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Thought and Experience The hard problem of consciousness

Keith Frankish

David Chalmers is best known for articulating what he calls the hard problem of consciousness and for defending a property dualist position. I talked to Professor Chalmers in April 2004 just before he left Tucson to head a new centre for consciousness research at the Australian National University. And I began by asking him what his aim was, in coining the term 'the hard problem'.

Professor David Chalmers

I didn't take myself to be taking any sort of massive original step in using this expression, in fact it was a big surprise to me that it caught on in the way that it did. The context for this was a conference on Consciousness, actually here in Tuscon, Arizona back in 1994, which was one of the first big international, interdisciplinary conferences on consciousness. In one of the early sessions, which was mostly on philosophical foundations, I got up and said, ok well here we are at a conference, explaining consciousness and already it's clear that people mean many many different things when they talk about giving a theory of consciousness. There is many many different phenomena that you might be trying to explain. So the first thing we want to do as Philosophers is to sort them out, and here's a distinction which I find kind of useful.

There are these phenomena which has got something to do with consciousness, the phenomena of discrimination and response and verbal report and so on. Which although they're essential and very much worthwhile phenomena to study, we don't have the sense that they're getting at the central, big mystery of consciousness. And then there's the, you know, the big banana, when we're all in the back of our minds really hoping to solve. When we think about consciousness as a last frontier of science. This is consciousness as experience, as first person, subjective, experience of the world. And that's the one that poses the big mystery.

So I guess there was some sense that a lot of people were coming into their papers and talks at conferences like this, starting out by claiming to be taking on the big mystery of consciousness and then addressing a different problem. So because of that I found the distinction kind of useful in sorting it out, and of course then it just took on a life of it's own. What I said in thinking about the hard problem and the easy problems I guess it just, for whatever reason, resonated. I mean everyone knew what the hard problem was in the back of their minds and I think having that expression around has now made it a lot harder for people to ignore the problem in a way that they might once have.

If someone gives a theory which ends up only addressing some of the other phenomena then someone's got to stand up and say well, that's getting at the easy problems, but is it getting at the hard problem. So because of that I think it's actually been quite a useful thing to have around.

Keith Frankish

You mentioned there that the study of consciousness is an interdisciplinary one, it's one that neurologists and psychologists and many others involved in as well as philosophers. What's specifically can philosophers contribute to consciousness research?

Professor David Chalmers

When I think about this stuff, I don't exactly think in terms of, here's what the philosopher is going to do and here's what the neuroscientist is going to do and here's what the psychologist is going to do. We're all in this together, trying to understand the phenomena. A lot of the time a neuroscientist or a psychologist will turn around and say well the hard world problem of

consciousness is a philosopher's problem. You know we're worried with gathering the data and explaining the functions, and you guys can worry about these private subjective aspects of experience.

On the other hand sometimes philosophers are going to say well let's wait around for the scientist to come up with a solution for this and my attitude is, there's no point in throwing this hot potato back to the other side all the time, but let's just try to see what we can all do in solving this thing together. Certainly, you know what's neuroscience and psychology going to give you, in addressing this question. In the first instance to what neuroscience and psychology and so on are really good at doing is coming up with mechanisms for the explanations of behaviours and of cognitive functions and so on. But as we've seen this very often seems to leave the hard problem of consciousness unanswered.

It explains how it is that we respond or how it is that information gets drawn together, without touching on the question of experience. So the first thing that the philosopher can do is to, you know, point out there's this further problem there. And then the question is, ok what are the further things we can do, to go beyond the raw data of neuroscience and psychology and get to a explanation of consciousness. So you know my own view is that what a philosopher can do is analyse what the further problems are and analyse what are the extra things we need to do to explain them, what are the extra elements in a theory of consciousness going to look like, in the most general sense.

And then the philosopher, the neuroscientist and the psychologist can all sort of join together in a sense in trying to fill in the specific details within a general framework. So in my work I've tried to outline in very general terms what the theory of consciousness in the fairly abstract sense might look like, and then I see the project of coming up with such a theory as a cooperation between the neuroscientist, the psychologists, actually gathering specific data, doing specific experiments and coming up with really specific principles, which will maybe somewhere down the line lead to a quasi scientific theory of consciousness.

