From Physicalism to Idealism: Challenging Assumptions about Reality

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Michael Egnor:

Thank you all for joining us here at Mind Matters News. This is Mike Egnor. I have the great privilege of having with me today Angus Menuge, who is chair of philosophy at Concordia University in Wisconsin, and he has written many books and popular articles on philosophy of mind, philosophy of law, and the foundation of ethics.

His most recent work is as editor of a new book called Minding the Brain: Models of Mind, Information, and Empirical Science. And he worked with Brian Krouse and Robert Marks. I contributed a chapter myself to this, and I've just had the pleasure of getting the entire book in the mail and reading it. And I'm reading it for pleasure because it's an absolutely fascinating book. I think it's the best book I've ever read on the mind-brain relationship. And Angus, it's just a real privilege to have you here with us.

Angus Menuge:

Thank you for having me, Mike. I really appreciate it.

Michael Egnor:

We had discussed, in our last segment, physicalism, and I wanted to just move on a little bit to some other ways of looking at the relationship between the mind and the brain. And if it's okay with you, I'd love to start with one that I don't know a whole lot about and haven't really been an advocate for, but it's a fascinating way to look at things, and I think that there is some deep truth in it, and that is idealism. So how would an idealist philosopher or idealist neuroscientist look at the relationship between the mind and the brain?

Angus Menuge:

So the idealists, they take a rather radical position. They take the position that matter, as we ordinarily understand it, that is, some kind of mind-independent stuff, doesn't really exist. Rather, what there are are a range of minds or spirits, and there are also their ideas.

And it can account, interestingly enough, for what we would call mind-independent truths because if you include God's mind, then there'll be plenty of things which are in God's mind which are not in humans' mind. And we can also account, for example, for laws of nature. A law of nature on the idealistic view would simply be a train of thoughts that God regularly thinks. And then there's kind of an interaction between God's mind, our mind, and this world of ideas.

And what's interesting is that you can seemingly reconstruct a perfectly common-sensical view of the world in this way. So, for example, things, ordinary things like tables and chairs, are just bundles of ideas. You can do all this without supposing there is some utterly mind-independent matter.

Michael Egnor:

I never knew much about idealism, and I think, in part, because it's been kind of pushed to the side in the 20th century. I know that. I think Bertrand Russell was rather critical of it. There were some philosophers in the early 20th century who really cast it away.

And I've talked a lot with my friend Bruce Gordon, who has a wonderful chapter in your book, about idealism. And Bruce has started to convert me, meaning that idealism makes a lot of sense in a lot of ways. Bruce especially talks about quantum mechanics and the observation that when you drill down on what we know about the subatomic world, matter seems to disappear, that it's Schrodinger's equation and waveforms and almost concepts rather than little physical balls of things zipping around. And I think he's right that the more closely you look at matter, the more it looks like an idea more than matter per se. So it's a fascinating way of looking at things.

Angus Menuge:

Yeah, it's interesting that how much of physicalism was built on, essentially, a classical view of physics, where essentially, the paradigm in the background is particles that behave like billiard balls in motion, and they all have definite locations, their behavior is deterministic, and we can always tell where they are and what they're up to.

But, of course, with the quantum revolution, all of that is thrown out. We can no longer simultaneously determine the location and momentum of a particle. It's often the case that in a particular development of a wave function, all we can say is, "Well, there's this superposition of possible states, and so there is no definite fact to the matter of what's going on."

And so it seems as if matter, as traditionally understood, disappears and is replaced instead by a lot of transitions of abstract possibilities. And it would seem that what's going on is a lot of transactions that are dealing, really, at the level of information. So when you do a scientific experiment and you finally come back with a result, well, what's happened is that there was a collapse of the wave function perhaps, and now that you've got some definite piece of information...

So it raises the question of whether we can understand what's going on in the physical world in terms of something very abstract, namely transactions of information of one kind or another. Do we really need to bring in the idea of definite bits of physical stuff anymore to do physics? It's not so obvious.

Michael Egnor:

An observation that I read many years ago that absolutely fascinated me, I still think about it, and it gives me chills because it's such a fascinating observation, is that if you look at electrons and you look at, say, for example, the mass of the electron, there's only one mass. For example, if you take acorns and you want to say, "Well, what's the mass of the acorn?" you measure a lot of acorns and you do a statistical average. You take the mean of the mass, and you can say, "That's the mean," but each acorn is a little different.

