neurons coming together, there is no synapse, there is no thought, where, how does the thought get carried on into eternity?

MUZAFFAR IQBAL: In my conception I have a very clear picture of this that these, these carriers of thought, these neurons, they are like, they are carrying the thought, they are not thought themselves, it's the electrons, electrons or whatever electrons we think of electrons, no, we think of electrons and particles or waves? If we think...

MICHAEL SCHERMER: Both. Monday, Wednesday, Friday it's particles, Tuesday, Thursday, Saturday it's waves, on Sunday it's wavicles.

LAUGHTER

MUZAFFAR IQBAL: No, see this, eventually electrons and electron is a negatively charged thing whether we call it a particle or a wave, which is, suppose it's moving from here to here, that negative charge itself is one thing, and the particle is another thing.

MICHAEL SCHERMER: Yeah? What's this got to do with the thoughts being carried on into eternity?

MUZAFFAR IQBAL: Neurons are one thing and the thought is another thing.

MICHAEL SCHERMER: No.

MUZAFFAR IQBAL: To me they are.

MICHAEL SCHERMER: Yeah, I know, to you because that's what you want to believe. You're not making any sense.

MUZAFFAR IQBAL: No, but what you are measuring through your instruments are neurons, you are not measuring the thought.

ROBERT KUHN: Does this deal with, when you say a physicalist explanation of the souls, you say non-reductive, which means you can't reduce it to physics and chemistry. Is anything Muzaffar is saying relate to the non-reductive element of the soul in your opinion?

NANCEY MURPHY: Well what he was saying about the neuron and the thought being different, I think that's a good example of it. The firing of a neuron is that which enables there to be a thought, there would be no thoughts without the firing of neurons, but we still have to make a conceptual distinction between neuron firing and thinking.

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MUZAFFAR IQBAL: Are we talking on the same wavelength when I say that you're talking about nufs and I am talking about nufs and rues, there are two separate entities?

NANCEY MURPHY: No, I am committed to saying that both are mental capacities and also are spiritual capacities, I don't talk about spirit as an entity or substance, but spiritual capacities emerge from our complex neural equipment, in a social/cultural context.

ROBERT KUHN: Back to Michael's question about resurrection, which you do believe in. How does that occur?

NANCEY MURPHY: That is the part of Christian theology that we could say the least about. Our only reason to believe it is going to happen is first, a moral argument that there seems to need to be some life after death if there is going to be justice in the universe. That has led to the invention both of the concept of resurrection of the body and also the concept of an immortal soul that lives on after death. But the only reason Christians have for believing that resurrection is going to happen is the model of Jesus been raised from the dead, and the only clue we've got about what that's supposed to be like is a set of strangely conflicting stories about what the resurrected person of Jesus was like.

MICHAEL SCHERMER: What if he was, you know, in sort of a comatose state for three days due to an epileptic seizure or some such thing?

NANCEY MURPHY: That would be comparable to the resuscitation of a corpse, and the resurrection body is not material in the same way, it's not material of the same kind of material that we know.

ROBERT KUHN: But you certainly believe that people who have died, as Christians at this point are dead, they're unconscious, they're non-conscious, they don't exist until they may or may not be resurrected in the future.

NANCEY MURPHY: Right, there is no part of us that continues to exist after death.

ROBERT KUHN: And that God would have to resurrect the body and recreate your thought patterns.

NANCEY MURPHY: Basically, yes, re-create us in a different form, a whole different world, because otherwise we would be equally subject to corruption and decay as we are in this life.

MUZAFFAR IQBAL: I think there are so many interesting points that you made, one point in which you started is that this is a point with which we are least sure in the

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tradition. So is the case in the Islamic tradition, this is an area about which we can hardly say anything except in metaphors, which won't make any sense to you.

MICHAEL SCHERMER: I like metaphors, but they have to be backed by something.

LAUGHTER

MUZAFFAR IQBAL: But here are also the areas in which Islamic and contemporary Christianity are worlds apart. In the very fundamentals in the concept of Jesus, for example, the Islamic belief is that he didn't die, he was raised

NANCEY MURPHY: So you and Michael agree on that point.

MUZAFFAR IQBAL: He was raised, no, he doesn't believe in the raised, no, being unconscious for awhile? Yes, and the Islamic belief is that he was not crucified and he was raised by God, and he will come back towards the end of history to restore things.

ROBERT KUHN: You differ there, I'm sure.

MUZAFFAR IQBAL: And, yes, and that is a statement that comes right from the Koran and that is a statement, that is a statement of faith.

ROBERT KUHN: Let's look at the areas that both Islam and Christianity feel are the greatest threats, or create the greatest tensions from science.

NANCEY MURPHY: I think that the greatest threat to Christian belief has been the development of the concept of laws of nature, which of course is basic to and permeates the whole of science. The reason that has been a threat, and I think continues to be a threat is exactly the issue that you raised earlier, if God doesn't do anything in the world then a God who sits idly by and watches the universe pursue its course, is un noble and you might as well not have one at all, unless you need God for a creator.

MICHAEL SCHERMER: Works for me.

