Mary’s Color Perception, 10-2005, Philosophy Forum

Yoichi Sugita set up a simplified Mary's room with monkeys. The result: colour perception is acquired, not innate.

http://medicalnewstoday.com/medicalnews.php?newsid=11255

It looks like, at the end of the experiment, the poor creatures were unable to experience colour normally, because their capacity to experience colour was sadly underdeveloped.

It is tempting to conclude that Poor Mary would not experience anything new when exposed to colour, because of a lack of development in her physiology.

By Banno

Morrandir,

Quote from Morrandir: Whatever the case, it does not seem to prove in any way that knowledge of physics gives you everything there is to experiencing red. In fact, I fail to see the point - has that person mangled up monkeys because he misunderstood the original question?
The point of the experiment was to learn more about how visual processing works, not to address some philosophical question.

Quote from Morrandir: The point of the example of Mary and the black/white room is not to show that experiencing redness is innate or not, but that just through physical knowledge you cannot know everything there is to know about experiencing - that which is left outside is what is it like to experience red.

This experiment has nothing to do with it, as far as I can see.
The question is, what does "knowing what it is like to experience red" actually mean?

It seems to me that the fact that I know what it is like to experience red, really amounts to nothing more than the fact that I remember having seen red in the past.

Such usage of the word "knowledge" is clearly different than what is used when you talk about "physical knowledge", meaning knowledge of facts about the world.

That said, it doesn't really seem like a philosophical issue at all to me. Certainly not a metaphysical one. If learning facts about the world cannot provide you with the memory of having had an experience, then clearly you cannot "learn" what an experience is like by just learning physical facts. This doesn't mean that physicalism is wrong, or that there is more to consciousness than stuff the brain does. It just means that arbitrary memories, which are physical structures in the brain, cannot simply be constructed by learning facts about them. Learning what the physical state of your brain would be if you had experienced seeing red, is not going to magically cause your brain to take on that state. And without doing so, you will not have any memory of having seen red, and thus will not know what it is like to do so.

The same reasoning applies to classic arguments like the one about "knowing what it is like to be a bat". In order to know that, you would have to remember having been a bat. Simply learning about how the experiences things, is not going to magically provide you with those memories, nor with the neural hardware necessary to remember those memories the way a bat does.

And incidentally, the experiment does have some relevance to this issue. It clearly demonstrates that the
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just would not possess the memories themselves.

Quote from Morrandir: That is because it fails to explain the "what it is like"-part.
No it doesn't. Again, what it is like is just a relationship between different experiences. The Mary argument does not show that Mary cannot learn these relationships. Nothing about the thought experiment shows that science cannot explain these relationships, and indeed explain exactly how the memories which constitute her "knowledge of what it is like" work.

Quote from Morrandir: It only explains that because of the activity of the brain there can be such a "what it is like"-part, but it does not reduce to it. It allows emergentism, for one, and a physicalist theory should be able to deny such emergentism.
I am not sure what you mean here. The Mary thought experiment certainly allows for emergentism, but it in no way demonstrates that emergentism is correct, nor that physicalism must allow for it.

Quote from Morrandir: If physicalism means: whatever happens in the consciousness must at some level be caused by physical events in the brain, then it should work.
Physicalism means that all facts about the world (including consciousness) are physical facts. The Mary argument in no way refutes, or even challenges this. What Mary lacks after learning all of the physical facts, are not facts at all, but rather physical structures in her brain.

Quote from Morrandir: The difference is between: there is no more to consciousness than what can be explained thoroughly through physical facts (this fails in Mary-example) AND whatever there is in consciousness is based on physical facts (this does not seem to fail).
The first does not fail in the Mary example. The fact that she lacks a set of memories does not imply that those memories (or anything else), cannot be explained thoroughly through physical facts. Why should simply being given an explanation about a set of physical structures be expected to cause those structures to appear?

Quote from Morrandir: That is, reductionistic physicalism tries to say that whatever there is to explain about the brain can be explained through physics. Now if it is right that we cannot know what it is like to experience red (but it is like something), then this is incompatible with reductionistic physicalism.
Only if you claim that knowledge of what it is like to see red is knowledge of facts. But it is not, so the point is moot.

Quote from Morrandir: This is quite evident from the fact that physicalism is compatible BOTH with there being no conscious experience at all.
Only if you define "consciousness" as being something which is completely causally inefficacious, in which case it clearly has no relevance to the Mary argument. Clearly knowing what an experience is like can affect your behavior, so whatever that knowledge is, it is not causally inefficacious. Physicalism is not compatible with it not existing. If it didn't exist, we wouldn't be talking about it right now. The physical world would be different.

Quote from Morrandir: and there being that - physicalism is independent of that, so it cannot explain consciousness. It explains the physical processes behind the rise of consciousness.
Only if you are talking about epiphenomenalism, which has no relevance to the Mary argument.

Quote from Morrandir: But if physicalism wants to make a real reduction, it must account also for what it is like to experience red, if we agree that it is like something.
It can account for it. The Mary argument in no way implies that it cannot. It is a relationship between experiences. Your knowledge of it is stored physically as memories in your brain. There is nothing being left out here. There are no facts about it which Mary does not know.

DM said: It just means that arbitrary memories, which are physical structures in the brain
Quote from Morrandir: Again, memories may be physical structures in the brain. However, the real question is how to explain what it is like to remember. That is, even if EVERYTHING concerning consciousness was physical processes in the brain (which is quite plausible), we still have the question:
“what is it like to go through these physical processes”.
You are talking about the experience itself now, not the knowledge of what it is like, which is what the Mary thought experiment talks about. It does not even address the experiences themselves, and says absolutely nothing about whether or not they are compatible with physicalism.

The Mary argument only states that Mary will not know what it is like to experience seeing red. It says absolutely nothing about whether or not she will know a complete description of how the experience of seeing red actually works.

Quote from Morrandir: There is nothing as such in the physical structure that even IMPLIES that it is like something to be unhappy.
That you know of. You are just begging the question here. If you start with the assumption that experiences cannot be physical, then the Mary argument is redundant. You have already assumed the conclusion.

Quote from Morrandir: But it seems to me that it IS like something, so we need something more than theories about the brain structure and its activities during sorrow.
How do you know? The Mary argument certainly does not indicate this.

