



Exploring Psychology

Exploring Psychology: Explaining Consciousness

Nick

Perhaps we can now turn to the second of our three questions, to consider some of the ways in which both cognitive and biological perspectives have been used to try and explain consciousness. There are two candidate accounts, the accounts of Antonio Damasio and Bernard Barr and Barr's, as you were hinting at Richard I think, talks about the relationship between unconscious specialised processes, which might be operating in certain domains. Some may be perceptual, some may be to do with reasoning or problem solving and they send their messages, broadcast them if you like, to a global workspace and that's how they operate. And consciousness then corresponds to the contents of this global workspace. So we have in Barr's account, you have a kind of fairly clear distinction drawn between unconscious processes which are operating fairly automatically, sending the contents of their processes up to a global workspace and there is where consciousness resides and operations which take place in the global workspace then can perhaps percolate down their influences towards the specialised processes. So you're right. You do have that distinction. That's a fairly clear account I suppose in some ways. I haven't probably given it full justice here and now and equally Demasio's is a clear account. But I don't know if we could maybe think about the extent to which we do find those helpful in understanding consciousness. Fred, perhaps you would like to tell us.

Fred

Yes I think both of them are helpful within limits. I think of course everything is within limits. Barr's I think, fits rather well in the sense of understanding the nervous system about how the nervous system processes information and there are specialised bits of the nervous system associated with conscious awareness. That, having extracted a signal, that signal was then used to influence other, what I might call lower level processes, to act in a coordinated fashion. And regarding Demasio, I think it's interesting that he presents an image which shows an integration between the mind, if you like, the brain, and the body outside the nervous system. So feedback from the body things like, the immune system, the heart rate and so on are a crucial ingredient of our conscious awareness. It's an intricate view and one which I would welcome.

Nick

And Richard, how do you find those two accounts?

Richard

I find Barr's interesting. It is a useful account. I suppose I do have some problems with what he actually means by the global workspace. This sense in which unconscious processes suddenly become conscious, so they become written on the blackboard if you like, and what the role of the global workspace is. On one level he talks about us not being active as not doing anything. Just being representative as it were. But on another level, it's got this sense of integrating the various inputs that are coming into it. So, a helpful account but I don't think it goes far enough really. It doesn't really explain how these unconscious processes suddenly become conscious. Demasio I have much more sympathy with. I find Demasio is very useful. For example, the way philosophers tend to talk about phenomenal consciousness is in terms of what they call 'qualia'. These sensory experiences, like the famous one, the smell of coffee or the sound of footsteps on pebbles. Sensory experiences. Now that doesn't seem to me sufficient, although it's part of phenomenal consciousness, it's not sufficient to account for it. And I think Demasio's notion of the pro-self. This sense of body awareness which is located in an environment of external objects, which forms if you like the background, the underpinning for consciousness. I think that's a very important feature of phenomenal

consciousness. I think all of us when we're conscious, are somehow situated. We are somehow aware of being in a body and within a context, if only implicitly. So I find that a very useful concept. And that notion of the way the core self emerges from the interaction of the proto-self and representations of the external world.

Nick

Mm Hm. And certainly it's difficult to see in Barr's account, which is strictly an information processing account, how something like phenomenal consciousness could arise. So it's a good account in its own terms, perhaps, but it's not a whole explanation of consciousness. But I guess a crucial question still remains for Demasio's account. Which is how is it that representations of the body, and how the body is changing in response its environment. How do those representations give rise to phenomenal consciousness? How does the raw feel, the taste of, or the smell of coffee arise from representations? And that's a really difficult question to answer isn't it.

Fred

That is the great intractable problem. But I'm afraid when making.. we're not going to be able to make much progress on, as far as I can see. Not right now, here and now, we're not. If at all.

Richard

I am not so sure about how far this really is the big intractable problem. If you take the analogy from elsewhere, the way that two gasses for example, can make a liquid, so that hydrogen and oxygen in the right proportions form water and yet, the properties of water are quite distinct from the properties of gasses. It seems to me that what we're having here, is that given the integration, for example, of sensory systems of different kinds, multi modal sensory systems. The only way you can achieve that integration is by what we call consciousness, this multi modal representation. There's no other way you could do that and so it's an emergent property, rather like water emerges from gases.

Fred

Yes. I think that's illuminating up to a point, that analogy of gases and water. But I bet if we got someone from the physics and chemistry departments here now, they would give us a pretty good account of how liquidity arises from the properties of gases and they would understand what liquidity is all about. I don't see anything comparable to that in terms or the insight we can give to conscious awareness. I think it's a start. It's a useful notion. But it's a very limited notion I think.