

Debate on the mind and scientific method (continued again) on <http://forums.philosophyforums.com>.

Quotations are in red and the responses by Death Monkey (Kevin Dolan) are in black. Note that sometimes a quote (in red) contains a previous response. This is usually found at the beginning of the quoted portion (in red) and separated from the actual quote by a horizontal line. This is usually done to provide a context for the quote before responding to it.

**TecnoTut,**

Quote:

In order to establish physical-mental identity in an ontological sense, which seems to be what you are referring, one uses metaphysical theories, because ontological identity is a metaphysical issue.

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Hitherto, I've been under the impression that you have been trying to argue between ontological identity between mental and physical properties. But you claim that you (and science) are not trying to make such an ambitious claim. But if that is the case, then why do you keep insisting that there's nothing more to the mind than brain processes.

First of all, the claim I typically make is that there is no evidence that there is anything more to the mind than brain processes, and no reason to think that there is. This is absolutely true. I doubt anybody would criticize me for saying that there is nothing more to water than H<sub>2</sub>O, but it is essentially the same thing. Science can say nothing about ontological identity there, either.

Quote:

Stating that mental properties are nothing over and above physical properties is an ontological claim.

That is why I make it a point to explain that what I am talking about is being able to describe one set of observable phenomena in terms of another, rather than a bunch of ontological identity nonsense. I have been making this distinction ever since I began posting here. Did you really only just now notice?

I see no point in making ontological claims of *any* kind. They are all blind speculation, with no relevance to anything that actually has any impact on our lives.

Quote:

Which mind-body problem? The metaphysical one, which science does not even attempt to address, or the epistemological problem, which it does attempt to address?

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Regarding the "epistemological", rather than the metaphysical problem of the mind, the only epistemological problem of the mind that I know of is the problem of "other minds" viz. whether other humans or organisms have minds. The metaphysical problem of the mind is whether the mind is nothing over and above something physical.

The epistemological problem you suggest is easily solved by scientific epistemology. We moved past that problem, and on to the much more important problem of trying to explain how minds work, a long time ago. The metaphysical problem you propose does not interest me in the slightest, since any of these hypothetical non-physical aspects of consciousness you are worried about the existence of, are fundamentally unknowable anyway. You might as well worry about whether basketballs are nothing over and above something physical.

Quote:

As you already said, not all knowledge is propositional knowledge. Having all the propositional knowledge of a

particular brain process, does not logically entail having any sort of non-propositional knowledge at all.

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I did say not all knowledge is propositional knowledge, but I did not say knowledge of experiences are non-propositional forms of knowledge.

Of course you didn't. I did. Specifically, I said that "knowing what it is like to have an experience", is not propositional knowledge, since it is not knowledge of facts about the experience, but instead the memory of having had the experience.

Quote:

To be blunt, I am not sure whether experiences are propositional or not.

I don't have the slightest idea of what that could even mean? How can a thing or process be propositional?

Quote:

On the one hand, an experience does not seem to be something that can be expressed as either a true or false proposition. But on the other hand, experiences do occur within the world, so knowledge of experiences is knowledge of some type of fact occurring within the world.

You need to be precise in your language here. Knowledge *about* experiences is propositional knowledge, because it is knowledge of facts about the world. Knowledge *of* experiences is a very vague expression, which could refer to such facts, or could refer directly to the memory of having had those experiences, which is not propositional knowledge.

Quote:

But even if they are not propositional forms of knowledge in case of the bat, it is, nevertheless, a type of knowledge that cannot be ascertained by science.

What do you mean by "ascertained"? If it is not propositional knowledge, then what, exactly, is it that you think science should be providing you with? Clearly science cannot provide people with the memory of having had an experience, but so what? Why should it? Why would anybody even suggest that it could or should?

Quote:

It is just not the case that all philosophical statements are subject to experimental scrutiny

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I know of no scientific experiments that can verify or falsify any of the following philosophical statements:

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I'm not sure what your point in posting this list was supposed to be. I already said that not all philosophical statements are subject to scientific scrutiny. How exactly is listing a bunch of philosophical statements which are not subject to scientific scrutiny, supposed to address or refute my argument that *some* are? Incidentally, most of the statements you listed above either will, or will not, be subject to scientific scrutiny, depending on how you define your terms. As posted, many of them are too vague to say one way or the other.

By Kevin Dolan (Death Monkey)

**Monroe,**

Quote:

I doubt anybody would criticize me for saying that there is nothing more to water than H<sub>2</sub>O, but it is essentially the same thing. Science can say nothing about ontological identity there, either.

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i disagree. science can show that what we refer to by "water" is composed of molecules described by "H<sub>2</sub>O", and that the laws governing the parts explain the behavior of the whole. in that way science justifies the claim that water is nothing more than a bunch of H<sub>2</sub>O molecules.

This is only epistemological reductionism. Science has described what we think of as water in terms of molecular physics. It has described only those aspects of water which are knowable. Only the physical effects.

Quote:

you know, come to think of it, even if there are properties of the behavior of water that emerge only on the macroscopic level and are not explained by the lower level laws, science has still justified the ontological claim that water is a bunch of H<sub>2</sub>O since those are the parts. they might just behave differently when put into large groups.

Science has not, and **can not** justify any ontological claims of any kind. What science has done is provided an explanation for how the various observable properties of water can be explained in terms of molecular physics. It tells us nothing about the ontological relationship between water, hydrogen, and oxygen.

Quote:

on the other hand the mind problem is different b/c we don't define the mind by just pointing to a brain (which is what we analogously do for water), and then science shows it is made up of neurons.

Nor do we define water by just pointing to a bunch of oxygen and hydrogen molecules. We have a set of observable properties which the term "water" is defined to refer to. We have other sets of observable properties which the terms "oxygen" and "hydrogen" are defined to refer to. We then construct falsifiable scientific theories which describe relationships between these properties. We conclude that the properties we associate with water can be described in terms of a particular type of chemical bond between oxygen and hydrogen. This is a purely epistemological formulation. Science cannot, in any way, prove that water is ontologically reducible to oxygen and hydrogen. Most people just accept that it is, because in order for it not to be, water, hydrogen, and oxygen, would all have to have properties over and above their physical properties. Which is, of course, exactly what dualists are claiming about consciousness in order to justify their claim that it is not ontologically reducible to the brain.

Quote:

instead, the sense in which the mind is defined is very different. its like if we were talking about some peculiar fluidity property of water. it might be that this flow property does not reduce to the microscopic laws. then that flow property wouldn't simply be properties of H<sub>2</sub>O molecules. similarly, the mind might not be explainable in terms of neurons.

But just as with water, any property it has which is not explainable in terms of H<sub>2</sub>O, would have to be some non-physical property, likewise any property you wish to assert that mind has that is not explainable in terms of either neurons, or some other physical process, would have to be non-physical properties of the mind. This brings us right back to the prior point I made in our discussion. Only those properties of the mind which are physical (meaning which have physical effects), are knowable. Just as we have no way of knowing about any metaphysical properties water may have which are not reducible to H<sub>2</sub>O, likewise we have no way of knowing about any metaphysical properties the mind may have which are not reducible to neural processes.

