Exploring Psychology

Exploring Psychology: Can science explain consciousness?

Nick
Well thanks Fred. I think that's the point at which we should move on to our third question. Which is the extent to which psychology could ever perhaps explain consciousness, whether we understand psychology as a science or not. Maybe I can start with you Richard. Do you think we'll ever be able to explain consciousness in a scientific way?

Richard
Well it depends on what aspect of consciousness you're trying to explain. I do think that a scientific approach can be very useful in looking at the biological bases of what it is to be conscious. For example, neuro-imaging, you might compare what's going on, with people who are unconscious, with people who are conscious and begin to get some sense of what the biological, or anatomical foundation for those different states of consciousness or non consciousness can be. So that's useful. But of course it's by no means the whole of an explanation of consciousness and when you actually move on to the content of consciousness, what it is we're aware of, the phenomenal aspect, I think one of the problems here, is that what I talked about, the implicit meanings, which are involved here these are not meanings which are actually present as such but underpin our sensory awareness, our perception. So for example if we look at a car and if you know what a car is, and what it does, you don't just look at an object, you look at an object with meaning. But those meanings, about what lies under the bonnet, what the car does, is not actually present, when you're looking at it, at that moment in time, you're conscious of it. So in other words, the implicit meanings which underpin consciousness, I don't think these can be studied using orthodox scientific method. And the reason I say that, is because I think they're of a different order. Meanings are essentially, required to be interpreted. If I want to understand what it is you're saying, I've got to try and make sense of the sounds that you're emitting and what the meanings that I take those to imply. I may not get it quite right, I may not fully understand what it is you're saying, I can only do my best. A second person also listening to you, may well come up with a different kind of meaning, attribute a different kind of meaning, so it's always got to be interpreted. It's not something you can put out there, measure, look at the causal relations, the kinds of procedures you need when you take a natural science approach. So what I'm saying then is the actual contents of consciousness, I don't think, are amenable to study from a natural scientific point of view. That's not to say they can't be studied. You can still engage in systematic exploration of this but it won't be the same kind of thing as you find in the natural science.

Nick
And would you see that systematic exploration as being psychological in nature?

Richard
Yes. I would want to include within psychological method. I would want it to transcend. I think it does involve natural science methods but I think it also has to involve other kinds of forms of understanding because the meanings which make up our world are very important psychological phenomena. We have to study them in some way, even if we can't use natural science methods. We have to find new ways of doing this. Interpretative methods, if you like.

Nick
Well Fred, can I turn to you as a biological scientist. There are two challenges which I guess Richard is presenting. One is that consciousness has a certain content, or a certain phenomenal aspect to it and the second is that necessarily scientific methods will fail to

address that. How do you respond to those features of consciousness as Richard outlines them?

Fred
In a sense I am very open minded about this because more and more knowledge we're getting of brain mechanisms that are the necessary basis, it would seem, for conscious experience and the more we understand of how complex properties emerge from a system then it seems as if we may get some purchase on consciousness. I am not entirely convinced we will. And I have to say I'd have to take seriously some of the more way out accounts of consciousness in your chapter that maybe it isn't a product of the physical brain. Now that sounds a completely way out idea but it's an interesting one. It's not one of course that most brain scientists would subscribe to. Most brain scientists would suggest if we keep plugging away at it and understanding how properties emerge, sooner or later we'll get there, that it is a product of the physical brain. I tend to wear two hats on this one. The one hat as a scientist which is someone who is working on trying to understand these complex phenomena and the other hat I wear when I go home, that I can quite easily live with the notion that there is a mystery to it. That doesn't really bother me.

Richard
Actually I don't think we need to take an either or position on it. I don't think we need to invoke mysterious explanations, like the Chalmers explanation that stones have consciousness. We don't need to go to that extent. That's not to say, as I think I've made clear, that I think you can reduce the explanation to a biological level. Because I think what we have here, we have what we call emergent properties. So I think that the meaning certainly depend on neuro-physiological functioning of some kind. I just don't think it can be reduced to that, when we want to understand it. We have to treat it at its own level. But I don't think therefore that we have to invoke some mysterious trans-material entity in order to understand consciousness.

Nick
Well can I defend Chalmers. Since it's whacky and enjoyable for that reason, I suppose Chalmers might say that that's all very well but as things stand, we don't understand how neuro-physiological processes, let's say, could give rise to something like consciousness. So yes, we don't necessarily have to be mysterious but it seems there's some kind of explanatory gap.

Richard
But we understand their inter dependence. We may not understand the precise processes by means of which biological processes generate phenomenological experience but we do know there is a link. You've only got to take a glass of whisky for example to know what when you have this physiological intervention of taking in alcohol, it changes ones state of awareness, or drugs, or feeling tired, or whatever. So we can quite clearly see there's interpendance here between physiological process and experienced phenomenon. But could I just pick up on one point that Fred made earlier, he talked about the importance of taking an evolutionary perspective, I think we also have to take an evolutionary perspective when we think about the kind of understanding that human beings are capable of. We have evolved brains that have enabled us to deal with the issues that are important to us in our previous evolution so we're very good at problem solving in the material world, this is why our technology is so good. Yet when it comes to other aspects of being human, we're not nearly as efficient. Now I do think that human brains have evolved to make good sense of social phenomena, meanings, of social meanings. However, where the problem I think arises when we try to understand consciousness scientifically is that scientific understanding usually involves the use of a model of some kind. If you look at psychology you find around the turn of the century, they drew their models from the current technology of the time which was a telephone exchange. So you have the notion of a mind as a telephone exchange. Now more recently we have the computer, as a kind of model out there in the world which we can use to try and explain consciousness. I think the problem is though, that there's nothing like consciousness, in the outside world. Phenomenal conscious is a first person experience; it's only in the mind it's not in the world. So there is no model we can draw on to help us make sense of consciousness.

Richard
I think that's a very valid point. That, that is a real weakness. You've talked about the telephone analogy, that was Watson's analogy, then the computer, even before that you had a hydraulic statutes of Descarte and so on. Where do we go from here, technology is not there.

Nick:
So are we are agreed there's some kind of gap in consciousness. There's perhaps a gap of explanation.

Richard
I think we're all agreed on that. I think that's the understatement.

Fred
That makes it exciting doesn't it.? We're reaching out into the unknown.

Nick
Yes, and trying to bridge this gap.