DM said: Learning what the physical state of your brain would be if you had experienced seeing red, is not going to magically cause your brain to take on that state.
Quote from Morrandir: Agreed. I think this is very important.
If you agree that this is true, then what, exactly, are you claiming that Mary is lacking? Is she lacking anything other than these memories? If so, why? What about the Mary thought experiment indicates that she would be?

DM said: It incorrectly attributes to the brain-mind theories the claim that "knowing what an experience is like", is no different than knowing how many apples are in a box. No brain-mind theory makes such a claim, nor does physicalism require that such nonsensical claims be true.
Quote from Morrandir: Okay, so Mary is a strawman, you say? But the question remains: how does physicalism try to explain the "what is it like"-part? Or does it?

Physicalism does not provide explanations. Science does. And science is still working on that. Maybe it can't. Maybe physicalism is wrong. But the Mary argument clearly does not demonstrate that it is.

Quote from Morrandir: If it does not try, then fine - then we need some philosophical attempts to explain it, as it clearly is something real.
Philosophy cannot provide explanations. It can only provide methods for trying to find such explanations (such as science). So far science is the only such method which has had any success at all in explaining real things.

Quote from Morrandir: Or, of course, we could go the "mysticism"-way and say that some parts of the conscious experience is simply and utterly unexplainable. I wouldn't go that way, though, at least not before I have seen a substantial amounts of attempts to explain it, or a sound argument against its explainability.
Agreed. If you have any alternative methods to science in mind, I would love to hear about them.

But consider this:

If I were to take somebody who had never seen color, and surgically alter their brain to the state it would be if they had seen color, would they the know what it is like?

Likewise, if I were to take somebody who had seen color, and surgically alter their brain to remove all memory of it, would they still know what it is like?

A little thought about these two questions should clearly reveal the complete irrelevance of the Mary argument to the validity of physicalism. It also brings up an important question. Is there really anything more to our experiences than our memories of them? I know that it seems like there is, but given that our thoughts (introspection) about our experiences always come after the experience, and thus operate only on
the memory of the experience, could there be anything more to it?

Your arguments appear to be based on the idea that a person is somehow aware of experiences as they happen. Not only does the Mary argument not make any reference to this whatsoever (again, it refers to the knowledge of what the experience was like, not the experience itself), but the simple fact of the matter is that there is no justification for this idea in the first place. On the contrary, the evidence strongly indicates that it is wrong. Your brain processes sensory information, and then thinks about it. Only then are you consciously aware of having had the experience. You can imagine that there is some sort of “awareness” of it while it happens, which is not tied to memory or thought, but there is no reason to think that there is. The intuitive sense that there is, follows directly from the fact that when you reflect on your experiences, you don't remember the event happening before you were aware of it, which is trivial. It has to seem like you are aware of the experience as it happens, because your introspection has no access to any information about the brief time between when your brain actually starts processing the sensory information, and when you begin thinking about your memory of it.

By Death Monkey (Kevin Dolan)

Morrandir wrote: Exactly. Which is why reductionistic physicalism is unable to account for everything. [...] Uhh, well, you say that in a highly counterfactual and implausible situation Mary wouldn't learn anything, which is probably true. But because we CAN'T, doesn't that directly lead to: Mary argument DOES prove a whole lot. Or am I missing something?

Yes you are missing something. HUMANS are unable to gain experiences through a presentation of physical facts. That does not mean that this experience is not explainable in terms of physical facts!

humans are also unable to learn how to ride a bicycle based on a presentation of physical facts. you cant read a book on bicycles and know how to ride a bicycle. but that doesn't mean that information isn't encoded physically. in fact it certainly is coded physically. the ability to ride a bicycle is simply having your brain calibrated in such a way that you push the pedals and lean left and right properly. This is entirely explicable in terms of physical information. STILL, HUMANS can't learn to do it from reading a book. ERGO, there are some types of information we cannot assimilate simply by reading.

HOWEVER, it is conceivable that there are aliens who could learn how to ride a bicycle simply by reading a book, because they can calibrate their brains properly. in precisely the same way, we could imagine an alien that is able to learn what it is like to experience red, simply by reading a book.

ERGO, physicalism is not disputed by the Mary argument -all the mary argument demonstrates is a limit on the means by which HUMANS can acquire experience.

By Andrew Saunders

DM wrote: Reduction physicalism holds that all phenomena can be explained in terms of the physical.

Morrandir wrote: Indeed. Now explain to me what it is like to be a bat, to take the Nagel-example. Or explain to a blind person what it is like to experience red.

"What it is like to experience red" is just a label which refers to a person's introspective thoughts about their experience of seeing red. Absolutely nothing about the Mary thought experiment indicates that these things cannot be explained in terms of the physical. The fact that providing you with such an explanation will not cause you to suddenly possess the memories which constitute somebody else's "knowing what it is like", does not mean that you do not have a complete description of it.
It is just a matter of semantics. You are incorrectly assuming that an explanation of "what it is like to see red", would cause you to "know what it is like to see red", when in fact, these two phrases are referring to drastically different things.

If by "knowing what it is like to see red", you do not mean "remembering having seen red", but instead "knowing what a person's introspective thoughts about having seen red are", then nothing about the Mary thought experiment indicates that Mary would not know what it is like to see red. Indeed, she would know. She just wouldn't have the memory of having done so herself.

The entire argument rests on vague definitions of terms. Only if you explain exactly what you mean by "what it is like to see red" and "knowing what it is like to see red" mean, can the question be answered of whether Mary would know or not in the thought experiment.

What do you mean by these phrases? You have asserted repeatedly that "what it is like to see red" is something which exists. What exactly are you referring to, if not the person's introspective thoughts about their experience?

If that is what you mean, then why do you think that it is not possible for these introspective thoughts to be explained in terms of the physical?

By Death Monkey (Kevin Dolan)

DM wrote: "What it is like to experience red" is just a label which refers to a person's introspective thoughts about their experience of seeing red.

Morrandir wrote: Why so? I think it is like something to experience light for a rat as well, although I do not believe much on rat's introspective thoughts...?

Well then, please explain what you mean by "what it is like to be a rat". I am getting the impression that you are just referring to the rat's experiences themselves. If not, then what?

DM wrote: Absolutely nothing about the Mary thought experiment indicates that these things cannot be explained in terms of the physical.

Morrandir wrote: It is a challenge, as I have repeated. Not an argument. It is a challenge against physicalists' bold claims that "we can explain everything".

No physicalist would ever claim that they can explain everything. What we claim is that all facts are physical facts. We do not claim to know all of those facts.