This is clear when you consider the simple fact that the only aspects of the mind we can claim to know we

have, are ones which we are capable of thinking about. Any aspect of my mind which I am not capable of reflecting on, is not an aspect of my mind which I can possibly know I have. The information processing component of thought is vital to this process of reflection, as are the information storage and retrieval aspects of memory. These are all neural processes. Put bluntly, I can only think about information which is physically stored and processed by my brain. My brain simply does not have access to any hypothetical metaphysical aspects of my mind. It cannot think about them. It cannot reflect upon them. Indeed, it has no way of ever knowing they exist. They are every bit as unattainable and irrelevant as any metaphysical properties water may have.

Quote:

Specifically, I said that "knowing what it is like to have an experience", is not propositional knowledge, since it is not knowledge of facts about the experience, but instead the memory of having had the experience.

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didn't i already refute this by counterexample?

No. What you did was point out that this phrase could also be meant in a way which is propositional. I have already addressed this point in detail. If the phrase "knowing what it is like to have experience X" refers to propositional knowledge about experience X, then science can provide this knowledge. If it refers to the memory of having had experience X, then science cannot provide it. That's really all there is to it.

By Kevin Dolan (Death Monkey)

All,

Just to try to clarify what I am saying here. If one were to accept as a *metaphysical* axiom that the only properties which exist are physical properties, then one could conclude that scientific reductionism is equivalent to ontological reductionism.

In such a case, one could argue that water is ontologically reducible to H<sub>2</sub>O, and that consciousness is ontologically reducible to neural activity.

In fact, many people *do* make such an assumption. That assumption is the difference between scientific materialism (or physicalism, if you prefer), and metaphysical materialism.

Such an assumption is not, however, required for science to work, nor implied by any scientific evidence. I personally see no point in making such an assumption, because I find it to be every bit as unjustified and pointless as any other metaphysical assumption you could make.

Without that assumption, or some similar metaphysical assumption in its place, there is simply no logical connection between scientific epistemology and ontology. Any conclusions people have made about the ontological relationships between things, based on scientific evidence, are also based on some set of metaphysical assumptions, in addition to the epistemological assumptions of science, whether the people drawing those conclusions realize it or not.

By Kevin Dolan (Death Monkey)

**Monroe,**

Quote:

Science has not, and can not justify any ontological claims of any kind. What science has done is provided an

explanation for how the various observable properties of water can be explained in terms of molecular physics. It tells us nothing about the ontological relationship between water, hydrogen, and oxygen.

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this is stated without argument, and i completely disagree, as do a large number of scientists, philosophers, and laypeople. so justify yourself.

I did, in my previous post, where I explained that scientific epistemology does not include any metaphysical premises. I should think that this fact makes it very clear that the only way any ontological claims could be inferred from scientific evidence, is if you include an additional metaphysical premise, namely that only physical properties exist. As for the many scientists, philosophers, and laypeople who believe that scientific evidence can support ontological claims, that is because they *have* made such a metaphysical assumption. But such an assumption is not required by science. Scientific epistemology works just fine without it.

Also, as I already pointed out, the same metaphysical premise that would allow somebody to conclude from scientific evidence that water is ontologically reducible to H<sub>2</sub>O, would also allow us to conclude that the mind is ontologically reducible to brain activity, and for exactly the same reasons.

Quote:

Nor do we define water by just pointing to a bunch of oxygen and hydrogen molecules.

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Yes we do. We define water as "that kind of stuff" (pointing to water). We don't know a priori the nature of the stuff we're pointing at, but chemistry shows that it is in fact composed of H<sub>2</sub>O.

Chemistry only shows us that the physical properties of water are explainable in terms of H<sub>2</sub>O. Just as neuroscience can only show us that the physical properties of the mind (those which have physical effects) are explainable in terms of neural activity. In both cases, science can tell us absolutely nothing about the reducibility of any non-physical properties that water, or the mind, may have.

Again, if we make the metaphysical assumption that water has only physical properties, then we could conclude that water is ontologically reducible to H<sub>2</sub>O. Likewise, if we make the metaphysical assumption that the mind only has physical properties, then we could conclude that the mind is ontologically reducible to brain activity.

I am not prepared to make either assumption. I do not understand why you think that it is reasonable to make the first assumption, but not the second.

Quote:

We have a set of observable properties which the term "water" is defined to refer to. We have other sets of observable properties which the terms "oxygen" and "hydrogen" are defined to refer to. We then construct falsifiable scientific theories which describe relationships between these properties. We conclude that the properties we associate with water can be described in terms of a particular type of chemical bond between oxygen and hydrogen. This is a purely epistemological formulation. Science cannot, in any way, prove that water is ontologically reducible to oxygen and hydrogen.

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No, this has to be wrong. For if all we did is show that the properties of H<sub>2</sub>O imply the ordinary macroscopic properties of water, this would NOT show that what we call water actually is composed of H<sub>2</sub>O.

That depends entirely on what you mean when you say it is composed of H<sub>2</sub>O. If you mean that it is ontologically reducible to it, then no, it does not show that. Not unless you add to the axioms of science the additional unnecessary metaphysical axiom that water only has physical properties. If, however, all you mean is that we have an extensively tested and strongly verified scientific theory which explains the

physical properties of water in terms of H<sub>2</sub>O, then yes, it can show that.

Quote:

Recall Putnam's thought experiment in which there is a different chemical substance called XYZ which in the everyday, macroscopic context, behaves just like water. Both the properties of H<sub>2</sub>O and of XYZ explain (assuming reducibility for now) the properties of water.

Only if XYZ and H<sub>2</sub>O are physically identical, in which case they can differ only in their non-physical, metaphysical properties.

Quote:

Further, you could construct a variety of theories about what any substance is at the microscopic level, all of which imply the macroscopic properties. BUT, science does have a procedure for testing whether water actually is H<sub>2</sub>O: get some water and run some chemical tests. Science shows that the stuff we call water actually is collections of H<sub>2</sub>O molecules.

If water can be experimentally distinguished from H<sub>2</sub>O, then its physical properties cannot be explained in terms of H<sub>2</sub>O. I'm not sure what you think this thought experiment is supposed to indicate. If H<sub>2</sub>O and XYZ are physically identical, then they can differ only in their metaphysical properties. The fact that this is possible, just demonstrates my point that the ontological reducibility of water to H<sub>2</sub>O cannot be inferred from scientific evidence, without making the additional assumption that water and H<sub>2</sub>O have only physical properties. If H<sub>2</sub>O and XYZ have different physical properties, then they cannot both have the same physical properties as water, so it is false to say that water is epistemologically reducible to both of them.

Quote:

Your position that science is "epistemological, not ontological" is very strange. I've never heard of anyone else that claims this.