There's no difference between electrons. It's not as if one electron has 1% more mass than the next electron. They're all the same. They're all identical. In fact, what I read was that it could even be possible that there is only one electron that we're seeing everywhere. It's just one thing. And that's fascinating, and it is completely not what you expect from the material world. An electron is much more like an idea than it is like a thing, and it fascinates me.

Angus Menuge:

Right. And so it seems like you enter a space of essentially conceptual possibilities. And then the idealist move is to say, "Well, if we're dealing with concepts and information and those kinds of things, where do they naturally belong?" They seem to naturally belong in minds, and if they're out there to be discovered and so they don't inherently exist in our mind, then that leads you to think that they must exist in some higher mind.

Michael Egnor:

It would seem to me that kind of ironically, the conundrum in idealism is not explaining the mind, it's explaining matter. The mind-brain relationship, it's the brain that's the harder thing to explain rather than the mind. And, of course, I don't think the brain is all that hard to explain because the brain itself may be a thought in God's mind, just like we are a thought in God's mind.

Angus Menuge:

Yeah, that's interesting. Yeah. So, I mean, the real test is to see whether you can do something that's highly complex and would at first sight seem to be obviously involve the interaction of many commonsensically physical elements, like the brain. Can you account for everything that's going on there on the idealist terms, essentially, in terms of signals and information and things of that kind, which is so abstract that they could exist purely in the mind and don't require some kind of independent material existence?

Michael Egnor:

Of course, there are many quite venerable ways of looking at the mind-brain relationship that are kind of a composite of idealism and materialism. That is dualism. And what do you think of the dualist perspectives on the mind-brain relationship?

Angus Menuge:

Well, of course, I have my own views on the matter, but I think the main thing that people should understand, and this is covered beautifully by Stewart Goetz and Charles Taliaferro in their chapter on the history of different views of the soul, is that there are many different kinds of dualism.

And so, on the one hand, there's the one that everybody knows about. There's Cartesian dualism that supposes that the mind and the body are substances of fundamentally different kinds. And that, of course, leads to the classic mind-body problem of how they interact.

But there are many others. You've got, for example, Augustine taking the view that the mind is, in fact, located in space, which Descartes denied, but it's simply located in a different way. That is to say that the whole soul is present everywhere in the body where there is sensation. It's rather analogous to the idea that with God's omnipresence, God is fully present everywhere where he is present. So that's another view.

And going back to Aristotle and, of course, Aquinas, you have the idea that, well, really, the person is a combination of matter and form and that we should understand the soul not as an independent substance in Descartes's sense but rather as the form of a human body and that the person is the composite of those two.

And there are many other subvariations as well. Some people think that the self emerges from the brain. So you've got emergent subject dualists, like William Hasker. So the point is that there are many, many forms of dualism, not just the one that many people seem to think is the only option.

Michael Egnor:

Your observation about Augustine and his viewpoint that the soul is present everywhere in the body, which I saw in the chapter that you're referring to, which is a fascinating way of looking at things, dovetails in a rather amazing way with research that was done in the mid-1950s by Benjamin Libet. Libet, as our listeners may want to know, he was a neuroscientist who worked mainly in San Francisco in the mid-20th century.

And Libet was fascinated by what he called mind time. He was obsessed, in some sense, with knowing exactly what's happening in the brain at the moment you have a thought. And doctors and neuroscientists had measured brainwaves in people and correlated brainwaves to thought in a very general way, without paying too much attention to the temporal correspondence. That is that the moment you have a thought, what's happening in your brainwaves was not really their concern, in part because it's very difficult to time the brainwaves and the thought with the kind of precision that Libet wanted.

So he set up an experimental technique of timing within 10 or 20 milliseconds of when a person would have a thought and then recorded what was happening in their brain and other parts of their body at the moment they had that thought. And he had a lot of fascinating results. And one of them was his famous free will experiment, which there's a chapter devoted to that in our book, and I mention it in my chapter.

But actually, to me, his most interesting experiments were things we didn't get into in the book, were his experiments on sensation. And what he did is he recorded brainwaves and he would prick the subject's finger and record the moment the subject's finger was pricked and the moment the subject reported that he felt the pain and then correlated that with the occurrence of brainwaves according to time.