Keith Frankish

Can we move on now to look at the framework theory of consciousness that you yourself propose. The view you advocate is one you characterise as a form of property dualism, could you explain what you mean by that and how your view differs from a physicialist one?

Professor David Chalmers

I take the physicalist view to be in the broad sense that everything in the world is ultimately derivative on, or in some sense reducible to the aspects of the world, the physics tells us about. Some physicists want to think as physics in some sense as providing us with a theory of everything. I mean it's not like physics tells you directly about tables and chairs and organisms and so on. But the sense is that all that stuff is a consequence of the basic properties and laws of physics. Physics will ground chemistry and chemistry will ground biology and so on from there. And if that works that's a beautiful version, if that works then there's some sense in which physics is at very least a theory of everything that's fundamental about the world.

I gradually came around to the view that although this can explain a whole lot, this isn't going to explain consciousness. Nothing in the ontology of physics, the underlying properties of physics, like space and time and mass and charge. The underlying laws of physics, is ever going to explain why consciousness is there.

In some sense this is always going to be left explaining the objective third person aspects of organisms, like their structure and their function, and it's always going to leave this explanatory gap to consciousness. Now the reasons for that are kind of tricky. But let's say that's right, and I think the consequence has to be, if the properties and laws postulated by physics can't explain everything, then there's more in the world than those properties and laws, we've got to go beyond them. Just as say it turned out that the mechanical view of physics was space and time and mass and laws of mechanics couldn't explain all the electro magnetic phenomena in a 19th century, people went beyond that to posit electro magnetic charge as an irreducible aspect of the world, and laws of electro magnetism.

Likewise here, I think you have to postulate some further properties in the properties of consciousness, as an irreducible fundamental aspect of the world. And laws that go along with those. So the sense in which my view if property dualistic, as it says there are more fundamental properties in the world than the fundamental properties posited by physics. Maybe the new property is something like consciousness itself. Or maybe it's some other property call it proto-consciousness, which when added to the mix will give you consciousness and then there have to be further fundamental laws which connect that to the laws of physics. Once we have that in the mix then I think we have the grounds for a theory of consciousness just as once we had electro magnetic charge and electro magnetic laws in the mix, we have the grounds for an explanation of electro magnetism.

Keith Frankish

You mentioned there the beauty of the idea that everything can be irreducibly explained in terms of a small number of basic physical properties and laws. Wouldn't the introduction of new properties and laws of consciousness spoil this elegant physical picture?

Professor David Chalmers

It's certainly true that there's something beautiful, elegant and simple about fundamental physicalist picture of the world. A few basic properties and a few basic laws and I'm very much attracted by that myself. So I agree you don't want to tamper with that in a which will ruin it, or destroy it's elegance or it's simplicity. I mean if one takes consciousness seriously, one is ultimately forced to say, there has to be something more than that. But one hopes that the extra thing which is more is also going to be quite elegant and quite simple. If it turned out that our fundamental picture of the universe was something like the following, I think one might have reason worry if it turned out that you know we had three basic laws of physics and five basic properties of physics and then on top of that a million properties of consciousness and two thousand ad hoc laws saying, whenever you have this brain, you get this state of consciousness and this brain you get this state of consciousness. That would be an ugly ad hoc picture of the world. So my hope is that ultimately it might be possible to integrate consciousness with our physical theories in a way which isn't ugly and ad hoc like that. Somebody once said that one of the fundamental goals in physics was to come up with a set of fundamental laws so simple you could write them on the front of a t-shirt. The thought is, well maybe we can come up with some fundamental principles governing consciousness which is so simple we can write them on the front of a t-shirt too. I see this very much as a challenge, for a science of consciousness. But right now I don't see a reason why it couldn't end up the principles governing consciousness could be very simple and very elegant and integrated with our elegant physical theories of the world.

Keith Frankish

Property dualists are sometimes accused of deliberately cultivating a sense of mystery around consciousness. In order to preserve the sense that human beings are special and not just soulless physical mechanisms. What do you say in response to that?