**Really? That seems very odd to me. How could a method which concerns itself only with physical properties, possibly *be* ontological? As I mentioned before, the only way I can see of doing that, would be to simply reject the possibility of the existence of non-physical properties entirely. Since science can only compare the physical properties of two things, how else could one ever logically reach the conclusion, based only on scientific evidence, that those two things are identical? Certainly you agree that identical means that they have to have *exactly* the same properties, right? How can such a conclusion be justified by a method which can only compare their *physical* properties?**

Quote:

But just as with water, any property it has which is not explainable in terms of H<sub>2</sub>O, would have to be some non-physical property,

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HAHAHA! Any macroscopic property of water, whether explainable via the microscopic laws or not, is a physical property, for crying out loud!

I'm not sure why you find that amusing. That was exactly my point. Do you agree that water could have non-physical properties, as could oxygen and hydrogen? If so, then do you agree that the mere fact that science demonstrates that all of the *physical* properties of water are identical to those of H<sub>2</sub>O, does not imply that their *non-physical* properties are identical too? If so, then you must accept that science cannot show water to be ontologically reducible to H<sub>2</sub>O.

Quote:

Geez, it kinda seems like you're just trying to label as mystical anything which questions the perfection of current science.

On the contrary, the argument I am making is based on my acknowledgement that science is *not* perfect. If

I were simply to do as metaphysical materialists do, and claim that only physical properties exist, then I would certainly agree that science shows water to be ontologically reducible to H<sub>2</sub>O. But I would also then claim that science can show the mind to be ontologically reducible to brain activity. If I were to do this, I have no doubt you would accuse me of simply begging the question. And you would be right.

Quote:

Only those properties of the mind which are physical (meaning which have physical effects), are knowable.

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look, whether consciousness is physical or not, it is knowable, because it is consciousness. its what we have direct awareness of, it is our awareness.

Only its physical properties are knowable, for the simple fact that if they are not physical, then they can have no physical effects on the part of our minds which process information, since that particular aspect of the mind is *known* to be physical.

Quote:

This is clear when you consider the simple fact that the only aspects of the mind we can claim to know we have, are ones which we are capable of thinking about. Any aspect of my mind which I am not capable of reflecting on, is not an aspect of my mind which I can possibly know I have. The information processing component of thought is vital to this process of reflection, as are the information storage and retrieval aspects of memory. These are all neural processes. Put bluntly, I can only think about information which is physically stored and processed by my brain. My brain simply does not have access to any hypothetical metaphysical aspects of my mind. It cannot think about them. It cannot reflect upon them. Indeed, it has no way of ever knowing they exist. They are every bit as unattainable and irrelevant as any metaphysical properties water may have.

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this is absolutely ridiculous. anyone can think about their mind as having almost any aspect they want to. this "what i can think about" restriction places really no restriction at all on acceptable theories. moreover, you are essentially claiming that no one has ever thought that their mind was nonmaterial.

I think you misunderstand me. I am not talking about thinking about some property of the mind in an abstract sense. I am not talking about making up some non-physical property that the mind *might* have, and then contemplating its existence. Of course we can do that. I am talking about reflection. I am talking about thinking about your own mental processes. Thinking about your experiences, thoughts, feelings, and memories.

You have many times talked about us knowing that we have mental properties because we have direct access to them. Well, that is what I am talking about. The part of me that needs to have direct access to my mental properties in order for me to know that I have them, is the part of my mind that processes, stores, and retrieves, information. And that particular mental function is performed by my brain. If I know I have it because I have direct access to it, then it follows that my brain must be a part of me that has direct access to it. That means that it is a physical property.

Non-physical properties of the mind are every bit as hypothetical and unknowable as non-physical properties of water.

Quote:

No, when I gave a propositional description of human visual experience, I asked you whether science can explain that by merely analyzing the brain, and you said "I don't recall ever saying that." check post 196

Actually, what you asked in that post was:

Quote:

Science can tell us what I said above about human visual experiences only by analyzing the brain?

It would appear that I misunderstood what you meant. I thought you were asking me if I thought that analysis of the brain was the *only* way science could tell us those things. If your question is whether brain analysis, by itself, could tell us those things, my answer is "yes, I think that in principle, it could".

Of course, we would need a complete scientific explanation for how the brain works, to do that *merely* by analyzing the brain. We are a long way off from that right now.

By Kevin Dolan (Death Monkey)

**Monroe,**

Quote:

Also, as I already pointed out, the same metaphysical premise that would allow somebody to conclude from scientific evidence that water is ontologically reducible to H<sub>2</sub>O, would also allow us to conclude that the mind is ontologically reducible to brain activity, and for exactly the same reasons.

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except for the fact that the ontological reduction of water to H<sub>2</sub>O consists in showing that a macroscopic mass is made of those microscopic parts, whereas on the mind/brain side, on the materialist theory the mind is supposed to be something like abstract higher-order properties of neural activity. its not a simple whole to parts reduction.

There is no question that the mind problem is far more complicated than the water problem. But my point still stands. One can only scientifically conclude that water is ontologically reducible to H<sub>2</sub>O if one assumes that neither water nor H<sub>2</sub>O have non-physical properties. Without that assumption, we can only draw scientific conclusions about their physical properties. The same goes for the mind. If we make the metaphysical assumption that neither the mind nor the brain have non-physical properties, then we may be able to scientifically conclude that the mind is ontologically reducible to brain activity. If we do not make that assumption, then we can only ever draw scientific conclusions about their physical properties.

Quote:

you misunderstand. i did not mean to suggest the possibility of water having nonphysical properties (or as you put it, "metaphysical properties", though i think this is a misuse of the term). that possibility is irrelevant. i only meant to suggest that maybe the laws which govern H<sub>2</sub>O on small scales cannot be used to explain how it behaves when put into very large groups. in this possibility, we would have some laws describing local interactions of H<sub>2</sub>O when it is in small collections, and the we would have to amend the laws by saying "but when the collection of molecules reaches more than X moles per cubic centimeter, then they behave in the following way...". i'm not sure if the actual state of affairs is like this, and i tend to doubt it, but that is the possibility i meant to indicate. now, there is nothing nonphysical about this; both cases only describe the dynamical properties of groups of H<sub>2</sub>O.

Again, I do not see what the point of such an example is supposed to be. What you have described would certainly make a scientific explanation of water in terms of H<sub>2</sub>O more difficult, maybe even impossible, but so what? If the physical properties of water could not be explained in terms of those of H<sub>2</sub>O, then what is your point?

Just to clarify, was the point of this example to support your claim that science can show water to be ontologically reducible to H<sub>2</sub>O? Or was it to give an example of how science might fail to be able to explain the physical properties of the mind in terms of brain activity?

If the former, I don't see how it supports the claim at all. If the latter, then we are in agreement. It is certainly possible that even if the physical properties of the mind can, in principle, be explained entirely in



terms of brain activity, that the problem may be so complex as to be intractable. But I see no reason to give up without even trying.