NANCEY MURPHY: Okay. So what's been critical in the modern periods since the rise of science has been to be able to give an account of how God acts in the world. Given the concept of the Newtonian world where supposedly everything is governed by laws of nature, how then does God have anything to do with what happens? Christianity is split over that, the liberal Christians say, well God really does essentially, and this is somewhat pejorative, rubber stamp the system, and the conservatives say, no, that's not enough God for us, our God has to mess about with the physical processes. The liberals come back and say, well that's a pretty flimsy notion of God who can't get it right from the beginning, and on and on and on.

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MUZAFFAR IQBAL: Yes, Nancey, thank you, that was a very good summation of the picture. But as far as Islam is concerned, they're dichotomies too foreign right from the beginning. They are dichotomic between the laws of nature and laws of... God, so to speak, I was also very intrigued by your description of the laws of nature. Because in Islamic religion there is no such thing as laws of nature, all laws are laws of God.

ROBERT KUHN: Where do you start from?

MUZAFFAR IQBAL: In the Islam tradition, the concept of creation is referred to as *fetera*, which means breaking apart of, from something. So if there is this one stone and I take one part of it, I have taken one part, but essentially I haven't changed the nature, if I take one drop of water from this glass of water, if you take one drop out of ocean, you are still holding onto a part of the ocean. So that concept of creation ties in with something being in the very composition of the human existence, that relates us to the creator.

ROBERT KUHN: How do you see the relationship between science and theology say 100 years from now?

MICHAEL SCHERMER: It would be the same general discussion it will be different examples instead of talking about God's providence in this area or that area dealing with some conundrums of science today that we can't explain we will have those explained and God won't be involved in those anymore.

MUZAFFAR IQBAL: I disagree with you, as a scientist I know that our means of investigation has been sharpening as we progress, science will bring us closer to reality, truth, closer to understanding the nature of God than we are now, 100 years from we'll be closer to understanding that because just this domain of neuroscience is so fascinating to me because it's opening up so many new ways. You know, had we been sitting here 100 years from now backwards in the Newtonian physical concept of nature, we will be talking totally different, we will be talking with clockwork universe, we wouldn't have any concept of quantum physics.

ROBERT KUHN: Nancey, how do you see this discussion 100 years from now?

NANCEY MURPHY: Well, when you look at the history of Christianity you can see that it's taken decades, centuries for the Christian faith to be reembodyed, or you might say reincarnated in the different cultures through which it's passed, and I can see that Christianity is still, in many circles struggling to come to terms with the scientific world view, despite the fact that the scientific worldview is 300 years old now. So for instance a lot of people I know still understand history in terms of a golden age in the past, a catastrophic fall and then basically no progress until the end. Whereas the evolutionary world view, and especially when you add big bang cosmology, it's just pretty much

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nothing in the beginning, and a slow ascent of more and more complex forms, including us. So Christianity is yet fully to take onboard that different sense of the timeline of human history. That means that it is going to be another hundred years for Christians in general to have taken on board the very scientific issues that we are talking about today.

ROBERT KUHN: To take a specific example, 100 years from now, do you believe that most Christians would not believe in the immortality of the soul?

NANCEY MURPHY: I think that it might take 100 years for that change to take place.

MICHAEL SCHERMER: To retreat a tiny bit on my own position, I often wonder if my preference for a scientific, or even scientific world view, is just a personality preference, that I just don't need the religious answers, I don't get anything out of it, in fact I find it kind of unfulfilling, but I like science, I am a science, you know, fanatic I am a big science guy. And I just like that approach, the open endedness, the uncertainty of it, I get to participate, and all that. But, but of course that makes me wonder, well maybe it's the same thing as you, you just have a personality preference for it and you were raised a certain way and maybe that's just part of my background.

MUZAFFAR IQBAL: . Michael, I was intrigued by the way you phrased it, you love scientific, you like science, as if it was something that if you liked to be, to have a scientific worldview you cannot have religious worldview.

NANCEY MURPHY: I don't think that psychological, sociological explanations are incompatible with epistemological explanations. But as a matter of fact I love the scientific world view, I see its appeals equally, at least I think I do. So it's a matter of...

MICHAEL SCHERMER: Making that one little step, that one little...

NANCEY MURPHY: That's right, that's right.

ROBERT KUHN: That's not a little step, it looks like a little step.

MUZAFFAR IQBAL: Your world view, your belief system is not only socially construed, social existence has a lot of influence on how we behave, what we believe, but there's not the only way, there is something more than that, it's not just you personal life experiences that determine...

MICHAEL SCHERMER: Maybe, maybe not.

MUZAFFAR IQBAL: It also depends on how much you know yourself. It also depends on how much what is your contact with your own being?

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MICHAEL SCHERMER: What does that mean?

MUZAFFAR IQBAL: When Dikhr sat in his room and said I'm going to disbelieve every single thing that has been given to me, and he goes step-by-step, he could not dismiss his own being because he knew that he is because he was there.

MICHAEL SCHERMER: Let's cut all the verbiage, why do you believe in God?

MUZAFFAR IQBAL: Because I knew he exists, as Nancey said, he answers the prayers, when you talk to him, He answers.