Professor David Chalmers

I think we have to distinguish the view and the motivations for the view. One could be a dualist for many different kinds of reasons. Some are sent there for a religious reasons, religion given us reason to believe in a immortal soul, so therefore it has to be non physical. And other people are perhaps sent there because there has to be something special about the human being and the human experience. Those motivations are simply not my motivations at all, I'm not especially religious, or especially spiritual. I was just led here, here's a phenomenon that we need an explanation of, what kind of explanation is going to work, and it turned out for systematic reasons that the kinds of purely physical explanations weren't going to work. And the view you went up with on this picture isn't necessarily going to be one which somebody who wants to preserve the specialness of human beings is going to necessarily like. I've become more and more attracted to views on which consciousness goes very deep in the natural order, it's not just human beings who have consciousness,

certainly most animals I think have some kind of consciousness and it may indeed go very deep, perhaps right down to some quite fundamental levels of existence. So this is probably going to be anathema to someone who wants to make human beings special. On the other hand it is the case that people who have those motivations and people from religious backgrounds and so on might find something attractive in the sort of view which I'm putting forward, without going all the way.

Keith Frankish

You mentioned that you were led to your position on consciousness by systematic reasons. One of the key arguments you discuss in your book and elsewhere is the conceivability argument, which turns on the claim that it is conceivable that they could be zombies, could you sum up that argument for us?

Professor David Chalmers

A zombie in the philosophical sense is a being which a physical duplicate of a normal conscious being, but lacks consciousness, so they're distinct from the zombies you see in movies, which go around behaving in strange ways and eating brains and so on. So these philosophical zombies are indistinguishable from ordinary human beings. Now few people think that zombies actually exist in our world, but the question is whether the idea even makes sense. And I think there is pretty strong prima facie reasons to think the idea at least makes sense. I can talk to somebody, I could talk to one of my colleagues and I can raise the question, are they conscious or not.

I mean I believe they're conscious but am I certain they're conscious? It seems there's no contradiction in supposing they're not conscious. I can do a brain scan of them, a body scan of them, know all about their brains and so on, again I might believe they're conscious but again it seems that no amount of physical information in some sense proves that they're conscious. It's always going to be coherent or consistent to suppose they have all their physical structure without consciousness, so that's roughly what we mean in saying zombies in this sense are conceivable, there's no conceptual contradiction in supposing that other people are zombies. Even though we might have reason to believe that in actual fact they're not.

And then, from there you can go on to say that given that these things are conceivable, or logically coherent you can then raise questions like, well aren't they in some sense metaphysically possible, again not necessarily possible in the sense that they could exist in the actual world, but to use one metaphor, couldn't God in creating the world, have created the world with zombies in it. It's a consistent conceivable idea. It seems like it's in God's powers to create a world that's physically just like ours. But that has less consciousness in, or perhaps has no consciousness at all. And that suggests that to get consciousness into our world, God has to take an extra step beyond getting all the physical stuff set up right. Has to make sure this is not a world of zombies, but a world with conscious beings.

You can think about it as one basic proto argument against the physicialists view of the world and for the property dualists view that you need further properties in the world to make sure that consciousness is there.

Keith Frankish

So the argument has two key premises. One that zombies are conceivable and two that if something is conceivable then it is possible, at least in the metaphysical sense. Now people have challenged both of those premises, let's start with the first. Can we really form a clear conception of a zombie, after all zombies are supposed to behave exactly as we do. So if my zombie twin describes its reactions on seeing a beautiful sunset, or listening to a moving piece of music, it will exactly what I would. Is it really coherent to suppose that all the same it is not actually experiencing anything?

Professor David Chalmers

I think there's a strong prima facie case that zombies are conceivable, now sure these zombies have all kinds of remarkable behaviours and make all the verbal reports of

consciousness. That suggests very strongly that if we discovered one of these things in our world, we'd think they were probably conscious. But I don't think it does much to remove the coherence of supposing they're not. I mean I could talk to you and I could listen to everything you say about consciousness, and all your reports of your consciousness and so on. I could say okay, he's probably conscious but again there's going to be no contradiction in supposing that you're not conscious. And I'm always going to be able to raise the question, well how do I know for sure that he's conscious. We could have complicated computers, that come up with all those verbal reports with all this processing and we'd still be worried. A strong prima facie case, I think, given all this that zombies are conceivable, still it's a reasonable strategy to come back on this point. So maybe there's some subtle contradiction that you haven't noticed yet. Maybe once you've really conceived of all that processing in all the glorious detail that goes on in the human brain, then you'd eventually come to realise that it just couldn't fail to be conscious, as a matter of conceptual principle. Once you really think it through the conceivability will go away.