And what he found was that it took about half a second for there to be a change in brainwaves, probably related to activity in the thalamus of the brain, which is known to be related to sensory input. But the person would feel the pain of the finger prick within a few milliseconds. So the person was feeling the pain in his finger before his brain showed any changes related to the pain.

And that intrigues me. It implies that you can feel before your brain knows you felt something, which would go along very nicely with Augustine's notion that your soul is everywhere in your body, that we've become so brain-centric that we think of almost the brain as the substitute in materialism for the soul. But the human being is a complete thing. It involves your body too.

And Libet was perplexed by this. The idea that you could feel pain before your brain knows you're having pain freaked him out. And his explanation for it, which I think was ad hoc and I think was not true, was that your brain backdates it. That is, your brain will get the information, say, a half a second later, but then make you think that you felt the pain a half a second earlier as kind of a survival mechanism so you can function in the world. But that strikes me as ad hoc. But I was always fascinated. I was more fascinated by his sensory experiments than I was by his free will experiments, actually.

Angus Menuge:

Yeah. It's interesting, too, that if you think about the complexity of the human body, that no matter where you are hurt, right, no matter where someone sticks a pin in you, your report of it is, "I am in pain." In other words, it always refers to the same I.

And the same issue then ties in with one aspect of the binding problem, which is that we have massively parallel brains, and we know now that when you are processing information about an object, that some of the properties may be processed in one part of the brain and other properties in another part of the brain.

And yet, at the end of the day, there is one I that experiences an apple, let's say, or the taste of some food, even though it's been distributed in many parts of the body. And pain signals are like that. It seems that they come from anywhere, and yet, they're reported always as the pain of a single subject. And that's something that cries out for explanation.

Michael Egnor:

And it seems there have been efforts to sort of address the binding problem with various kinds of materialistic neuroscientific models of how all these axons and neurons all kind of get together. But I think they all fail.

An interesting perspective on the binding problem has been some of the research in the last half the 20th century and going into the 21st century on patients who've had split-brain surgery. Because split-brain experiments sort of get right to the heart of the binding problems, but basically, the hemispheres of the brain are completely disconnected surgically, so they're two separate hemispheres.

Yet, people can think and behave, in some situations, in a completely unified way. For example, Yair Pinto, who's a researcher at the University of Amsterdam who's worked on split-brained patients, has noted that if you look at the way the brain is connected, that the right visual field is connected to the right hand, the way the hemispheres work, and the left visual field is connected to the left hand.

And normally, we can respond, say, with our left hand to what we see in the right visual field because we have a corpus callosum and the information can pass between the hemispheres. If you've had the corpus callosum cut, then you would think, by the materialistic way of looking at things, that the left hand could only respond to what's in the left visual field and the right hand could only respond to what's in the right visual field.

But Pinto has found that that's not true, that if you give people buttons in both hands and you ask them to push the button with either hand they choose, when they see an apple... And you put a picture of an apple in, say, the right visual field, they'll push the button with either their right or left hand about 50/50.

There's very little difference in which hand they choose, even though only the right hand has seen the apple. The left hand has no access to the visual field that sees the apple, but the patient still pushes the button with that left hand. So it implies that there's a binding going on, that there's this unified self and that the unified self is not in the brain. And it fascinates me, and it's a very important finding.

Justine Sergent, who was a neuroscientist at McGill back in the 1980s, found something very similar. She would take split-brained patients and put arrows pointing in different directions in their visual fields, and she would ask them, "Are these arrows pointing in the same direction or different directions?" And the patients usually could tell, even though no part of their brain saw both arrows. So they could make judgments as a unified individual, even though no part of their brain had a unified input.

So I think the binding problem is solvable if we assume that the solution is not materialistic, if we assume that there's an immaterial soul that binds it all together.

Angus Menuge:

Right. And the interesting thing, too, in general, in those cases of split-brained patients... Tim Bayne has done a lot of study of that as well and points out that even if there are some particular visual or other deficits, still, when it comes to the unity of consciousness and reasoning, the individual behaves as one person. He does not turn into two people. And that's rather obvious from the fact that split-brained patients can still ride a bicycle or play the piano or do other things that require there to be just one subject that's in control of their body.