Quote:

you misread. i said that XYZ and H2O have the same everyday, macroscopic properties. i mean that they both look the same, flow the same, boil and freeze the same, you can drink both of them, etc. however, when you carry out some chemical tests like, let's say, electrolysis, you can distinguish them. the point is that you can take a collection of either type of molecule, and determine in a lab whether it is XYZ or H2O. but both chemical makeups explain the "everyday" properties

OK, but so what? What does this hypothetical example of two different physical compounds being very similar, but not physically identical, have to do with what we are discussing? Certainly you would agree that the water made up of H2O, and the water made up of XYZ, are neither scientifically reducible (meaning having the same physical properties), nor ontologically identical? I don't see the point in this example.

Quote:

Really? That seems very odd to me. How could a method which concerns itself only with physical properties, possibly be ontological? As I mentioned before, the only way I can see of doing that, would be to simply reject the possibility of the existence of non-physical properties entirely. Since science can only compare the physical properties of two things, how else could one ever logically reach the conclusion, based only on scientific evidence, that those two things are identical? Certainly you agree that identical means that they have to have exactly the same properties, right? How can such a conclusion be justified by a method which can only compare their physical properties?

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How about by showing a whole is composed of certain parts? Then it wouldn't matter whether H2O had any nonphysical properties. since water is just a collection of those molecules, those same nonphysical properties, were there to be any, would be contained in the large collection of molecules.

How do we know the water is *just* a collection of those molecules? How do we know the non-physical properties of water do not differ from those of the molecules it *appears* to be made up of?

This is *exactly* what property dualists claim about the mind, after all. Even if we scientifically explain every physical property of the mind in terms of brain activity, dualists will claim that we have not shown ontological reduction, only correlation between physical properties. The same is true of water. It only seems intuitively different, because you are not starting with some preconceived notion that water has different non-physical properties than H2O.

If we can show that all physical aspects of the mind are just made up of various brain processes, then would you claim that science had proven the mind to be ontologically identical to brain processes? If not, why the double standard? If you would, then how do you *you* address the property dualist's claims that all of the physical properties of the mind *can* be so explained, but that nevertheless the mind has non-physical properties which are *not* properties of brain activity?

I suppose as a property dualist, you could argue that the mind is ontologically reducible to brain activity, and that the non-physical properties of the mind are also properties of the brain activity, but what about interactive substance dualism? Any such dualist would quickly point out that you have no scientific justification for claiming that the non-physical properties of the mind and of brain activity are identical.

The same goes for water, and indeed everything else in the world.

Quote:

umm, no. nobody has explained thought in terms of neurons.

Not a complete explanation, no. But there is *extremely* strong scientific evidence that the information processing aspect of thinking is done by the brain. The fact that the brain is what does this is not even remotely controversial. At least, not among people who know anything about modern neuroscience.

Quote:

but besides the "information processing" function of thought, we have direct access to emotions. would you say that emotions are a type of rational, calculative "information processing"?

No, but then again, neither is the information processing aspect of human thought. That is not the point, though. The point is that you can think about your emotions. You can reflect on them, remember having them, compare different emotions you have had, and so on. This would not be possible if your brain did not have access to them. Indeed, the only aspects of them which you can possibly know you have, are those aspects which your brain has access to.

The only way to deny this is to claim that your brain is not involved in the processes of thinking and remembering. Do you wish to make such a claim?

By Kevin Dolan (Death Monkey)

**TecnoTut,**

Quote:

First of all, the claim I typically make is that there is no evidence that there is anything more to the mind than brain processes, and no reason to think that there is. This is absolutely true.

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But that's evidently false because there're no scientific laws or theories that state mental properties and physical properties are the same thing. There are scientific theories that correlate the mental and the physical, but none that state that they are the same thing (unless you mean something else by the phrase "anything more to the mind than brain processes").

I think you have misread my post. I did not say that I claim that there is nothing more to the mind than brain processes. I said that there is no evidence that there is anything more to the mind than brain processes, and no reason to think that there is.

Put simply, I do not claim that the mind (or anything else) does not have non-physical properties. I simply see no reason to think that they do.

Quote:

I doubt anybody would criticize me for saying that there is nothing more to water than H<sub>2</sub>O, but it is essentially the same thing. Science can say nothing about ontological identity there, either.

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Correct. Furthermore, no one would criticize you for saying brain processes are nothing over and above carbon, hydrogen, oxygen and nitrogen. However, you'll be criticized for making the claim that mental properties are physical properties as you are now.

I have claimed only that some properties of the mind are physical properties (meaning that they have physical effects). This is indisputable. As to any non-physical properties the mind may or may not have, I can only say that if it does have any, I do not know about them.

Quote:

That is why I make it a point to explain that what I am talking about is being able to describe one set of observable

phenomena in terms of another, rather than a bunch of ontological identity nonsense. I have been making this distinction ever since I began posting here. Did you really only just now notice?

I see no point in making ontological claims of any kind. They are all blind speculation, with no relevance to anything that actually has any impact on our lives.

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But science does make ontological claims all the time. And you have just listed one, viz. that water is H<sub>2</sub>O and that both water and H<sub>2</sub>O are physical objects.

What ontological claim are you saying that science makes? Science alone does not, and can not, make any claims about ontology. Scientists may make such claims, but they are doing so based on additional metaphysical assumptions which are not necessary for science.

Quote:

If you reply that science is only defining what we think of water is in terms of physics, then that's your philosophy of science. Many scientists are realists (as opposed to being instrumentalists), and will tell you that water is really nothing over and above H<sub>2</sub>O.

I am quite aware that many scientists make the additional metaphysical assumption that only physical properties exist, and that therefore many of them will tell you that water is nothing over and above H<sub>2</sub>O. They cannot, however, legitimately claim that this is implied by the scientific evidence. Their conclusion is based on the combination of scientific epistemology and their metaphysical assumptions, not on science alone.

Quote:

The epistemological problem you suggest is easily solved by scientific epistemology. We moved past that problem, and on to the much more important problem of trying to explain how minds work, a long time ago. The metaphysical problem you propose does not interest me in the slightest, since any of these hypothetical non-physical aspects of consciousness you are worried about the existence of, are fundamentally unknowable anyway. You might as well worry about whether basketballs are nothing over and above something physical.

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Can you cite to me where "scientific epistemology" (I don't know what that phrase means) has solved the problem of other minds?

As to what scientific epistemology means, I would think it would be clear. It is the philosophical basis of science. The system resulting from the axioms of science, which allow us to decide what is, and is not, scientific knowledge. I would think you could find a detailed explanation of this in any modern philosophy of science book.

As to the solution to the epistemological problem of other minds, that is quite simple. The theory that other people have minds, is not only the simplest explanation for the similarities between their behavior and my own, but is also both falsifiable, and well supported by scientific evidence.

Quote:

Also, no one would criticize you for saying that basketballs are just physical objects. You would be criticized, however, for saying that the circular, orangish experience is physical.

On the contrary, if I were to claim that basketballs have only physical properties, I am quite sure that just about anybody who believes that metaphysics is meaningful, would criticize me. But then, I am getting the distinct impression that you are using the term "physical" in an inherently metaphysical way, whereas I am not.

Quote:

Of course you didn't. I did. Specifically, I said that "knowing what it is like to have an experience", is not

propositional knowledge, since it is not knowledge of facts about the experience, but instead the memory of having had the experience.