Morrandir wrote: The idea is that it seems impossible to explain these things.

It certainly doesn't seem impossible to me. But that just goes to show the limited value of intuitively based conclusions which are not supported by actual evidence. In other words, not only are things not always as they seem, but they often seem very different to different people. You find the notion of it being possible to explain these things extremely counter-intuitive. I find the notion that it is not possible to explain them to be both counter-intuitive, and contrary to everything we currently know about how the world works.

Morrandir wrote: It does not mean that it is (and I am not claiming that either - I would like to make clear that I am not trying to refute the physicalist, only saying that the whole discussion here is aimed at the wrong direction, that the real problem here is being missed).

Well then, I don't understand why you think the Mary argument even has anything to do with what you are talking about. The Mary argument claims that if, upon seeing red for the first time, Mary learns anything new, then physicalism is false. This claim is clearly incorrect.

Morrandir wrote: The idea is that in Mary thought experiment it ends in a question: "would not Mary learn something new?" - would she? If a physicalist wants to say "no", then the physicalist should be able to show somehow that Mary could learn the experience through the books - which sounds strange to say the least.
But the physicalists don’t say no, nor do they claim that you can “learn an experience through the books”.

**Morrandir wrote:** Or somehow show that there really is no such thing as "what it is like..." (some eliminativists go for this). They need do neither. They need only point out that what Mary gains is not knowledge of facts about the world, but rather the memory of having had an experience. You can call this "learning something new" if you want, but doing so does not somehow render physicalism false, because physicalism in no way claims that learning facts can provide you with memories of having had experiences.

DM: The fact that providing you with such an explanation will not cause you to suddenly possess the memories which constitute somebody else's "knowing what it is like", does not mean that you do not have a complete description of it.

**Morrandir wrote:** Let me stop here, because I think this is extremely important. Why? Because I have tried many, many times to understand what makes a person say such a thing that to me seems so completely wrong. Now I am really and honestly of the opinion that I do not understand this, and am not saying, as such, that it is wrong. Because the only reply I can really think of is "but it does!". When I look at that what you say above, I see this:
1. Explanation will not cause me to experience "what it is like" (of course not, I would like to add - and we seem to agree).
2. This means that there is something that is left outside the explanation. This is the experience. (Isn't this completely obvious? How can it not be?)

No. The experience is not left out of the explanation. On the contrary, the experience is completely explained by the explanation. But this explanation is no more going to provide you with the actual experience, than an explanation of how combustion works is going to cause a real fire to occur. Again, the experience is not a set of facts which can be conveyed by a description in a book. It is a set of neural processes. Simply describing these processes is not going to cause them to happen.

Put another way, experiences are not knowledge. They are things which you can have knowledge about. Knowing everything there is to know about an experience, does not cause that experience to exist.

**Morrandir wrote:** 3. A physicalist says that he can explain everything related to experience.
4. "What is it like" is a part of the experience.
Yes, and *explaining* it does not cause your brain to *experience* it.

**Morrandir wrote:** 5. A physicalist should by all accounts admit that he can't have all these together.
A physicalist need only point out that what you are claiming Mary will not have is not something which physicalism claims she should have.

**Morrandir wrote:** 6. Yet you, and some other physicalists, do not even problematise the matter. You and they say that "it does not mean...", but to me it seems it exactly DOES mean that.
That is because you are mixing different concepts. You are using "what it is like to experience red" to mean X, and then using "know what it is like to experience red" to mean "know Y", where X and Y refer to similar, but different things. At least, this seems to be what you are doing. It is difficult to say for sure, because the meanings you provide for those phrases is so vaguely defined that it seems to be able to refer to an entire spectrum of concepts.

**Morrandir wrote:** So where is the problem? How come physicalists are so incapable of seeing this problem? Because non-physicalists seem to be incapable of coherently explaining what they think the problem is.

**Morrandir wrote:** And how come I am so incapable of understanding that for them there is no problem? Everything you say above is what I would agree to any day, but the last "does not mean that you do not have a complete description of it." that I simply cannot see following.
What exactly are you asking for a description of? And what do you expect this explanation to provide Mary with?
DM wrote: If by "knowing what it is like to see red", you do not mean "remembering having seen red", but instead "knowing what a person's introspective thoughts about having seen red are", then nothing about the Mary thought experiment indicates that Mary would not know what it is like to see red. Indeed, she would know. She just wouldn't have the memory of having done so herself.

Morrandir wrote: How could she know? How can you say that? Does a blind person know what it is to see colours just by reading books and listening to others explaining it?

If you accept the premise of the thought experiment, and assume that the blind person has been provided with a complete physical explanation of how the brain works, and has the cognitive capability of understanding it all, then sure.

Perhaps what makes this scenario seem to be impossible is not that physicalism is wrong, but rather that the premises of the thought experiment are impossible to begin with?

Morrandir wrote: And I think I argued against the memory-part already, which calls for some attention. It seems that you ignored it.

I responded to it in a previous post. Your notion of immediacy of experience is not consistent with reality. By the time you are aware of your experience, it is already a memory. Indeed, it is that memory which you are actually aware of.

DM wrote: The entire argument rests on vague definitions of terms. Only if you explain exactly what you mean by "what it is like to see red" and "knowing what it is like to see red" mean, can the question be answered of whether Mary would know or not in the thought experiment.

Morrandir wrote: Ah, but that would beg the question. If the point is: "what it is like to experience red" is NOT explainable (at least through physical terms), then it begs the question to say that "until you explain what it means to it being like something to experience red, I will not go on".

Explaining what it is like to see red (which you want me to do), and explaining what you mean by the phrase "what it is like to see red", are two very different things. I cannot even attempt to do the former until you do the latter.

Morrandir wrote: The point is, the PHYSICALIST is saying that he can explain everything. The Mary thought experiment is just a challenge: "well, explain this".

That is nonsense, on both counts. Nobody is claiming to be able to explain it. We are only claiming that the facts about it are physical facts. We are not claiming to actually know those facts.

Morrandir wrote: But, this does not mean that I could not explain to what I refer, nonetheless. Provided that you are not a zombie. What I am referring to is a very common phenomenon, or so I have heard. Say that I experience a red spot now. And now you know it. That to which I refer is that part that you are missing in relation to me in this case, when you know that I experience something, but do not experience it yourself. You understand what I mean by looking at something red. You should understand it whenever you are sad - your sadness is radically different from the sadness of others to you, right?

