

The Atheism Tapes 4, Richard Dawkins

Jonathon Miller (JM) [To the viewer]: Now the English biologist Richard Dawkins is probably almost as well known as an atheist as he is as a scientist. And it's clear in the conversation we had that the theory of Evolution played a very important part in undermining his own religious belief. But as it happens, we met right at the start of the war in Iraq. So before we could get to Darwin, we started by contemplating the role that religion had played in the policies of a Christian British Prime Minister and a Christian American President.

Richard Dawkins (RD): Blair is obviously an order of magnitude more sophisticated intellectually than Bush, that wouldn't be difficult. But I suspect that where as Bush is just plain naive, um, they probably both have some sort of an idea that there's a war going on between good and evil, and that... um, I mean in Bush's case, and in the case of many Americans, I suspect that many of them can't tell the difference between Saddam Hussein and Osama Bin Laden. I mean, they're all "evil", and that's why it was so easy to switch the American public from a genuine fight against terrorism after September the 11th to a totally irrelevant fight against Iraq which, after all could have happened at any time. But what happened was that September the 11th focused everybody's attention on evil, and the fact that there's a them against us. And it then became very easy to muddle up in people's minds anybody evil.

JM: Now in identifying them as exponents of evil... urr... I believe, and I'm sure you do, that they actually think evil is a principle of some sort...

RD: Yeah.

JM: ... which exists in the universe...

RD: Or a spirit.

JM: ... A spirit. Now, do you think that notion of evil as an autonomous principle, uhh is... inseparably associated with a religious belief in a deity?

RD: Well, umm... I think it's very similar and I think there is a sort of impulse in humans to personify. And to... instead of just recognising that evil and good are descriptions we give to things that people do - I mean good things and bad things - I think there is a tendency to personify and to think there is a spirit of good and a spirit of evil, that implies some kind of a war between them... you can kill evil by... having a war against, in this case evil people, without realising that that may very well spawn a whole lot more people who may not necessarily be evil, but who will simply rise up and do things like terrorist acts as a consequence.

JM: So in other words, in addition to these mortal exponents of wicked deeds... there is, as it were, behind the visible and palpable surface, some sort of metaphysical principle which outlasts...

RD: I think that's what they think... whether directly... I expect Bush actually thinks that literally, and I think Blair kind of subconsciously thinks it, yes.

JM: So you think this is being an inevitable consequence of a larger religious belief in the existence of metaphysical principles in the universe.

RD: I suspect so. I'm sure it goes with a larger religious belief, whether it stems directly from that religious belief, or whether both of them stem from the same kind of mental predisposition, which, I dare say all humans have to some extent, I don't know.

JM [To the viewer]: But if, as Richard suggests, all human beings share a predisposition to believe, I wanted to know the extent to which he himself might have experienced belief in his early life. After all, I had been talking to many people who with varying degrees of enthusiasm identified themselves as atheists, or disbelievers and I was interested at how people arrived at it, or whether they had had it from the start. I asked Richard whether he started life, as indeed I had without a religious thought.

RD: No, I had a normal Anglican upbringing. And I think I first started to doubt it when I woke up to the fact that there were lots of different religions and they couldn't all be right, and that it was just an accident, an arbitrary accident, that I happened to have been brought up in the Anglican church, so that caused me to have doubts and I sort of became a non-believer at the age of about nine as a result of that. However, I then reverted to religious belief, um, until the age of about 16.

JM: If I can stop you there, I'm very interested in these critical moments...

RD: Yes.

JM: What do you think the reversion to something you had begun to be doubtful about?

RD: I think it was the argument from design. I think I started to appreciate the glorious complexity... especially of life, and didn't understand at that time the Darwinian explanation for it. And so I think that I did the rather naive thing of assuming that if something looks as though it's designed, it probably is designed, and didn't kind of wake up to the alternative explanation until I was about 16... also didn't wake up to the fact that even without the Darwinian explanation, design is a very bad explanation for the complexity of life because it... it's got a... regression built into it. I mean you have to explain the designer, so, um it's not even a good explanation. But finally... I was about 16 when I discovered Darwinism... I was taught Darwinism and then realised that there

is a... not just an adequate explanation for the complexity of life, but a wonderful, um, electrifyingly simple explanation - which is Darwinian evolution.

JM: Now did it come as a flash of delight or was there in fact a, um, agonising sense of regret and remorse at what you had lost?

RD: I don't remember any regret. I think it was delight. And it was a delighted sense of freedom, perhaps, from a... view of the world which... was always rather unsatisfactory anyway. And it was also delight at the positive feeling that one now had a fully satisfactory explanation of the way the world was, and that I had my life before me to try to understand that in detail.