What I've done to argue against this is to say well for this to work there's ultimately going to have to be some kind of conceptual hook between the concept of consciousness and the underlying physical concept. Concepts of all those physical processes to bring in the contradiction, to bring in a conceptual entailment from all that physical stuff to consciousness. And ultimately then, you've got to look at what's in our concepts of all that physical processing. I think it's ultimately a bunch of physical structure and dynamics.

What would the concept of consciousness have to be like in order for it to support such an entailment that would lead to a contradiction? Ultimately our concept of consciousness would have to be a concept of something so structural or functional, for example could be the concept of playing a certain function or role in the production of behaviour or of certain processing. If our concept of consciousness had that form then I think the concept of a zombie would be contradictory and then I just think there's very good reasons to think our concept of phenomenal consciousness is not a functional concept, it's not just a concept of something which does something which responds in a certain way which reports in a certain way. So somebody taking this position, I think, is ultimately going to be, not fully taking consciousness seriously, I think ultimately the only way to make zombies inconceivable is to take a pretty hard line in the way as say Dan Dennett has done, and so there isn't really any further hard problem of consciousness over and above the functions.

Now more power to Dan Dennett for taking that line, but I think that's a line which many many people think is one that just doesn't do justice to the phenomena here, that need explaining. There are the functions that need explaining the reports and the responses and there's the subjective experience that suggests very strongly our concept of consciousness isn't this functional concept.

If that's the case I think through a relevant chain of reasoning it's always going to turn out that zombies are conceivable.

Keith Frankish

Okay, so there's a case for thinking that zombies are conceivable, but what about the second premise. That if something is conceivable then it's metaphysically possible. Is that true? Does the fact that we can imagine something really show that it could exist. Doesn't it just tell us something about our powers of imagination?

Professor David Chalmers

This is one of the most interesting and controversial questions in this area, and in the last few years in the philosophical literature there's been a lot of going back and forth on this and people trying to understand this relationship between conceivability and possibility better. The first thing you need to do is to realise that conceivability doesn't mean just one thing, even possibility doesn't mean just one thing. So I wrote a paper where I tried to sort out about eight different meanings of conceivability in different centres of possibility. I won't try and go through those now you'll be glad to hear. The thought was though that if you articulate the right sense of conceivability in the right sense of possibility, there is a very

plausible thesis here to be had. That when something is conceivable in the relevant sense of not being able to be ruled out through any amount of a priori reflection, then there's going to be some kind of metaphysical possibility, near by, again not a natural possibility, not something which could actually exist but a metaphysical possibility. Now metaphysical possibility of course is a much broader notion than mere natural possibility. There's no reason to think conceivability should tell us about what actually exists, but this is a metaphysical possibility. It's just basically the ways things could have been. And I think there is a link between our imagination and our powers of reasoning and our ways of the world could have been.

And now some people think there are counter examples here, for example, you can conceive of certain complex mathematical statements being true or false but they couldn't really both have been true or false, so one thing you're going to want to do is articulate the thesis in the right ways, so that excludes those counter examples.

And I think if you idealise the relevant notion of conceivability by saying things couldn't be ruled out by arbitrary reasoning then we have a tougher notion of conceivability which might link to possibility. Then there are various examples which came in from Saul Kripke and his work on it being necessary that water was H2O whilst being conceivable that water is not H2O. And that raises again a bunch of very tough, technical issues. But I think again once you articulate the right notion of conceivability there's a way of understanding it. So those aren't counter examples. So the upshot to all this is that I think you can put forward an attenuated conceivability to possibility thesis. So there are no clear counter examples anywhere to this thesis and all the other domains, whether it's water or mathematics or whatever you like, what's conceivable there's a very good reason to think, is metaphysically possible and I just say we should apply the same principle which seems to work in all these cases to the case of consciousness.

Now at this point someone can come back and say well, either there is something wrong with this thesis in the first instance, even in other domains and we can argue about those, or they can say there's something special about consciousness. So even though that principle works in these other cases, it doesn't work for consciousness. And in practice I think opponents of this themes and materialists are going to divide between those different strategies and that leads to a lot of discussion. So I think if you just go by the principles that seem to work in other cases things come out pretty good in the case of consciousness for the sort of arguments that I'm trying to put forward.

Keith Frankish

May we turn now to the problems that property dualism faces. The most serious of these I think concerns the causal or role of consciousness. If the physical world is causally closed, then how can a non physical consciousness have any effects within it?