I don't understand this at all. What I am missing is having had your experience.

Morrandir wrote: It is that to which I am referring. An existent phenomenon, yet quite unexplainable in objective terms, or so it seems.

How it seems is irrelevant. Clearly we would need to know a lot more about the brain before we could even attempt to provide the explanation you want. That doesn't mean that it is impossible, nor is there any good reason to think that it is.

Morrandir wrote: We tend to think that it is like something for women to give birth. Yet I am sure people would look a bit askance if I said that "I know what it is like", being a man and all.

Which is utterly irrelevant. They don't know, nor do they have a complete description of it. That does not mean that it can't be explained. Just that they do not know the explanation.

Morrandir wrote: Do you understand that to which I refer?

It sounds like you are using "the experience" and "what it is like to have the experience" identically.
If not, then no, I don’t understand that to which you refer.

DM wrote: What do you mean by these phrases? You have asserted repeatedly that "what it is like to see red" is something which exists. What exactly are you referring to, if not the person's introspective thoughts about their experience?

Morrandir wrote: See above. I hope it is clear enough an explanation. I do not, however, refer to introspection. At least not in the "thinking"-way you spoke of earlier. I cannot think what it is like to experience red - it is more of an emotion than a thought. In particular no amount of thinking of red will ever be able to produce anything like the experience of redness. Even the memory of redness is always different in nature, more toned down, than the experience itself (although surely of the same "kind"). So you are talking about the experience itself, right? If so, then what is "knowing what it is like to see red", if not possessing the memory of having had that experience?

Morrandir wrote: In these things we must really only assume that others see the world in quite the same way. I am merely hoping that you do experience things, and that you do, if you are honest, understand to what I refer.

The problem is that there are quite a few related concepts which you could be referring to, and I am not sure which it is that you actually are referring to. Indeed, as I have suggested before, it seems like you are referring to one concept when you talk about "what it is like to see red", and knowledge of a different concept when you talk about "knowing what it is like to see red".

Morrandir wrote: They cannot be explained in any way that I know - and that is exactly the point of Mary.

I disagree. The Mary thought experiment does not in any way indicate that they cannot be explained. It simply starts with the premise that Mary has a complete description of all of the facts, and poses the question of whether she will learn anything new when she sees red. The answer depends simply on what you mean by "learn something new".

Will she learn any new facts about seeing red? No, she will not. Will she learn something new in the sense of gaining the memory of having had an experience she never had before? Yes, she will. The latter does not in any way contradict physicalism.

What you seem to be getting at, namely the question of whether experiences themselves can be described scientifically, is not even addresses by the Mary thought experiment. It deals strictly with what Mary does, and does not, know.

DM wrote: If that is what you mean, then why do you think that it is not possible for these introspective thoughts to be explained in terms of the physical?

Morrandir wrote: They probably could be. If I could say what it is like to experience redness, then it could probably be explained. But in the end, I can really only offer vague metaphors etc which do not touch the real sensation that I experience.

Well, given that you do not know a complete description of your experiences, the fact that you are unable to verbally communicate such a description to other people seems to me to be rather trivial. Of course you can't.

But this certainly in no way suggests that such an explanation is not possible.

I again pose these two questions to you:

1) If I surgically alter Mary's brain to be the way it would be if she had seen red before, would she then know what it is like to see red?

2) If I surgically alter your brain to be the way it would be if you had never seen red before, would you still know what it is like to see red?
I think the answer to these two questions are "Yes" and "No", respectively. Do you agree? If not, why?
What is Mary missing in the first case? What do you still have in the second case that somebody who has never seen red would not have?

I think this thought experiment is far better than the Mary one, since it does not start with impossible premises. It addresses exactly the same issue, though. If physicalism is right, then the answers should be "Yes" and "No" respectively. If those answers are wrong, then physicalism fails. It also cuts through all of the vague definitions and appeals to intuition, and directly gets to the point.

spacer1 wrote: I don't think that knowing all the physical facts explaining why I enjoy the taste of chocolate will tell you anything about the taste of chocolate. The memories I form when tasting chocolate, in their physical form of brain chemicals, etc., is not the taste of chocolate. Or rather, it certainly is, from the third-person, but not from the first.
Correct. Your memory of having tasted chocolate is not the taste of chocolate. Your introspective thoughts about those memories, including relationships with other experiences you have had, is your first person view of the taste of chocolate. And those thoughts, like the memory itself, are physical structures and processes in your brain.

spacer1 wrote: how about replacing chocolate with a food you've never tried before? If you knew all the physical facts of said food, could you be said to know how it tastes?
That depends entirely on what you mean by "know how it tastes". If you mean remembering having had the experience of tasting it, then no. If you mean knowing what all of those introspective thoughts and relationships with other experiences, would be, then the answer is yes.

If you mean something else (as I suspect you do), then I have no idea, because I have no idea what you actually mean.

But since it is not possible for somebody to know all of those physical facts, much less for them to have the cognitive ability to process all of that information, the point is rather moot. When a thought experiment starts with "if something impossible happened...", don't be too surprised when the results don't make very much sense.

Perhaps you would care to look at the questions I posed for Morrandir.

If I surgically altered your brain to the state it would be if you had tasted food X (something you have never tasted), would you then know what it tastes like? If not, why not?
If I surgically altered somebody's brain who had tasted X, to the state it would be if they had not, would they still know how it tasted? If so, why?

DM wrote: That depends entirely on what you mean by "know how it tastes". If you mean remembering having had the experience of tasting it, then no. If you mean knowing what all of those introspective thoughts and relationships with other experiences, would be, then the answer is yes.

spacer1 wrote: I meant the former.
Then again, the answer is no. Simply knowing the physical facts will not cause the memory of having tasted it to form in your brain. Again, this does not contradict physicalism. It doesn't even have anything to do with physicalism. It is simply a limitation of how the brain works. The brain does not possess any mechanism for constructing memories based on knowing what the structure would be.
**Spacer1 wrote:** although I must agree with Morrandir's seemingly basic point that the memory is formed from the experience.

Unfortunately, this point is not consistent with reality. By the time you are aware of the sensory input, what you are aware of, is already a memory. What you think of as your "immediate experiences of sensations", are just memories which are being thought about for the first time. That is where deja-vu comes from. Sometimes the memory gets mixed up a bit, and you interpret it as an old memory, as well as a new one. As a result, you feel like the "immediate experience" is something which has happened to you before.