JM: All right now, if I can go back to that period between 9 and 15. Nine when you first started to have doubts because there were so many religions, and 15 when you had the, as it were, the biological road to Damascus and began to read Darwin. Umm... What form did your relatively un-doubting religion take? I mean in the way of observance, in the way of prayer. Umm... in one way or another.

RD: Oh yes. Between 9 and 15 I was pretty devout. I used to... I mean I got confirmed. I used to pray. I used to, umm... sort of have little fantasies at school... in boarding school, creeping down to the chapel and praying and having sort of visions of angels and things. And I remember being prepared for Confirmation, which actually even at the time I could sort of see that was a load of rubbish. I... I sort of forced myself to go on believing in it because here was this vicar in his cassock telling me about it. But it just didn't hand together. It didn't make any sense. I... I could follow an argument that said, the world is such a beautiful place it needs a designer, but that wasn't what it was about at all. It was all about original sin and things like that which even then... I could sort of see wasn't really coherent.

JM: So in a sense then, it was more tied to morality - and the sense of sinfulness - than it was to the beauty of the creation.

RD: I think the preparation for Confirmation probably was, yes.

JM: I mean, were you constantly told by, um, the minister that you were in the nature of man, um an inheritor of some sin?

RD: I don't remember that. I mean, I do remember odd little... stupidities such as, "disease is a result of sin". Disease is not a result of bacteria or viruses or cancerous tumours... Disease is a result of sin. And I can remember being told that and... hearing other people saying it later on and you know, apparently taking it seriously... I mean, they just didn't seem to realise what an extraordinarily... unpleasant as well as illogical thing it is to believe.

JM: So when, at the age of 16, you became acquainted with Darwin, was it because you were taught about Darwin, or you began reading The Origin of Species?

RD: No, it was because I was taught.

JM: And were you taught by people who, as it were, were aware, or seemed to be aware of the fact that it would have theological consequences?

RD: No, I don't think so. I mean... that wasn't the terms in which they put it anyway.

JM: How soon in the lessons did you begin to see that it did have theological consequences - that it more or less knocked the idea of design on the head?

RD: I do remember that I understood the principle of Darwinism before I really believed it was big enough to do the job. So I understood the principle of it and realised that yes, that is a candidate explanation for doing this job but I still don't think it's a big enough one... it was only later that I decided yes - it is big enough.

JM: In that case, I'm going to ask you this question. I'm going to ask you for the point of view of the viewers, to um... it's an awkward question I'm asking you... to give a summary of the most persuasive version...

RD: Oh, fine. OK.

JM: Of Darwinian theory.

RD: First I would make a distinction between the fact of evolution and the actual change from generation to generation that has led from bacterial ancestors to all the creatures we have today by gradual, gradual change such that you wouldn't have noticed it, um, in any particular generation. That is a matter of fact that can be observed - not directly - but by it's aftermath in the form of fossils and the pattern of living creatures. Then ask, what is the guiding force for it being like that? Natural selection. And the most illuminating way I can think of to explain that is that all living things contain digitally coded representations of themselves, digitally coded instructions for building themselves and for making more like themselves. The instructions survive or the don't survive depending on how good the bodies are at surviving and at how good the bodies are at reproducing and therefore passing them on. Therefore the world becomes filled with coded instructions for being successful in building bodies that survive and reproduce those very same coded instructions.

JM: Mmm. Now the objection that is constantly raised by people who hear this, to me and to you, extremely persuasive argument, they say, "Aha! But what is the source of these fruitful novelties upon which natural selection exerts it's pressures?". People would say, "Well surely the novelties themselves, even if, um, they are then... pressure is exerted upon them, something has to explain the novelties themselves."

RD: Well the novelties themselves of course, are genetic variations in the gene pool, which ultimately come from mutation and more proximately come from sexual recombination. There's nothing very inventive or ingenious about those novelties. I

mean, they are random. And, um, they mostly are deleterious - most mutations are bad. And so you really need to focus on natural selection as the positive side, and it's only natural selection that produces living things that have the illusion of design. The illusion of design does not come from the novelty, it comes from what happens to the novelty as it is filtered through.

JM: But the argument was constantly levelled about the, um, the imperceptible changes which might in fact, as they were developed and recurred, would have culminated in something as useful as a feather. They constantly emphasise the fact, what was it about that early novelty before it had accumulated to the point where it was recognisably doing an adaptive job... where could natural selection get it's purchase upon something which was no more than a pimple?

RD: Yes. Um... well it's a fair point. It's one that I've talked about quite a lot. Um... there... we... there cannot have been intermediate stages that were not beneficial. It's... there's no room in natural selection for the sort of foresight argument that says, "Well, if we're going to persist for the next million years it'll start becoming useful.". That doesn't work, there's got to be a selection pressure all the way.