---

But it is knowledge of a fact. It may not be propositional knowledge, but it is nevertheless a fact. What kind of fact? The fact of knowing what it is like to have a certain experience.

Now you are just being sloppy with language. The fact that I know fact A, is not fact A. Nor is the fact that I have some piece of non-propositional knowledge, that piece of knowledge. You are conflating the fact that I know something, with what I know. They are different things.

And anyway, the fact that you know what it is like to have an experience, is something which (in principle) science could tell me. What it cannot do, is provide me with the experience, or the memory of having had that experience. The fact that you choose to confuse the issue by insisting on calling that knowledge, does not change what it is.

Quote:

What do you mean by "ascertained"? If it is not propositional knowledge, then what, exactly, is it that you think science should be providing you with?

---

Science can provide objective facts about brain processes, but not subjective facts about experiences.

What is a subjective fact? There is no such thing as subjective facts about experiences. There are facts about subjective experiences, but they are still objective facts about the world. Anyway, neither experiences nor memories are facts about experiences, and those are what science cannot provide us with. You have presented neither argument nor evidence to support the claim that there are facts about our experiences which science cannot tell us.

Quote:

I'm not sure what your point in posting this list was supposed to be. I already said that not all philosophical statements are subject to scientific scrutiny. How exactly is listing a bunch of philosophical statements which are not subject to scientific scrutiny, supposed to address or refute my argument that some are?

---

The list was used to show that the most important philosophical issues lie outside of science's domain.

Even if I agreed that what you listed were the most important philosophical issues, and that they all lie outside of science (I agree with neither), so what? How does this support your argument, or refute mine?

Quote:

Incidentally, most of the statements you listed above either will, or will not, be subject to scientific scrutiny, depending on how you define your terms. As posted, many of them are too vague to say one way or the other.

---

Well, philosophical problems are not solved by the arbitrary fiat of redefining terms.

Exactly. So if you want those examples you listed to be anything more than pointless exercises in semantics, you would need to explicitly define the terms being used, rather than relying on vague terminology to allow you to wiggle out of any example I might give for how they might be addressed scientifically.

By Kevin Dolan (Death Monkey)

**Monroe,**

Quote:

OK, but so what? What does this hypothetical example of two different physical compounds being very similar, but not physically identical, have to do with what we are discussing? Certainly you would agree that the water made up of H<sub>2</sub>O, and the water made up of XYZ, are neither scientifically reducible (meaning having the same physical properties), nor ontologically identical? I don't see the point in this example.

-----

the point is that science has methods for deciding ontological questions such as "is this watery stuff H<sub>2</sub>O or XYX?"

Only in the sense that if they have different physical properties, then science can compare those physical properties. If A and B have different physical properties, then they cannot be ontologically identical. If they have the same physical properties, then they may or may not be ontologically identical. Science has no way of answering *that* question. All it can do it tell you that they have the same physical properties.

Quote:

This is exactly what property dualists claim about the mind, after all. Even if we scientifically explain every physical property of the mind in terms of brain activity, dualists will claim that we have not shown ontological reduction, only correlation between physical properties. The same is true of water. It only seems intuitively different, because you are not starting with some preconceived notion that water has different non-physical properties than H<sub>2</sub>O.

-----

an ontological reduction of water to H<sub>2</sub>O is not about a correlation between properties of H<sub>2</sub>O and properties of water, as if we say "when H<sub>2</sub>O does this, water does this..." It is about performing a chemical test showing that this watery stuff is a collection of H<sub>2</sub>O molecules.

You seem to be confused about what that chemical test actually entails. We have, through the science of chemistry, identified the physical properties of oxygen and hydrogen atoms, including properties of how they bond into H<sub>2</sub>O, and how they can be split back again. What our chemical tests do, and indeed all they *can* do, is show that our sample of water has those physical properties which we know that H<sub>2</sub>O has. Your chemical test *is* nothing more than a correlation between the physical properties which our scientific theories tell us H<sub>2</sub>O has, and the observed physical properties of the sample of water.

Quote:

(barring, of course, the hypothesis that every macroscopic collection of water has some ethereal spirit in it. this hypothesis doesn't explain anything, so it is useless.

**I agree, as is the hypothesis that the mind has some ethereal spirit in it.**

Quote:

on the other hand, dualism is advocated on account of the "explanatory gap" in materialist theory. we know minds exist, and we know brains exist, but have very hard problems reducing the former to the latter.

**Dualism may very well be advocated on the basis of this "explanatory gap", but it in no way fills it. Whether or not you are a dualist, the problem remains of how to explain the physical properties of the mind scientifically. That is where our explanatory gap lies, in the fact that there are physical properties of the mind which we know exist, but do not yet know how to explain scientifically. Interactionist dualism does not solve this problem. It just asserts that some of these physical properties are somehow ontologically different than others. Epiphenomenalism also does not solve the problem, because it simply asserts the existence of a bunch of non-physical mental properties that**

**don't need to be explained, any more than those hypothetical but useless non-physical properties of water do.**

Quote:

however, we don't have any evidence for water spirits.

**Nor do we have any evidence for non-physical mental properties.**

Quote:

Not a complete explanation, no. But there is extremely strong scientific evidence that the information processing aspect of thinking is done by the brain. The fact that the brain is what does this is not even remotely controversial. At least, not among people who know anything about modern neuroscience.

---

I think you are confusing the "information processing" mechanisms of perception, which neurosci has done a lot of work on, with conscious thought and reasoning, which neurosci is at a loss about.

No, I am not. I am talking about the information processing mechanism of thought.

Quote:

No, but then again, neither is the information processing aspect of human thought. That is not the point, though. The point is that you can think about your emotions. You can reflect on them, remember having them, compare different emotions you have had, and so on. This would not be possible if your brain did not have access to them. Indeed, the only aspects of them which you can possibly know you have, are those aspects which your brain has access to.

The only way to deny this is to claim that your brain is not involved in the processes of thinking and remembering. Do you wish to make such a claim?

---

what? why must i deny that the brain is involved in the process at all?

Because the brain can only process information it has access to. You don't even need to get into details of neuroscience to understand this argument. The simple fact is that every single aspect of your mind which you know exists, has some effect on the physical world. The mechanism of how those effects work, is important to the question of whether or not the mind can be explained entirely in terms of neural activity, but has no relevance to the question of whether those mental properties are physical or not. They quite clearly *are* physical.

This means that, regardless of whether those properties *are* explainable in terms of brain processes or not, science should be able to at least tell us whether they are or not. Eventually science will either have explained all of the properties of the mind that we know about, in terms of neural activity, or it will discover specific properties of the mind which cannot be explained in terms of neural activity, and will use that newly found information to begin constructing a new, better theory.

Quote:

I don'y deny that paper and pens are part of the process of mathematics, but there is surely more to math than that.

I fail to see the relevance of your analogy. In fact, I am not really sure what you mean by "process of mathematics". Mathematics is not a process, computation and analysis are.