**DM wrote:** since it is not possible for somebody to know all of those physical facts, much less for them to have the cognitive ability to process all of that information, the point is rather moot.

**Spacer1 wrote:** Unless we can rule out such a thing in principle.

Go for it. But the Mary argument is barking up the wrong tree.

**Spacer1 wrote:** Also, I think this is precisely where you can't explain the taste of chocolate by reference to other tastes. What would you say it tastes like? And would any description be able to replace the experience of eating chocolate?

Of course not. Actually eating the chocolate results in the formation of the memory of having eaten the chocolate. A description cannot replace this, because a description cannot cause the memory to form.

**DM wrote:** If I surgically altered your brain to the state it would be if you had tasted food X (something you have never tasted), would you then know what it tastes like? If not, why not?

**Spacer1 wrote:** Well, I don't know, what would I compare it to? If you tell me it's pig's testicles, I guess I'd just have to take your word for it that I was experiencing the taste of pig's testicles.

I think you misunderstood my question. The surgical procedure in question will provide you with the memory of having tasted food X. You will literally remember having eaten the food, and remember having experienced eating it (even though you never did).

**Spacer1 wrote:** However, assuming that you know that it will produce the taste in me, then, yes, I would know how it tastes.

It will produce the memory of having eaten it. That should be sufficient, unless you think that there is something more to knowing what it tastes like, than just remembering having tasted it.

**DM wrote:** If I surgically altered somebody's brain who had tasted X, to the state it would be if they had not, would they still know how it tasted? If so, why?

**Spacer1 wrote:** No, they would not know how it tasted.

But, knowing how things taste is outside the realm of science (or third-person perspective).

This contradicts your above answers. If I can use science to figure out what your brain state would be if you had tasted X, and then use that knowledge to physically alter your brain to that state, then I can use science to provide you with the knowledge of what X tastes like.

That is the point of this modification of the experiment. The standard one fails because its premise is impossible, and because no mechanism exists for the brain to transform knowledge of brain states into actual brain states. But in my version of the experiment, we can.

**Spacer1 wrote:** In surgically altering my brain, you have no way of knowing whether I'm really experiencing the taste of pig's testicles or not.

You aren't experiencing the taste of pig's testicles. You are remembering having tasted them. And since memories are purely physical structures in the brain, if I know all of the physical facts about the brain, then I will know that my surgical procedure is giving you that memory.

**Spacer1 wrote:** I'm not trying to introduce anything non-physical, but I do see there as being extra knowledge in the having of experience, compared to just having a description of that experience, by virtue of the difference of perspective.

Yes. The "extra knowledge" is simply the memory of having had the experience. This is completely compatible with physicalism.
Mikkel wrote: Now I am going to give you a simple challenge that will refute your claim that "all facts are physical facts".

Imagine that the above written as a conversation taking place between two persons in a language unknown to both of us. Further these two persons are been measured (brain scanned and what not) and the spoken words are being recorded with all physical features. That is to say we now have all the physical facts or rather all the facts according to you.

Now please tell us all, Death Monkey, without knowing anything about the language and only with the raw physical facts what it is they are taking about?

Don't be ridiculous. knowledge of the language is part of those physical facts. Knowledge of how to speak the language is physically stored in the brains of the people having the conversation.

Mikkel wrote: I can even rewrite the challenge for you. Du påstår, at alle fakta er fysiske fakta. Det betyder, at du skal være i stand til ved alene at undersøge det, som jeg har skrevet her på dansk rent fysisk som det fremstår på din computer skærm og således vil vide, hvad der står. Det er jo et faktum, at det her, som det står skrevet, kan forstås af andre, der kan dansk.

Should be the case that you don't understand Danish, you should be able to by physically examining your computer screen to tell what it says.

Again, don't be ridiculous. Your knowledge of how to read Danish is part of the relevant physical facts, since it is physically stored in your brain.

Mikkel wrote: In short what you claim is that it is a fact that all facts are physical facts, but as it stands -"it is a fact that all facts are physical facts" - is not a physical fact. If it were the case then imagine all of this as above with the two persons and then give all the physical facts to someone who doesn't understand the language and ask this person: What is this about?

Care to try again? Give it a bit more thought this time.

Mikkel wrote: As to really spell it out for you: The ability to understand a given language is not objective, i.e. physical facts, but subjective. Not all facts are objective/physical facts just as this sentence has a fact to it, that is not objective/physical!

You are wrong. Sorry to break it to you. Language is learned by the brain. The brain is a neural network. It physically encodes your knowledge of how to speak the language. This is why brain damage can damage your ability to understand language. I have a friend with this problem. Due to a degenerative brain disease, he is gradually losing his vocabulary, even though his other cognitive functions are completely intact. It's actually quite disturbing to see.

Longsock wrote: The Mary thought experiment shows clearly that physicalism has been undermined. (if not completely refuted by the hypothesis!). However, this is dependent on your definition of 'physicalism.' If you take it to mean- EVERYTHING can be reduced to physics, then obviously what i am saying here parallels this definition, however, if it says that all facts of mind are caused by physical facts- then this allows in other ideas- QUALIA for example.

The Mary thought experiment does not, in any way, demonstrate that there is anything which cannot be reduced to physics. The fact that my describing a physical brain structure to you, does not cause that brain structure to magically form in your brain, does not contradict physicalism. I do not understand why you think it does.

By Death Monkey (Kevin Dolan)
Mikkel wrote: You claim that all facts are physical facts. I will have to expand on the term physical facts; first off they are objective and secondly they are purely about states of matter and energy. Yes.

Mikkel wrote: So let us look at my brain, as I understand Danish, for example “Rød grød med fløde”. As I understand it, we could in theory completely measure my brain in that state and get an account of the configuration and amount of matter and energy.

Now this is where our understanding parts, I claim that there are facts that are not purely objective, physical facts. So I will try to show you that this is the case, but before I will state what I am not claiming. This is not about ontology or metaphysics, but rather about epistemology. I am in essence claiming, that if we only know the pure objective, physical account of the configuration and amount of matter and energy of my brain, as I understand “Rød grød med fløde”, there is something missing that isn’t a part of said account. So what is it, which is missing, you might ask? The subjective understanding is not there, remember this account is about the brain state of “Rød grød med fløde”, but you won’t find “Rød grød med fløde” as “Rød grød med fløde” in the account, if it is kept totally objective and physical.