JM: So there isn't a process as it were going on in the cell saying, "Look, be patient. It's going to be a feather, believe me.

RD: Um no. Yes.

JM: Sydney Bremner satirised that beautifully when he said he imagined some protein arising in the Cambrian which was kept because, "It might come in handy in the Cretaceous".

RD: Um... it's... it doesn't happen like that. Um, there's got to be a series of advantages all the way in the feather. If you can't think of one then that's your problem, not natural selection's problem. Natural selection, um, well, I suppose that is a sort of matter of faith on my, on my part since the theory is so coherent and so powerful. You might mentioned feathers. I mean it's perfectly possible that feathers began as fluffy, um,

extensions of reptilian scales to act as heat insulators. And so the final perfection of the sort of, wing feathers that we see in flying birds might have come very much later. And the earliest feathers might have been a different approach to hairiness among reptiles keeping them warm. Over and over again we come across, um cases where an organ starts out doing one thing and then gets modified to doing another thing.

Um... But, um... it's not useful to challenge an individual biologist's ingenuity in thinking up what particular intermediates might have looked like because we don't... I mean maybe we're not ingenious enough to think what they are. I should have thought there's a more general argument which is that we... we shouldn't in any case be saying, "Oh, I can't think what the explanation for it is, therefore it must have been designed.". There's a fatal weakness in any argument which says, "I cannot understand how X could have happened, therefore it must have been designed.". It would be as if you took a famous scientific discovery... I think of Hodgkin and Huxley's working out of how the nerve impulse works - a very difficult problem involving very tough mathematics. Suppose that they found it too difficult. Would we have respected them if they'd said something like, "I can't work out how this nerve impulse works, Hodgkin. Can you?", "No Huxley, I can't. Let's just give up and say God did it."?

It's that element of giving up. It's that element of defeatism. Saying, "I can't understand how it works. Well, let's fall back on the design explanation.".

JM: Yes, even if it doesn't take the form of explicit, um, conscious design on the part of the creator, the... one of the ideas which seems to me to be the counterpart of what you are saying was the invoking of the vital principle in the 19th century.

RD: Yes absolutely. Vital principles, force locomotif and... none of them explain anything, they're just re-descriptions of the problem. But they're pernicious because people think they explain something. It sort of vaguely sounds like it explains something, and people are so used to the idea that complicated things in our human world are indeed designed and made. But when you've said, "Oh, it was designed by God", you have explained absolutely nothing because you're left with the problem of explaining

where the designer came from. And so it's a non-explanation. We shouldn't even regard it as a candidate explanation.

JM: Why do you think it was, that for really intelligent biologists to invoke something - which we can see now it's surprising they couldn't see, was such a vacuous explanation - as the vital principle to account for the spontaneity of living things?

RD: Well, I suppose it's all very well for us to say we can see that it's nonsense, but when you didn't have anything better... Um... I mean, I could imagine in the time of Hume for example, um, he would have said, "This is a bad explanation." and he was right, but he didn't actually have a better one to put in its place. And so you have to be quite intellectually courageous to stick on the philosophical point that clearly it's clearly a bad explanation and I think that in a real sense it had to wait for Darwin who produced a deeply satisfying explanation. I mean, it would have been wonderful... Hume would have been simply captivated to have heard Darwin's explanation, I suspect.

JM [To the viewer]: For Richard then, the Theory of Evolution provided support for his growing disbelief. But I wanted to know why atheism was such a pressing issue for him.

JM: Why is this argument so important at this point in the 21st century when you and I can see that it's a settled issue, and yet we find ourselves in... in an embattled position? Why is the argument so important?

RD: Well... as a scientist to me it's important because I do regard the hypothesis of a supernatural designer as a scientific hypothesis. I think it's a wrong one but it actually is science. One can't... I don't have much patience with theologians who say, "Well we're really not disagreeing. It's just that religion concerns itself with... morality and science concerns itself with the way the universe is and there's no problem between them.". To me there is a problem because the moment you talk about a supernatural creator, designer, um, anything... you are advancing a scientific hypothesis which is either right or wrong. I mean... a universe that has a supernatural... intelligence, a supernatural

overmind in it, is a very very different kind of universe from a purely scientific point of view than a universe which hasn't. And it's a very very interesting difference. I mean, it's a massive difference. And I think it's scientifically interesting to hold a view of the universe which I do, which is that there is no supermind. Well, there may be minds far superior to ours but they will also have come into existence through a slow, gradual, incremental process. They were not there from the start.