By Kevin Dolan (Death Monkey)

**Monroe,**

Quote:

but what i'm saying is that science has a method seeing whether a given liquid is H<sub>2</sub>O. the method may not be logically airtight and it may be vulnerable to doubt brought on by metaphysical considerations, but the method is not about taking your H<sub>2</sub>O theory and seeing whether it explains all the properties of water. it is just about running a chemical test on a given sample of water.

This sounds like mincing words to me. More specifically. I say again, the chemical tests which compare water to H<sub>2</sub>O can only be claimed to determine whether the water you have *is* H<sub>2</sub>O, if you make additional metaphysical assumptions. All of the arguments you have presented amount to nothing more than saying that you *have* made that additional metaphysical assumption, and that the assumption is somehow justified.

Quote:

the mind-brain issue, on the other hand, is about explaining all mental properties in terms of neural activity. not taking a sample of mind and running a lab test to see if it is composed if neurons.

More mincing of words. If I make the same metaphysical assumption with respect to the mind and brain as you have made with respect to H<sub>2</sub>O and water (that they have only physical properties), then the mind-brain issue becomes about showing that the mind is nothing more than brain processes.

Quote:

the whole point of the example is to show that using science to ontologically reduce water to H<sub>2</sub>O vs. doing that with the mind and brain, are not exactly on par with each other.

The only difference I see is that in one case, you are apparently perfectly comfortable with assuming that only physical properties are involved, and in the other, you are not. In either case, once that assumption has been made, ontological reducibility *is directly implied* by our ability to scientifically explain one in terms of the other.

Quote:

Dualism may very well be advocated on the basis of this "explanatory gap", but it in no way fills it. Whether or not you are a dualist, the problem remains of how to explain the physical properties of the mind scientifically. That is where our explanatory gap lies, in the fact that there are physical properties of the mind which we know exist, but do not yet know how to explain scientifically. Interactionist dualism does not solve this problem. It just asserts that some of these physical properties are somehow ontologically different than others. Epiphenomenalism also does not solve the problem, because it simply asserts the existence of a bunch of non-physical mental properties that don't need to be explained, any more than those hypothetical but useless non-physical properties of water do.

-----  
no, dualism does solve the explanatory gap i'm talking about. if minds have features that are not reducible to physical processes, then dualism says alright, they are different substances so there is no point in searching for a reduction anyway. in other words, said explanatory gap does not exist for dualism. there may be other explanatory gaps that you were thinking of.

**That depends on what you mean by saying that the mind has features which are not reducible to physical processes. If you mean that it has features which we know about, but which cannot be explained scientifically in terms of brain processes, then dualism does not fill the gap at all. All it does is present an ad-hoc reason for why we cannot find a scientific explanation. It does not offer any explanation at all as to how those aspects of the mind we have failed to explain, actually work. Instead it just declares that an explanation of how they work is fundamentally impossible.**

**If, however, what you mean is that there may be features of the mind that have no physical effects, since we are incapable of knowing such features exist, there is no explanatory gap to fill. That whose**

**existence we can only speculate about, does not require an explanation.**

Quote:

No, I am not. I am talking about the information processing mechanism of thought.

---

point me to one source that explains thought in terms of neurons.

That is not what I claimed. What I claimed is that we have very solid scientific evidence that neuronal processes are *involved* in thought, and are responsible for the information processing aspects of it. Frankly, I don't see how you can possibly deny this without being completely unaware of anything which neuroscience has done over the past 40 years or so.

Quote:

Because the brain can only process information it has access to. You don't even need to get into details of neuroscience to understand this argument.

---

I can still deny that the physical brain is all that is involved, while asserting that it is involved in some way.

Go right ahead. Doing so does not mean that the aspects of the mind which we know about can be non-physical.

I am not claiming that I know that there is nothing more to the knowable aspects of the mind than brain processes. That is a scientific theory which is well supported by evidence, but not yet conclusive. What I have claimed is that all knowable aspects of the mind are physical, and that therefore science should be able to either explain them entirely in terms of the brain, or show that some other physical mechanism is involved.

Quote:

The simple fact is that every single aspect of your mind which you know exists, has some effect on the physical world.

---

maybe, but this does not mean that the cause of those effects is reducible to physics.

I did not claim that it does. But what it does mean is that if the axioms of scientific epistemology are correct, then every knowable aspect of the mind can be explained scientifically in terms of physical processes. The points I am making are that

(1) The epiphenomenalist idea that the mind has aspects which do not have physical effects, is irrelevant, since such aspects would be unknowable, and therefore require no explanation.

(2) The interactivist dualist idea that the mind is a distinct ontological substance from the brain, but still interacts with it, is also irrelevant, because science does not say anything about ontological substances.

In effect, both positions are just claiming that the mind has non-physical components. That's fine. Maybe it does, but if it does, we have no way of knowing that it does, no reason to think that it does, and no reason to care whether it does or not. The epiphenomenalists are dead wrong when they claim that we know about these non-physical aspects because we have "direct access" to them, and the interactionist dualists are dead wrong when they claim that ontological dualism somehow implies that epistemological reductionism is impossible.

Quote:

I fail to see the relevance of your analogy. In fact, I am not really sure what you mean by "process of mathematics". Mathematics is not a process, computation and analysis are.



---

oh don't be so nit picky! say "the process of doing math." it involves pens and paper, as the mind involves a brain, but that is not the whole story, says the dualist

It doesn't have to be the whole story. Science does not claim that it is the whole story. I am not offering the involvement of the brain in mental processes up as proof that only the brain is involved, as you seem to be suggesting I am. I am offering it only as proof that those mental processes it is involved in are physical processes.

Likewise, I could argue that any aspect of the process of doing arithmetic which has some effect on that pencil and paper, must clearly be physical. Anything else which is involved in the process of determining what that pencil and paper are going to end up doing, must also be physical.

By Kevin Dolan (Death Monkey)

**Monroe,**

Quote:

First of all, I don't want us to talk about whether science makes ontological claims. Open any science textbook and you will see what appear to be ontological claims. It is only when you do philosophy of science that you start saying things like you are saying.

Well, obviously introductory level textbooks which cannot assume that the reader has studied the philosophy of science, or even that they are familiar with basic philosophical ideas like epistemology and metaphysics, are not going to go into such details. But the fact is that what we are discussing here *is* philosophy of science, and the subtle distinctions I am talking about are very relevant to the issue at hand.

Quote:

I think the issue is not really relevant to this discussion,

I don't see how you can say that, when the thing that sparked this entire part of the discussion was the claim that science can only show correlations between mind and brain, and can never prove ontological identity between them.

Quote:

but in any case, you can't deny that science does make those claims at least in form.

I don't know what that means. What are you calling "science" in the above statement? Scientists? Textbooks?

Quote:

Perhaps you say that whenever those utterances occur, they are not to be taken literally. So just assume that whenever I appear to be talking about this mysterious metaphysical ontology you keep referring to, interpret me as meaning it in the nonliteral, scientific sense.