I don't know what you mean. Are you saying that the information I would need to determine what that phrase means isn't stored in your brain? If so, could you please justify this claim?

Mikkel wrote: Take E=MC2! Now I will ask you to do a little experiment, find a lighter and light it under your hand until it starts hurting. That is E=MC2 and some other physics, right. Now “do” in your mind an pure objective, physical account of the configuration and amount of matter and energy of your body and brain and please tell us, where it is that the pain, as you experience it, is???

I am not sure what you are asking. The experience of pain is something my brain does. It is a process taking place in my brain, not an object located somewhere.

Mikkel wrote: Where we agree, is that there isn't something missing in the pure objective, physical account as far as the pure objective, physical account goes. Let me try to explain with the help of a thought experiment; imagine we could “playback” a complete objective, physical account of a brain state, an experience, again in the person/brain which had the experience. I would claim that as far as the experience of the recorded event and the “playback” event goes there is no difference in the experience. So yes, as far as physical facts goes they are complete. There are no invisible magical “God”, “Soul” or what not missing, but what physical facts miss it is the subjective experience.

You can claim this all you like. What we need is some justification for this belief.

Frankly, I don't see how what you are suggesting even could be possible. If the physical world is causally closed, and these “subjective experiences” are not physical, then it follows that they cannot possibly have any effects whatsoever on the physical world. And yet, here we are (physically) discussing them. Clearly something is fundamentally wrong with this idea.

Mikkel wrote: So to end this! The fact is that if you lit a lighter under your hand you would feel pain as you do feel pain, but this fact is not present in a pure objective, physical account of the event!
How do you know? Do you have a complete physical account of the event? Nobody else in the world does. Could you show me this magical brain scanning machine of yours?

Mikkel wrote: If it were, then you should be able to point to the place in the account and show where you felt the pain as you felt it.
If I had such a complete account, and the computational power necessary to process it, maybe I could.

Mikkel wrote: Some facts are subjective. The fact that you claim that all facts are physical facts is of course happening in your brain, which is objective and physical and can be viewed from a pure objective, physical point of view, but how you understand and experience the claim: “All facts are physical facts” is in fact subjective to you. The experience of “All facts are physical facts” is not only physical, but also something else, namely subjective. You know something which can’t be known from a pure objective, physical point of view.
Your opinion is noted. Do you have any justification for it?
By Death Monkey (Kevin Dolan)

spacer1 wrote: I'm not trying to contradict physicalism. Also, I find it odd that you consider the inability to gain a first-person experience by being given all the physical facts to be a "limitation of how the brain works", as if such an ability was necessarily desirable.
How does saying that it is a limitation of how the brain works indicate that I think such an ability would be desirable? The point is simply that it isn't an ability that they the brain has.

DM wrote: Unfortunately, this point is not consistent with reality. By the time you are aware of the sensory input, what you are aware of, is already a memory. What you think of as your "immediate experiences of sensations", are just memories which are being thought about for the first time.
spacer1 wrote: That immediate conscious experience is, in your words, "just memories" is beside the point. Those memories are formed via experience. That is, you have to have had certain experiences to form the associated memories. If you've never eaten chocolate, whether you did it freely or determined by all physical forces, you cannot form the memory of its taste.
Exactly. That was my whole point. Reading a book doesn't give you that memory. Why should this fact be problematic?

DM wrote: Of course not. Actually eating the chocolate results in the formation of the memory of having eaten the chocolate. A description cannot replace this, because a description cannot cause the memory to form.
spacer1 wrote: This is the very heart of the Mary example. Having studied everything there is to know of the physical effects of "experiencing the colour red" in humans, does Mary gain any new knowledge when she has the first-person experience of seeing red? You say above that the description cannot replace the experience, which suggests that you would agree that Mary gains extra knowledge upon seeing red.
That depends on your definition of "knowledge". She does not gain any new knowledge in the epistemological sense. That is, she does not learn any new facts, physical or otherwise. She just gains the memory of having had the experience.

That is the problem with the Mary argument. It makes no distinction between "knowledge of facts", and other definitions of "knowledge". The "knowledge" Mary gains is not "knowledge of facts", so you cannot conclude from the fact that Mary gains this knowledge, that there were facts she did not already know.
There weren't any.

You can break the Mary argument down like this:

Premise 1: All facts are physical facts.
Premise 2: Mary knows all of the physical facts about the perception of color.
Premise 3: Upon seeing red for the first time, Mary learns something new.
Conclusion: Mary did not know all of the facts about the perception of color.

The flaw is simple. What Mary learned when she says red was not facts about the perception of color, nor was it facts at all. Therefore the conclusion simply does not follow. Even if all of the premises are accepted as true, the conclusion simply does not follow from them.

DM wrote: This contradicts your above answers. If I can use science to figure out what your brain state would be if you had tasted X, and then use that knowledge to physically alter your brain to that state, then I can use science to provide you with the knowledge of what X tastes like.

spacer1 wrote: Except that we don't have all the physical facts, so the point is kinda moot.
The thought experiment is set at some future time when we do know those facts, just like the original Mary experiment. The only difference is that my thought experiment does not bestow upon Mary's brain super-powers which no human brain possesses.

DM wrote: Yes. The "extra knowledge" is simply the memory of having had the experience. This is completely compatible with physicalism.

spacer1 wrote: Compatibility with physicalism is only half (if any of) the issue regarding the Mary example.
Compatibility with physicalism utterly refutes the conclusion of the Mary argument.

spacer1 wrote: The question the example raises is whether any knowledge is gained from having the first-person experience, compared to having only a third-person description.
And we already know that the answer to that question is "yes".

spacer1 wrote: It's an epistemological question, as Mikkel pointed out. You can say that everything is physical, or all knowledge is only memories which are physical, but that doesn't say anything about the content of knowledge.
You can rephrase it as such a question, but that is not what the original Mary argument was. At this point you are just talking about neuroscience. How does the brain learn? How do memories form? This isn't even philosophy any more. It is biology and psychology.

spacer1 wrote: Think of it this way: In order to get to the point where neuroscientists can produce certain experiences in us synthetically, wouldn't this require not only the third-person view of brain scanning, etc., but also the responses of the subjects as to their first-person experiences, in order to correlate the physical information with the subjective experiences?
Those brain scans include the responses. What do you think causes the person's overt behavioral responses in the first place? Brain activity.