Professor David Chalmers

Yes, so this is a very tough question and many people think that this is one of the best reasons to believe in physicalism, we've got this beautiful autonomous causal network in the physical world, all physical effects are produced by physical causes. So wouldn't consciousness have to be physical to produce such effects. So one of the big problems for any non physicalists view has always been, how does consciousness get into the loop, so to speak. I don't know the answer to this question but I think there are about three possible options in responding to it.

The first one is simply to deny that consciousness has any effects; this is the epiphenomenalist's view. Consciousness is outside the physical network, the physical network is causally closed and consciousness doesn't have any effects within it. Any many people find this view counter-intuitive; they find it very intuitive that consciousness has physical effects. But I'm not sure that there's anything which proves that consciousness has physical effects. I mean you can make the point that we're exposed to all these regularities between consciousness and the physical world, therefore, we naturally suppose or infer that there's a causal connection there when in fact there's mere irregularities of a common cause. And so one thing I've tried to do in some of my writings is to make the case that there's no fatal objections to epiphenomenalists as a view, it ought to be regarded as a possibility.

I think the biggest objection to epiphenomenalism, it's not so that it's counter institutive it's rather that it leads to an integrated picture of the world, that closed physical network and consciousness dangling outside it.

Keith Frankish

So one option is to endorse epiphenomalism to deny that conscious that physical effects. What are the other possibilities?

Professor David Chalmers

The other two possibilities are ones which integrate consciousness a bit more with the physical world and maybe give it more of a role to play.

The second possibility then is an interactionist dualism, which is a little bit like the view that Descartes held in saying that consciousness is outside the physical network but still gets in and makes a causal difference to physical processes, it shoves the physical stuff around if you like. Now to do that you have to deny the causal closure of the physical world and say there actual gaps in physical processing which consciousness feels. Many people think that's incompatible science because physics has begun to tell us that the world is causally closed. I think there is something to this but still if you look at our best physical theories these includes quantum mechanics. Quantum mechanics is quite ill understood and there are places in quantum mechanics that suggest there are quite big jumps some of the time in physical systems. Big unexplained jumps. Some people hypothesised this has something to do with consciousness, and indeed if you look at quantum mechanics they say these jumps have something to do with measurement. Measurement, observation, consciousness it's at least a natural link. So the second view which I see as a viable option is to exploit some things which are going on in guantum mechanics to give a role for consciousness in affecting physical processes. I don't know that that's right, I mean it's a very, very speculative view but I don't think it's the case that it's ruled out by science in the way that some people think that these sorts of dualistic views are. It's just a matter of, quantum mechanics is quite mysterious in this respect. That does, I think leave room for a consciousness to play that role. So that's option two.

Keith Frankish

Okay, so option two is interactionism. Consciousness affects physical processes perhaps at the quantum level. What's option three?

Professor David Chalmers

Option three is the view that says consciousness, although irreducible isn't exactly outside that physical causal network at all. Consciousness instead is deeply tied to the intrinsic nature of the physical world. This goes back to Immanuel Kant if not further, and Bertrand Russell, we don't really know the intrinsic nature of entities out there in the physical world. The physical world is always revealed to us via its appearances, it's effects on us. Take a bunch of physical particles, we understand there relationships to each other and the causal structure of this network out there. But do we really know what these particles are in themselves, as Kant said do we know the nature of the thing itself. Or a Russell said, we understand the extrinsic properties of physical entities but not their intrinsic properties. So that's a big metaphysical mystery, what's the intrinsic nature of entities out there in the physical world. Combine this with another metaphysical mystery, we have these intrinsic properties of consciousness, how are we going to place them with respect to the physical world.

Russell's' idea was maybe we can solve both these problems at once. Say it turns out that the intrinsic properties of the physical world are either precisely the properties of consciousness or certain other special intrinsic properties which are very closely related to the properties of consciousness. So on this view, which I sometimes think of the pan psychist's view for consciousness everywhere, or the pan proto psychists view for proto consciousness everywhere. Wherever we have fundamental physical entities in the world like physical particles, they have an extrinsic nature and an intrinsic nature. That intrinsic nature might be closely tied to consciousness itself. So consciousness or proto consciousness spread throughout the physical network. Now if you take this view there is no danger of

consciousness being epi phenomenal, being outside the network in some sense consciousness is going to be present at the ground of all physical causation it's going to be consciousness which is in some sense is doing the work.

