

## Transcript - Long

### Robert Lawrence Kuhn:

Richard, the claim is made that while we think we have free will, the fact that the universe is a closed system, and the current state of our brain is caused by a previous state of our brain, which is caused by a previous state, and there's this closed system going back as far as you want, that what we feel is free will is not because our mental activity is caused by our brain, so free will is an illusion.

### Richard Swinburne:

Two points I would make. First, I don't accept that the world is a determined, the physical world is a deterministic system. I think quantum theory has suggested otherwise. The more normal interpretation of quantum theory is just that on the very small scale, how a fundamental particle will behave is not predetermined. There's a certain probability it will do one thing, a certain probability it will do another. Of course, on the large scale, in the case of most systems, the small-scale probabilities even out, that is to say, if you imagined that whether a coin lands heads or tails is not predetermined, and there's a natural probability that it will land half heads and that it will land half tails. Nevertheless, if you toss a coin a thousand times, it follows from that, that something fairly close to 500 will be the number of tails, and something fairly close to 500 will be the number of heads. But, of course, it is possible to devise systems, scientists can do it all the time, in which the outcome on the large scale depends on a very small event on the small scale. So, you could produce a bomb, a hydrogen bomb, such that whether it exploded in the next hour or not, depended on whether some particular atom decayed within that time or not. And, the brain, to all appearances, is a system on which very large outcomes might very well depend on very small events. Now, we don't know enough about the brain to know whether that is the case, but there is a certain plausibility in supposing that that is the case. Whether a particular neuron fires will depend on whether the input to it from one side, that is, the neurons which build up the strength of the potential is greater than the input from the other side, that is neurons which diminish the strength of the potential, and just one extra bit of input from one side will mean that the neuron fires. Whether the input does come, may well depend on the exact amount of chemical, which is released from the next neuron to it, and one can tell a story about how a very small going on, within, within the quantum limits, such that it's not predictable by science, will lead to large-scale differences. Now, that may or may not be the case, but there is a certain plausibility in it and one mustn't start the argument by saying, well, the physical world is determined. So, it may be, but if the mind interferes and it were in the brain, there won't necessarily be much physical evidence of that. However, I think we have to say, for rather different sorts of reasons, that our intentions do make a difference to what goes on in the brain. A lot of scientists have wanted to suggest in recent years that they can explain our behavior in terms solely of brain events, and it's not necessary to bring in our intentions. It might seem, of course, that I came here to talk to you because I had a belief that this would be a good thing to do, and I formed the intention to act on that belief, and that's why I directed my steps in this direction. But, a lot of recent work by neuroscientists have suggested that prior to our forming intentions there are events going on in our brain and they wanted to suggest that these events going on in our brain determine which steps we will make, and therefore, there's no need to bring in intentions. The sort of experiments done of this kind are not concerned with such large scale events as me coming here, but as to whether I move my hand or not, and the experiments have tended to show that if you ask somebody to move their hand within the next twenty seconds or something, there will be a buildup of potential on their skull, or now we know, in a lot more detail, what's going on in the brain, there will be a certain group of neurons which will be a lot more active, and this group of neurons is always more active before we make, before we produce a certain bodily movement.

### Robert Lawrence Kuhn:

And before we have a conscious sensation of wanting to do that.

### Richard Swinburne:

And before we have a conscious sensation of forming the intention to do that. And therefore, they say, we can explain all in terms of earlier goings on in the brain. The trouble is, however, that these experimental results do depend on the scientist knowing the exact moment at which you form an intention and, of course, for that they have to rely on what the subject tells them. Now, why should they believe what the subject tells them? Well, of course, because they think the subject is trying to tell them the truth, and what does that mean? Well, it means that they believe the subject said, I formed intention at time T, and they believe, when the subject says I formed intention at time T that the subject says that because the subject believes that he formed intention at time T, and he has formed the intention to tell me. They think that what comes out of his mouth is caused by his intention to tell me the truth and his belief about what, at what moment he formed his earlier intention. So, the very attempt to suggest that certain experimental results have the consequence that our intentions don't affect our brain events depends on a certain kind of evidence is what subjects tell us. And we believe that evidence because we believe that their intentions caused them to tell this. So, the only way of proving that your intentions don't cause your brain events is by believing certain evidence, which depends on the assumption that your intentions do cause your brain events. So, I regard this as a self-defeating program.