If I do so, then the arguments that caused me to bring up this issue simply make no sense. Most of the dualistic arguments against the possibility of a scientific explanation of the mind, are directly based on the idea that science either does, or should attempt to, show an ontological reduction from mind to brain.

Quote:

On the issue of H<sub>2</sub>O, your responses seem to indicate that you're not understanding me. The reason why H<sub>2</sub>O/water and mind/brain are not exactly on par is that the procedure for making the reduction, and the kind of propositions that must be given justification are different. For the case of water, let's say we have a chemical theory of what H<sub>2</sub>O would be and how you would test for it. Then we go out and test some samples of the stuff we call water, and the test says that it is H<sub>2</sub>O. What we do not have to do is list all of the known properties of water: thermal, flow dynamics, light refraction, etc, and see if we can derive all of these properties from our chemical theory of large clumps of H<sub>2</sub>O. No, all we have to do is perform the lab test and generalize to all the stuff we call water. It is not even remotely the same kind of verification procedure: it is a lab test whereas the derivation is theoretical work.

So the key difference between H<sub>2</sub>O/water and mind/brain is that ultimately the claim that the mind is the brain must be justified by that "derivation" thing, rather than performing lab tests on minds.

I am sorry, but I am not understanding you at all. Those lab tests are based on the "derivation thing". I really don't get what you think the difference is here. It seems to me that the only real difference is one of complexity. In both cases, the question is whether or not completely explaining all of the physical properties of something in terms of some other, simpler phenomena, demonstrates an ontological identity. I maintain that if one assumes that they only have physical properties, then it does. If one does not make such an assumption, then it does not.

The water example is not even really important here. What is important is that logically speaking, no amount of scientific evidence can ever say anything about ontological identity, unless the assumption that only physical properties exist, is made. Clearly dualists are not prepared to make such an assumption. That's fine. This has absolutely nothing to do with whether or not science can explain the mind in terms of brain activity.

So what is the problem? If you are just saying that science cannot show the mind to be ontologically reducible to brain activity, then I agree. It can't. If you are saying that science cannot explain the physical properties of the mind in terms of brain activity, then you need some sort of argument that justifies this position. Claiming that science can only show correlations between the mind and brain activity, is not such an argument, because those correlations are exactly what constitute explaining one in terms of the other.

So what, exactly, are you saying the problem with the theory that the mind can be explained in terms of brain activity, is?

Quote:

That depends on what you mean by saying that the mind has features which are not reducible to physical processes. If you mean that it has features which we know about, but which cannot be explained scientifically in terms of brain processes, then dualism does not fill the gap at all. All it does is present an ad-hoc reason for why we cannot find a scientific explanation. It does not offer any explanation at all as to how those aspects of the mind we have failed to explain, actually work. Instead it just declares that an explanation of how they work is fundamentally impossible.

-----

It does not claim that an explanation of how they work is fundamentally impossible, just that one cannot be explained in terms of the other. Thus it eliminates that explanatory gap.

I don't follow you here. What is the gap? I would say that if there is a gap, it is that we lack an explanation for how the mind works. We lack *any* explanation for how it works. Science proposes the theory that the working of the mind may be explained in terms of brain activity. In other words, it proposes a methodology for trying to close the gap. Dualism does not close the gap, nor does it even propose a way to try to close it. It simply declares that the scientific proposal *can't* work. The gap is still there. Under dualism, we still have no explanation for how the mind works.

Quote:

That is not what I claimed. What I claimed is that we have very solid scientific evidence that neuronal processes

are involved in thought, and are responsible for the information processing aspects of it. Frankly, I don't see how you can possibly deny this without being completely unaware of anything which neuroscience has done over the past 40 years or so.

---

Frankly, I never did deny it. But I'd still like to know what you mean by 'the information processing aspects of thought.'

Really? I would think it is pretty clear. For example, when I think about what you just wrote, and construct a response to it, I am processing information. My brain is taking the input information of what you wrote, and processing it both to figure out what your writing means, and to construct a response to it. Clearly there is information processing involved in such thought.

Likewise, when I contemplate my experiences, my brain is processing information about those experiences which has been stored in my memory. Information processing is a central component of thinking.

Quote:

I did not claim that it does. But what it does mean is that if the axioms of scientific epistemology are correct, then every knowable aspect of the mind can be explained scientifically in terms of physical processes. The points I am making are that

(1) The epiphenomenalist idea that the mind has aspects which do not have physical effects, is irrelevant, since such aspects would be unknowable, and therefore require no explanation.

(2) The interactionist dualist idea that the mind is a distinct ontological substance from the brain, but still interacts with it, is also irrelevant, because science does not say anything about ontological substances.

In effect, both positions are just claiming that the mind has non-physical components. That's fine. Maybe it does, but if it does, we have no way of knowing that it does, no reason to think that it does, and no reason to care whether it does or not. The epiphenomenalists are dead wrong when they claim that we know about these non-physical aspects because we have "direct access" to them, and the interactionist dualists are dead wrong when they claim that ontological dualism somehow implies that epistemological reductionism is impossible.

all of this assumes that knowledge is a purely physical thing, which the dualist would not grant so readily

No, it only requires that in order to know that you have a particular mental property, you must be able to remember having had it, and be able to think about it. Both of these clearly require that your brain have access to it. Put simply, if there is an aspect of your mind which your brain does not have access to, you cannot think about it, because your brain is involved in the process of thinking.

Again, none of these arguments require that the mind only have physical properties, nor that things like thinking be completely performed by the brain. All they require is that the brain is actually involved in the process of thinking about something.

I don't see how you can possibly deny that in order to think about your experiences, your brain must have access to the information which you are thinking about.

But as I already mentioned, we can forget about neuroscience entirely. Just look at your behavior. There is no aspect of the mind which I know I have, which does not have some effect on my behavior. That right there proves that all of the aspects of my mind which I know I have, are physical. The question of whether they can be explained scientifically or not, still remains, as does the question of whether they can be explained entirely in terms of brain processes, but whatever they are, and however it is that they work, there is simply no question that they are physical features of the world.

I have still yet to hear any argument against the possibility of the knowable aspects of the mind being explainable in terms of brain activity, that does not either assume that the mind is supernatural, or that the

mind has non-physical aspects which we nevertheless somehow know about. Arguments which assume supernaturalism just beg the question, and arguments which hold that knowable aspects of the mind are non-physical not only beg the question, but are also completely incoherent.

By Kevin Dolan (Death Monkey)

**Monroe,**

Quote:

It seems important that I clarify some semantical issues right now. You define "physical" to apply to anything which "has physical effects." This is an odd definition to me, and I do not think that it is what most people mean what they use the term.

It is not what most people mean when they use the term. It is what scientists mean when they use the term, and therefore the definition which is relevant when discussing claims and hypotheses made by scientists about consciousness.

Quote:

It also seems like a circular definition, but you say it is recursive rather than circular. What is the initial set of physical things that the recursion works off of?

Our observations themselves. The purpose of science is to study and understand the world we observe around us. Within the context of science, the term "physical" is used to refer to those things. For example, in science, the term "non-physical" is often used to refer to solutions to equations which model something, which do not represent anything which can actually be found in the observable world.