When one particle hits another particle that particle is somehow intrinsically constituted by consciousness or proto consciousness. It's right in there, in the causal network. Likewise when I perform an action, certainly intrinsic properties in my brain are going to be tied to consciousness and in some sense that's really doing the work.

So in this view consciousness is right there in the causal network. Now of course this view is speculative, the other two views are both very speculative too. So I don't know which of these three views is correct and I go back and forth myself a bit between them. I think each of them though has some chance of being correct, if you're really worried about finding a causal role for consciousness I think you should go for the second and look to quantum mechanics or go to the third and look to the intrinsic nature of the physical world. But these are very much I think open questions for exploration in the coming years. We haven't yet got to the bottom of them.

Keith Frankish

Well the three views you've outlined seem to be coherent but they are all rather speculative and in some ways counter intuitive. And someone might say that physicalism for all it's problems is simpler and less counter intuitive and therefore preferable, how do you respond to that?

Professor David Chalmers

Well I can certainly see how one being attracted to physicalism on the grounds that it seems simple, plausible, conservative and so on. My view is there is nothing wrong with a theory being counter intuitive per se I think one moral of 20th Century science is the physical world is

being counter intuitive per se I think one moral of 20 Century science is the physical world is really a very strange place. So it shouldn't be a constraint in our theories that they be completely conservative and intuitive pan psychicism and interactionist dualism might have some counter intuitive developments but no more so than other theories in physics. So that's not exactly a strike against them, but now the question is well maybe physicalism though is even less counter intuitive so we ought to believe in it. Again I just come back to the basic constraint which guides all my theorising about this is, our scientific and philosophical theories have to explain the phenomena.

They've got to explain the manifest phenomena that we have reasons to believe in, and I've just been led through systematic reasons to believe, physicalists view they're not just counter intuitive they just can't explain the phenomena.

Now I guess you could just deny the existence of consciousness or say there's nothing here that needs explaining, that would be more than counter intuitive, that would just be crazy. So the fundamental argument for physicalism you might think of as oconus rasa go for the simplest view, don't multiply entities without necessity. Dualism you might think multiplies entities without necessity. If what I've been saying here is right, there is necessity, I mean if you can't explain the phenomena given entities, A, B & C, then there's necessity to bring further elements into the picture and that's I think what one ends up doing on the property dualists view. You say well in this case reluctantly and conservatively we can't explain the phenomena given the basic entities of physical theory, so we need some new entities in there. If the theory ends up being counter intuitive that's okay, but at least we have the materials we need to explain the phenomena.

Keith Frankish

You mentioned Daniel Dennett earlier. Your views and his could hardly be more different. Dennett denies there is any hard problem of consciousness and argues that once we have solved all the so called easy problems, explaining the functions, responses and reports associated with consciousness, then no further problem will remain. You think that we could solve all those problems without even touching the really big problem of consciousness. This is a very deep disagreement. What does it stem from? Does is just come down to a fundamental clash of intuitions?

Professor David Chalmers

I respect Dennett's position because I think he bites many of the bullets that you need to bite if you want to have a strong robust, physicalist view. I think ultimately the only really coherent and consistent way to be a physicalist is to deny there is any special problem of consciousness and a sense that there is a special problem is a kind of illusion and that's Dennett's view. And he pushes that view pretty strongly. My own view is that the view is not adequate to the data, not adequate to the evidence that we have about us being conscious, and there being something here to explain over and above the behaviour and the functions. But you ask where does this disagreement stem from. I think it probably stems with a different kind of alternate methodology. Dennett himself has described his view as a kind of third person absolutism. It's differential to science and to observational data in that all that we ultimately have to explain are phenomena that are observable from the third person point of view. That's what science has to explain and that's the ultimate arbiter of what's real. So you observe the system from the outside, you look at its responses, its reports and so on, those are what you get from the third person point of view and that's ultimately everything that needs explaining. If that was right I think Dennett's position would be the correct consequence. But I'm going to disagree with him at that fundamental starting point. I think there are more data, there are more things that need explaining than what's observable from the third person point of view. In particular in the case of consciousness I think there are first person data. First person data of subjective experience that aren't simply reducible or straight forwardly translatable into just the problem of explaining certain verbal reports and so on.