A complete description of how the brain works must necessarily include a complete description of every aspect of subjective experience. The only way a complete description of all of the physical facts could fail to provide this, is if there is something non-physical interacting with the brain.

This follows from the fact that our subjective experiences clearly are causally efficacious. One way or the other, our thoughts are affected by them, and thinking is something which your brain does. If your subjective experiences are not something your brain is doing, then they are something which affects what your brain is doing.

Either way, there are only two options. Either all of the facts are physical facts, or the physical world is not causally closed.
By Death Monkey (Kevin Dolan)
DM wrote: You find the notion of it being possible to explain these things extremely counter-intuitive.

Morrandir wrote: Not exactly. It is counter-intuitive that they could be explained solely through facts about physics. And I find it implausible that we could ever explain everything related to our experiences - but I do not find it counter-intuitive that some parts can be explained through science and some parts can be explained through reference to other experiential factors. For instance Andrew Saunders's explanation of what it is like to fall off an airplane: we can use analogies to other experiences that we assume others have. What makes you think that these similarities to other experiences are not part of the physical facts? Indeed, they must be, since all Andrew was actually doing was verbally expressing to you similarities between his memories of those things. Indeed, what he was explaining was his memory of the experience!

Morrandir wrote: For instance, "that he dumped me was like being hit in the chest with a sledgehammer" is an analogous explanation to someone. It is based on imagination and our ability to empathise - but it is not a physical explanation until we have secured some basic qualia through physics and showed that every analogical explanation is ultimately based on these qualia. It becomes a physical explanation the moment we realize that it is referring entirely to memories of past experiences, which are physical structures in the brain. If there was anything more to the experience than what is remembered, then whatever it is which was missing isn't being explained (or even referenced) by such analogies anyway. Nor is it accessible to our own introspection. Indeed, we could not possibly know about it at all.

Morrandir wrote: Do you agree that if there is such a chasm between explanation of x and experience of x, then it cannot be bridged unless at least some experiences of x can be explained thoroughly? Absolutely. But I do not agree that it is not possible, even in principle, to provide such an explanation. So far the only reasons you have offered to think so, are intuitive ones.

Morrandir wrote: That is, we could explain all the relevant aspects of at least some experiences through physical sciences? If you do, and I think you ought to, then you should I believe agree that either: 1) Physics must be able to account for these "basic experiences" (which it has not done yet) at least in principle. 2) It must be shown that such a chasm does not exist at all. I agree with number 1. I do not see any reason to think that there are any facts about our experiences which science cannot, at least in principle, reveal to us.

Morrandir wrote: On another note, I am not sure if there is very much difference in those approaches. Both will end up in bridging the chasm and thus dealing away with it, but from different aspects I believe. There is no difference. Again, this "explanation in terms of other experiential factors" that refer to, is nothing more than comparisons between different sets of physical brain structures (memories). So it is an explanation in terms of physical facts.

DM wrote: I find the notion that it is not possible to explain them to be both counter-intuitive, and contrary to everything we currently know about how the world works.

Morrandir wrote: How come everything we currently know about how the world works is contrary to this? Because what you are suggesting would require something non-physical to interact with the physical brain. That is the only way that we could possibly know any non-physical facts.

Morrandir wrote: As far as I know, physical sciences has not been able to explain qualia - it has at best managed to secure a foot within the brain so that it is at least plausible to assume that those qualia are nonetheless caused by brain activity. I think it is simply false to say that science has somehow showed it is possible. It has not. What you are probably referring to instead is that because so much of other things has been explained through physical sciences, it is assumable that this can be as well. However, there seems to be a fundamental difference here. What science has been able to explain this far has been questions such as "what is x like", but not "what is it like to be x". That is because asking "what is it like to be x" is not asking for a set of facts about something. It is a trick
of language. It *sounds* like you are asking for some set of facts, but what you are really asking for is to have a specific physical process occur in your brain.

**Morrandir wrote:** So you cannot directly use the success of sciences here. I am not.

**Morrandir wrote:** No more than you could use the success of mathematics in deriving Real numbers from Naturals to argue for its possibility of showing that the laws of physics must be as they are. They are, so to speak, in different categories. But claiming that there are no non-physical influences on the brain is not, and that is exactly what knowing non-physical facts would imply.

**Morrandir wrote:** This of course is, I emphasize, an argument that they cannot be explained. Only that they have not been, and there is a more fundamental problem here. It is not like we have not just built a device good enough to measure these things or worked up a theory. It is deeper than that. How do you know? The simple fact is that we haven't built a device good enough to measure these things, and due to our lack of knowledge about the brain, we don't have a satisfactory theory yet. You have not presented any actual evidence to indicate that a complete understanding of the brain will not also provide an explanation for experiences.

**Morrandir wrote:** IF Mary learns anything new from experiencing (I take the rather problematic "see" and change it here) red, THEN physicalism is false. This is because IF physicalism is correct, THEN there is no way that Mary could learn anything new: she has already learned everything here. This statement is false. Physicalism does not claim that she has learned everything that there is to know about experiencing red. Only that she knows all of the *facts* about experiencing red. What she learns is not knowledge of facts, so physicalism is just fine. I see absolutely no justification for claiming that she would learn any new *facts* about experiencing red.

**DM wrote:** But the physicalists don't say no, nor do they claim that you can "learn an experience through the books".

**Morrandir wrote:** Well, if they do as you say here, then their reduction fails. Reductionist physicalism wants to say that all relevant information is gained through physical facts (if we have them at our disposal). But in this case you depict, that is not true. Wrong. Experiences are not information. They are brain processes. Knowledge of what it is like to experience red is not knowledge of information. It is the memory of having experienced red.

**DM wrote:** They need only point out that what Mary gains is not knowledge of facts.

**Morrandir wrote:** If you mean physical facts, this is true. But she does gain something, and something that contains information. No, I mean facts. What she gains contains information, sure. Information which she already has. What she doesn't have is the *actual memory*. That is *all* that she is lacking. Any facts which she could extract from that memory, she already knows. She doesn't physically possess the memory yet.

**DM wrote:** ...about the world, but rather the memory of having had an experience.

**Morrandir wrote:** Halt now! Really, are you serious? How can I have a memory of having had an experience, if I really did not have an experience? At least that is a false memory, but I think we ought to stick with correct memories. It does seem to me that you cannot have a (correct) memory of an experience if you have not had an experience.

I don't understand this response. I just said that she doesn't have the memory of having had the experience until she actually has it. My point was that this is *all* she gains when she *does* experience it. She does not learn any new facts.