Quote:

An important feature of your definition is that it does make interactionist dualism contradictory, if such a dualists uses the words in the same way.

But of course, they do not. When interactionist dualists talk about "physical" and "non-physical" substances, they are referring to a completely different, metaphysical definition of the term. One which is no longer considered to be useful, or even meaningful, within the context of science. They are referring to a metaphysical notion of "physicallity" that was rejected by most scientists nearly a century ago.

Quote:

I do not deny, nor think it is rational to doubt, that the mind and the brain stand in cause-effect relations, and that every mental event causes something in the brain. My position is that our mental properties are not necessitated by the brain and that information about mental properties is not logically derivable from the set of all information about the brain (that is, all information describable by neurobiology and physics).

OK. The question is, why is this your position? What possible *rational* reason could there be to believe that this is the case? I do not deny that it is *possible*. Do you deny that the alternative, that all knowable aspects of the mind *are* necessitated by the brain, and that information about mental properties *is* logically derivable from the set of all information about the brain, is also possible?

Quote:

Notice that I stated that without making any ontological statements, so we can eliminate that issue from our discussion. (see below for further clarification)

That's fine. Essentially you are arguing that the knowable aspects of the mind function in such a way as to make scientific understanding of them impossible. I have already agreed that this may be possible. The

question is, do you have any kind of arguments or evidence to support this position, or is it just something which you believe, without any rational justification?

Quote:

I don't see how you can say that, when the thing that sparked this entire part of the discussion was the claim that science can only show correlations between mind and brain, and can never prove ontological identity between them.

---

My position is that science can establish correlations between the mind and brain, but not show any necessary connections between the mind and the brain.

I am not sure what you mean by "necessary connections". If the mind has effects on the brain, then I would say that is a necessary connection. Remove the mind, and the brain stops being affected by it. Its behavior changes.

Quote:

As a sidenote, with regard to whether science makes ontological claims,

Quote:

I don't know what that means. What are you calling "science" in the above statement? Scientists? Textbooks?

yes and yes, and also anything else scientists publish

Not every thing every scientist says is science, nor is every conclusion or claim a scientist makes scientifically justified. Most scientists are careful about keeping their metaphysical speculation and scientific conclusions distinct. Many are not.

Quote:

I don't follow you here. What is the gap? I would say that if there is a gap, it is that we lack an explanation for how the mind works. We lack any explanation for how it works. Science proposes the theory that the working of the mind may be explained in terms of brain activity. In other words, it proposes a methodology for trying to close the gap. Dualism does not close the gap, nor does it even propose a way to try to close it. It simply declares that the scientific proposal can't work. The gap is still there. Under dualism, we still have no explanation for how the mind works.

---

The gap is the lack of necessary connections between the mind and brain. Most versions of materialism require this, but I suspect your version does not. I wouldn't call your position materialism, but like "Massachusetts liberal", it's only a label.

Again, I am not sure what you mean by "necessary connections", but if by "materialist" you mean the old metaphysical materialism that was so popular before scientists discovered that pretty much all of our preconceptions about the nature of reality were wrong, then no, I am not one.

Quote:

Really? I would think it is pretty clear. For example, when I think about what you just wrote, and construct a response to it, I am processing information. My brain is taking the input information of what you wrote, and processing it both to figure out what your writing means, and to construct a response to it. Clearly there is information processing involved in such thought.

Likewise, when I contemplate my experiences, my brain is processing information about those experiences which has been stored in my memory. Information processing is a central component of thinking.

---

So you're saying that 'the information processing aspects of thought' covers basically the entirety of thinking and

reasoning. There is not a neurobiological explanation of that.

That is most definitely *not* what I just said. What I said is that it is a *central component* of thinking. It's right there in my post, clear as day.

Quote:

No, it only requires that in order to know that you have a particular mental property, you must be able to remember having had it, and be able to think about it. Both of these clearly require that your brain have access to it. Put simply, if there is an aspect of your mind which your brain does not have access to, you cannot think about it, because your brain is involved in the process of thinking.

---

Using the more "archaic" (as you say) sense of 'physical', the interactionist-dualist could easily say that the brain could be used to store information about nonphysical mental events.

So what? Since they are using a different definition of "physical", such a claim has no relevance whatsoever to my argument. All the dualist would actually be *saying* is that information about one ontological substance (mental events) can be stored in another ontological substance (the brain). Who cares? I certainly don't. Fantasize about all the different ontological substances you want. As long as they interact with each other, they are all physical, according to the scientific definition. I neither know nor care how many distinct ontological substances make up the observable world.

Quote:

But as I already mentioned, we can forget about neuroscience entirely. Just look at your behavior. There is no aspect of the mind which I know I have, which does not have some effect on my behavior.

---

False. I can sit in a chair quietly thinking about something, and there is no way to tell from my behavior exactly what I am thinking about, especially if it is not something very emotional, and especially if I never tell anyone what it was. You can perform this experiment yourself!

Whether or not a third party can tell through casual observation, is irrelevant. It does affect your behavior. I don't need to be able to figure out how it affects your behavior, nor do I need to be able to determine what your mental states were from your behavior. That is a completely separate issue. If it affects your behavior *at all*, no matter how subtly, then it is physical. Those thoughts are going to influence your decisions. The effects may be so subtle that even you are not completely aware of how they affected your behavior, but they have affected it.

Once you acknowledge that the knowable aspects of the mind are all physical, then we can discuss whether or not they can be scientifically understood in terms of their physical effects, and whether or not such an explanation could describe them entirely in terms of brain activity.

By Kevin Dolan (Death Monkey)

Quote:

Originally Posted by **Monroe**

(barring, of course, the hypothesis that every macroscopic collection of water has some ethereal spirit in it. this hypothesis doesn't explain anything, so it is useless.

Quote:

Originally Posted by **Death Monkey**

I agree, as is the hypothesis that the mind has some ethereal spirit in it.

This discussion between DM and Monroe bears a striking similarity to discussions between scientists and creationists. For example, the supernaturalists/metaphysicists will insist that it is possible that god created the world 10,000 years ago or that the mind consists of non-physical mechanisms and in fact, they are both correct. Science cannot falsify either metaphysical assumption.

Yes, God could have created the entire world last Thursday with fossils already in the rocks, photons from distant stars already on the way and our memories installed, as Russell famously said. Yes, my mind could be operating using supernatural Earth-rays or under the control of giant invisible pink elephants that are undetectable by any possible means. Science cannot, in principle, falsify either metaphysical assumption. All science can do is provide varying degrees of probability for reasonable explanations based on the evidence we actually observe. At this task it has been enormously successful. As I tell my freshman seminar on science and pseudo-science, "Unexplained does not mean inexplicable."

As science explains more about the universe, both creationists and dualists attempt to limit science's explanatory power and instead seek to create simple certainty in their own beliefs without any positive evidence for their non-materialist ideas. I dub both positions "non-materialism of the gaps."  
By Probeman (John Donovan)