Dennett here thinks okay explain the reports, explain the responses, that's all the data. I say no there are further data there is something here observable, distinctively from the first person view point which is one of the things that we need our theories to explain, and which is the primary thing that we need a theory of consciousness to explain. So I think it's that fundamental starting point which is really the fundamental difference here and I think I'm just following in a sense of good scientific methodology which is explain the things that need to be explained.

Keith Frankish

So does it follow that we're never going to make any progress in resolving this dispute? If it's a difference of starting point, then I guess in a hundred years time there will still be people who adopt Dennett's starting point and people who adopt your starting point and they will remain as opposed as ever. Isn't that a little pessimistic?

Professor David Chalmers

I think it's quite likely, I mean maybe its pessimistic but I think it's quite likely that two hundred years time there are going to be people who take very deflationary view of consciousness and say there is no special problem and there are going to be people who say there is some special problem and maybe we'll have made some progress in solving it. But one thing we've learnt is that the biggest philosophical questions disputes about those don't go away and philosophical progress doesn't consist in resolving these disputes for once and for all. It consists more in understanding them and in the case of consciousness, I suspect no result that's going to come out of neuroscience for example is going to settle the issue between Dennett and me.

But what philosophical progress is going to consist in is understanding what this difference in starting points, where it leads you to. So ok the fundamental difference in starting point between Dennett and me, which I suspect isn't going to be very easily resolved at all. But what Dennett's work is doing is bringing out where his starting point leads you to, what it commits you to, what's the best theory of consciousness that takes this broadly deflationary starting point. Where as on my side what's going on is okay, we'll just say you do take consciousness seriously in this fashion and just say you do except this starting point then where are you led. So it's a kind of conditional structure if you like, you don't get away from those fundamental differences and starting points, but still we make progress all the same. This does have a nice feature that I can at least look at the work that someone like Den

Dennett is doing and say well this isn't completely worthless, this is actually quite interesting. If you take that starting point where does it go?

I think there's fundamental reasons to reject this starting point, so ultimately the resulting view is incorrect, but that's not to say that it's valueless or worthless, what it does is to lead to a better understanding landscape of options.

Keith Frankish

Could I round this interview off by asking you about the more immediate future. There has been a boom in consciousness studies in recent years, partly inspired by your own work. How do you see consciousness studies developing? If we were doing this interview in 2020 rather than 2004, what do you think we would be talking about?

Professor David Chalmers

It's hard to sav exactly where it's going to go. I mean the boom in the study of consciousness hasn't just been in philosophy it's been in neuroscience and psychology and other areas. Certainly I think the neuroscience is going to continue to develop very rapidly and our understanding of the neurocoralets of consciousness will be much better and psychology, all kinds of interesting new phenomena are coming along, I think we're going to have better cognitive theories of the basis of consciousness. In philosophy distinctively though my sense is that right now the area where people are making the most progress is understanding what we might call the character of consciousness, its structure, and its phenomenology and so on. In particular there has started to be a big boom in the last few years of understanding the connection between consciousness and intentionality or representation. The way that consciousness represents the world, and this is where a lot of my own very recent work has been focusing, on understanding the way that consciousness reaches out to the world and represents it. This isn't so much a question about the mind body problem, what's the relationship between consciousness and physical processes this is a question about the intrinsic character of consciousness in its own right. One thing that's nice about this is that it's a question of which people who might disagree on some of these fundamental questions about whether consciousness is physical or not can still make progress on.

Other questions like the unity of consciousness is something I've thought about quite a lot. Consciousness has this unified nature; all these experiences present to a subject reaches out and represents the world and so on. So if you ask me in twenty years time, I mean I hope we've made progress on the mind body problem and we've got a better understanding of the options, the alternatives and where it's going, I don't think we'll have a final theory of consciousness, a final scientific or philosophical theory, I hold out hopes for a century down the line there. But if you ask me about twenty years time, I guess in twenty years time I would hope that we'll have a much better understanding of the intrinsic character of consciousness, one which might then be able to play a big role in helping to boot strap and constrain for the theories of consciousness' of ultimate nature.

Keith Frankish

Well that's an optimistic note on which to finish. Thank you very much Professor Chalmers. It's been great to talk to you.

Professor David Chalmers

Well thanks a lot.