### Robert Lawrence Kuhn:

But it seems that if you do believe that they are telling the truth you just simply have the fact of the buildup of brain activity prior to when they report they have the urge to move their finger, or the intent. So, it cannot, can't you get beyond the logical consequence of their belief system and just say, very simply, where, at what time the brain buildup you see in terms of their neuronal activity, and at what time, some milliseconds later, that they report the urge to move their finger, the mental intent.

### Richard Swinburne:

Yes, but the issue is whether the brain event by itself causes the motion of the hand, or whether the brain event causes my intention.

### Robert Lawrence Kuhn:

Correct.

### Richard Swinburne:

My intention, in turn, causes the motion of the hand.

**Robert Lawrence Kuhn:**

Correct.

**Richard Swinburne:**

What I am suggesting is we must believe the latter, that the intention is a necessary part of the causal chain. Or rather, we don't have to believe it with regard to any particular experiment. I'm certainly hap, open to the sometimes that we act very quickly and we, as it were, automatically act, and we don't form an intention, and then we, afterwards, we rationalize. But this argument is designed to show that can't generally be the case, that we can only believe this happens sometimes if we believe that other times it doesn't happen, and that's to say that the intention produces the brain event which produces the bodily movement, and we must believe that our subject's intentions cause the brain events which cause them to say what they do, otherwise we'd have no reason to believe them when they tell us this. And if we don't believe them when they tell us this, then we haven't got the evidence on which to build our theory. Look, it's a basic epistemological principle that you believe that you are having the experiences you think you are having, that you, that your memories are basically reliable, and that when people tell you something, they should be trusted. But in each case, as it were, there's a defeat, if it can be shown that, for example, you are inclined to say that you did so-and-so yesterday, not because you remember it, but because somebody has programmed your brain or kept repeating it to you in the interval or something, then you've, you've given reason to suppose that the previous event was not a cause of your having this memory, and once you believe that, you don't believe the memory to be genuine. Likewise, also, with testimony, if somebody tells you, I went to London yesterday, and you find that they are going to tell you that anyway, whether or not they went to London, because they wanted you to believe it for some purpose, then you wouldn't believe what they said; that is to say, it's a necessary condition of our believing, trusting our memories, trusting our testimonies, trusting our beliefs about what we're now thinking about that we believe, that our belief arising from the testimony, or our belief arising from the memory, or our belief arising from the experience is, in fact, caused by the experience, caused by the memory, caused by the testimony. If we find it isn't, we don't trust it. And, coming back to the particular case of testimony, if you find the words coming out of someone's mouth are caused by Tourette's syndrome, or caused by plastic aphasia, then you realize there's a cause of these words coming out of the person's mouth, which has nothing to do with their beliefs or anything, or indeed, I mean, we needn't postulate diseases, if you really let yourself go, and let all sorts of words come out of your mouth, you find the words coming out of your mouth have nothing to do with your beliefs or intentions, they just come. But then, if someone realizes that's what you're doing, they're not going to believe what you'll say, but it's like that in this case. If, if you believe that when somebody tells you, I formed intention at such and such a time, the words are coming out of their mouth not because they have a belief that they formed an intention at such and such a time, or that they intended to tell you that, but simply because there's a brain process going on which led this to happen. Then, immediately, that defeats your reason for believing them, just as if the words come out of their mouth cursing you, and you realize they've got Tourette's theorem, syndrome, you realize the words are coming out of their mouth not because they wanted to hurt you or anything like that, so you don't trust it. That is the pattern of the argument. It's necessary to believe, in some cases, that our intentions are causing brain events if you are to have evidence that on other occasions they don't. And therefore, we must believe as, and once that, that point is admitted, in general, then surely the case that [unintelligible] that often intentions cause brain events, then surely, they do, it's plausible, in the most serious cases where we are making up our mind about a moral decision or something, or a long-term plan above all, then they must do that.