People who hold the opposite view, that there was a supernatural intelligence, right from the start, responsible for it all, are advancing a very... diametrically different scientific hypothesis which has got to be either right or wrong. Even if we can't finally decide whether it's right or wrong, we must at least admit that it is a... a different hypothesis - a very different hypothesis - and therefore it matters.

JM: But I often encounter religious people who argue in the following way. They say, "Well, it's not really. And we don't think of it as a scientific hypothesis. We think of it as something which involves a leap of faith." In other words it's not something which they say can be proved right or wrong. There's no way in which it can be proved right or wrong because it belongs to a domain of existence and entities about which that sort of proof, disproof and research are irrelevant. There is something that they call "the leap of faith" which identifies you with this creator.

RD: Well, that sort of thing... just leaves me cold, and I can't really even begin to empathise with it. I understand that it may be, in principle, impossible to demonstrate one way or the other. So there may be no scientific test you could ever do to decide the question and that I could believe. But to me that still leaves the point that it either is true or it isn't. A leap of faith that just means that a person has a... a sort of inside, internal feeling of... revelation, which is not sharable with anyone else and which can't be demonstrated to anybody else, to me that just sounds like a mental delusion.

JM: Why is it then that people actually invoke the notion of a leap of faith, not as a weakness on their part, but as some sort of virtue which is lacking in people like you and me? That there is some sort of peculiar willingness, and a willingness which indicates some sort of spiritual generosity which we, somehow, don't have.

RD: I mean... first thing... I think it's important to stress, in view of our earlier conversation that the kind of person you're now talking about is a very much more sophisticated animal than the sort who argues about, um... creationism and... that kind of thing. Because those kind of people really would think that there was some intervention by... the deity in the world. But your people with their internal revelation presumably accept that their god doesn't actually intervene in the world, otherwise they would have to concede that it is a scientific hypothesis. So the domain in which he works - or it works - seems to be a rather strangely detached from the world domain, purely concerned with internal feelings that people privately have.

JM: But the implication is that it's a domain from which we are unfortunate enough to be excluded.

RD: That's right...

JM: ... And it's a lack of some sort of, um... talent... generosity... or, um... blindness on our part which cuts us off from the beauty and majesty of this deity.

RD: Like not knowing what it's like to fall in love or something like that...

JM: Yes.

RD: ... Being deprived. Being deficient in some important way. Um, yes, I can understand that, and I... actually could imagine that, that we're not so deprived as... because you and I probably do have... feelings that may very well be akin to a kind of mystical wonder when we contemplate the stars, when we contemplate the galaxies, when we contemplate life, the sheer expanse of geological time. I experience, and I expect you experience, internal feelings which sound pretty much like um, what mystics feel, and they call it God. If - and I've been called a very religious person for that reason - if I am

called a religious person, then my retort to that is, "Well, you're playing with words.", because what the vast majority of people mean by religious is something utterly different from this sort of transcendent, mystical experience. What they mean is a... an entity which interferes in the world, which actually has some kind of impact upon the world, and therefore is a scientific hypothesis.

The transcendent sense... the transcendent, mystic sense, that people who are both religious and non-religious in my usage of the term, is something very very different. In that sense, I probably am a religious person. You probably are a religious person. But that doesn't mean we think that there is a supernatural being that interferes with the world, that does anything, that manipulates anything, or by the way, that it's worth praying to or asking forgiveness of sins from, etc.

JM: But once we concede that, I know - this is what I call the clergyman in the laurel bushes - that as soon as one makes any concession in the direction of wonder, awe, or um, a sense of majesty and mystery, and it's not confined to the large things... just simply contemplating mitochondria produces the same sort of Blakeian feelings that he had from grains of sand... the clergyman in the, um... laurel bushes leaps out and says, "Ah! You are one of us after all."

RD: Exactly. It's happened to me over and over again. I think it's deeply dishonest, and I think it's fooling around with words and not understanding, or not honestly dealing with way ordinary people use words. And so, I prefer to use words like religion, like God, in the way that the vast majority of people in the world would understand them, and to reserve a different kind of language for the feeling that we share with possibly your clergyman in the laurel.

JM: But, um... as soon as one does admit that, and admits the un-knowability of things, there is always the implication from the religious - not necessarily from the orthodox religious, but the people who are susceptible to energies and vibrations and aromas and so forth - to the idea that, what they often say, "There must be something."

RD: Well, OK, it just doesn't follow. It's just umm...

JM: Well, my answer to them when they say, "There must be something", and I always say, "Well yes there is. It's everything."

RD: Yes.

JM: "It's there without any super-added... principle."

RD: I think I would hit back harder than that actually, and say that the sense of wonder that one gets as a scientist contemplating the cosmos, or contemplating mitochondria is actually much grander than anything that you will get by contemplating the traditional objects of religious mysticism.