Michael Egnor:

Well, it's funny. I've done the surgery, and I've taken care of the patients, and I couldn't tell. You see these people, they're perfectly normal people. And I don't think that I could tell that a person was a split-brained patient unless I saw the scar and knew they had had the surgery. You really have to be a

specialized neuroscientist who has the ability to study these people in that kind of detail to pick up the neurological deficits.

So, yeah, these are completely normal people in everyday life, totally normal, which I think is the most amazing thing about split-brain surgery. Roger Sperry won the Nobel Prize for his studies of their disabilities, but it's their lack of disability that is the most amazing thing.

Angus Menuge:

Yeah. So there seems to be sort of a hierarchy. In other words, anything that is closely tied to the senses... Of course, if the senses are damaged in some way, well, then maybe you can't see or hear, but yet, the further you go up, when you get to the level of abstract reasoning and the unity of consciousness, it just seems as if you get more and more independence of anything that is specifically physical.

And that seems to explain why... This goes back to Aristotle. He wanted to understand, how is it that human beings can reach conclusions which are universally and necessarily true? Because, of course, through our senses, all we ever get information about is contingent events, things that have happened...

Michael Egnor:

Right.

Angus Menuge:

... but that won't ever tell us what must be true. And yet, the human mind can demonstrate things in mathematics and say, "Look, this always has to be true. That can't be explained by information we derive contingently from the senses."

Michael Egnor:

Right. Well, mathematicians can work rather easily with a concept of infinity, but we have absolutely no perceptual knowledge of infinity. Infinity is, by definition, not something that we could ever perceive.

Angus Menuge:

Right.

Michael Egnor:

Yeah. I mean, I find that an absolutely fascinating, fascinating observation. One other thing I just wanted to close with here, and that is about emergence. You had mentioned emergence as a theory in the mind-brain relationship. What is emergence, and do you feel that there are weaknesses in the concept of emergence?

Angus Menuge:

Well, there's a couple of different kinds of emergence. You can have what might be called a weak emergence view and a strong emergence view. The weak emergence view is often called supervenience, and it says that there can be no mental difference without a physical difference, so that, theoretically, if you had an individual and you physically cloned them, then if the first one was thinking about the Eiffel Tower, the second one would have to be thinking about the Eiffel Tower as well.

Now, that view, for one thing, is an extraordinary metaphysical speculation because there never are going to be too physically identical individuals, but also, it has no explanatory power whatsoever, right?

Michael Egnor:

Right.

Angus Menuge:

It just asserts it. Really, it's just a theorem of physicalism, "Well, gosh, if everything is physical, then you can't have anything mental that varies independently of the physical," but it doesn't explain anything. So that the stronger view wants to say that, "Well, there is some sort of causal process, and somehow, the neural processes cause us to have various mental states." And in the strongest views, they want to say perhaps that the mind can have some independent causal power. And some of these individuals will say that perhaps the mind that emerges can then act back on the brain.

But, of course, if they do that, at this point, they have granted some form of dualism. They may not be substance dualists, but by definition, if you give the mind any independent powers, then you're no longer saying that everything that happens happens because of a physical cause.

Michael Egnor:

Right.

Angus Menuge:

And so what I think is so interesting is that as time has gone on, the more plausible physicians that call themselves physicalists actually really are not obviously physicalists anymore. They seem to be at least on the road to a view that is, in some way or other, dualistic.

Michael Egnor:

Well, I had a long-running internet debate with a neurologist at Yale who was a materialist, and he summed up his view of the mind-brain relationship as, "The mind is what the brain does." And I thought that was hilarious because that's an overtly dualist viewpoint.

Angus Menuge:

Yes.

Michael Egnor:

So he was just admitting he was a dualist in the middle of an argument that he was a materialist. It was kind of a funny way of looking at it.

Well, I just wanted to thank you, Angus. To our listeners, this has been Dr. Angus Menuge, and he is a editor, along with Brian Krouse and Robert Marks, of a wonderful new book, Minding the Brain: Models of Mind, Information, and Empirical Science, published by the Discovery Institute Press. It's a great book. And Angus, we'll be back shortly with another segment. Thank you.

Announcer:

This has been Mind Matters News. Explore more at mindmatters.ai. That's mindmatters.ai. Mind Matters News is directed and edited by Austin Egbert. The opinions expressed on this program are solely