**DM wrote:** You can call this "learning something new" if you want, but doing so does not somehow render physicalism false, because physicalism in no way claims that learning facts can provide you with memories of having had experiences.

**Morrandir wrote:** It either does, or it claims that memories (let us accept your thesis for the sake of
argument) do not have informational value. That is because they deny that any information could be learned after learning all the possible physical facts about the world. They do contain informational value, but they are not just information. The facts which she could extract from her new memory will all be facts which she already knew.

For example, maybe she finds red aesthetically pleasing. She will have known, before ever seeing it, that she would. Maybe she finds the experience of seeing red to be somehow qualitatively similar to tasting something hot. Again, she will have known, before ever seeing it, that she would. All facts about the experience will already be known to her. All she lacks is the memory itself.

DM wrote: No. The experience is not left out of the explanation. On the contrary, the experience is completely explained by the explanation.

Morrandir wrote: The tautological experience is completely explained by the complete explanation is most definitely true, but the real question is: is any information left out?
Yes, that is the question. And the Mary argument in no way indicates that there is.

Morrandir wrote: Consider it like this. You seem to be hung on the idea that non-physicalists would demand that physical explanations would cause things to occur. This is quite evidently false: explaining x does not cause x to occur. That matter can be settled and agreed upon. But what if x occurs? This is where the physicalist differs from the non-physicalists. The physicalist says that "it does not matter whether x occurs or not after its complete explanation, because no information will be gained - its occurrence is not relevant to anything". The non-physicalist says that "how can it be? If this was so, then even in theory someone in possession of all physical facts could not ever learn anything new from experience. But if he knows every physical fact about x, it seems that he would still gain information upon experiencing x: what is it like to experience x?"
But he doesn't. What he gains is not information. That is where we seem to disagree. I do not see any reason to believe that Mary would gain any new information. And my alternative thought experiment illustrates quite clearly why.

Again, consider the question: "If I modify Mary's brain to the state that it would be if she had experienced seeing red, would she then know what it is like to experience red?"

If you answer "yes" to this, then you must acknowledge that, whatever Mary gains when she sees red in the ordinary version, it can't be facts.

Why? Because any facts which she could gain by having the experience, must be provided to her by the surgical procedure.

So, how do you answer the above question? Do you think Mary would learn anything new in my version of the thought experiment? If not, then you must acknowledge that in your version, she learns no new facts.

DM wrote: It is difficult to say for sure, because the meanings you provide for those phrases is so vaguely defined that it seems to be able to refer to an entire spectrum of concepts.

Morrandir wrote: Well, again, if you are not a zombie, I cannot see why it would be so.
No, if I were a zombie, then my problem would be not having any idea what the definitions you gave could refer to at all. This is not my problem. My problem is that I can think of a wide range of related concepts which your definitions could refer to. They are not specific enough.

Morrandir wrote: You do know that there is a difference between person x saying to you that "I am sad" and between you yourself being sad. Also, a difference between x explaining what it is like for him to be sad, and with you being sad and experiencing what it is like to be sad (at least in that particular case of sadness). This difference, whatever is included, is to be explained if all relevant factors are to be explained. I do not need to point out what exact parts are problematic, because they all are insofar as they cannot be explained.
Well, that remains to be demonstrated. Please show your evidence that any of them cannot be explained.
Something more than arguments from intuition, please.

**DM wrote:** Because non-physicalists seem to be incapable of coherently explaining what they think the problem is.

**Morrandir wrote:** What is the problem with my explanation? Is it so that you do not really see a difference in the cases where someone else is sad and you are sad? I think that is a proof of p-zombies, if this is so.

I do not see how this statement even relates to what I said. p-zombies are not even relevant here. Even if Mary were a p-zombie, she would still learn something new when she first sees red. She would still acquire the new memory of having seen red.

Are you saying that Mary acquires some information with that new memory which p-Mary does not? If so, what? What does Mary know that p-Mary does not? How could she know anything that p-Mary doesn't? Wouldn't that difference in knowledge result in different behavior? Doesn't that contradict the very definition of a p-zombie?

**DM wrote:** What exactly are you asking for a description of? And what do you expect this explanation to provide Mary with?

**Morrandir wrote:** An explanation that would make it so that Mary would not gasp in astonishment IF she ever saw red. An explanation that would make a blind person understand what it would be for him to experience red. An explanation that would make me understand how it would feel to be a bat.

In other words, you want an explanation which can somehow magically cause your brain structure to change. Why do you think that physicalism implies that it should be possible for an explanation to do this?

**Morrandir wrote:** Simply: an explanation that would make it so that nothing new would be learned, no new information gained, in the case of experience.

Too bad. That is physically impossible. The human brain doesn't work that way.

**Morrandir wrote:** Of course, nothing like this is required as of yet, but at least an analysis of how it would be in theory possible to explain this. Or, then, an agreement that physics cannot do this now, nor is it possible to see how it could, and an addition that regardless, physics should remain optimistic in this. After all, Mary is not a refutation, it is a challenge. It is the physicalists that step back from this challenge, perhaps too afraid that they can never fulfil it (Nagel is a physicalist of the sort that berates his colleagues for stepping back from this overpowering problem and thus making themselves look ridiculous), or perhaps because, like you, they do not see the problem. That should not, however, mean that there is no problem. It may be my lack of skills in explaining, or your lack of comprehension as well.

You are attacking a strawman version of physicalism which claims that simply being told what your brain structure would be if you experienced something can modify your brain structure to that state. No version of physicalism makes such a ridiculous claim.

**DM wrote:** How could she know? How can you say that? Does a blind person know what it is to see colours just by reading books and listening to others explaining it?

**Morrandir wrote:** If you accept the premise of the thought experiment, and assume that the blind person has been provided with a complete physical explanation of how the brain works, and has the cognitive capability of understanding it all, then sure.

Really? You do think so? That the blind person would not miss anything that we non-blind people have? With all seriousness, are you serious?

All he would miss is the memory itself. He would know all of the information. Yes, I am serious. If this sounds bizarre, consider that it is no more bizarre than having a blind man capable of knowing several terabytes of information (at least), and able to process that information faster than all of the super-computers in the world put together.

Start with a ridiculous premise, and get a ridiculous result. Go figure.
DM wrote: Perhaps what makes this scenario seem to be impossible is not that physicalism is wrong, but rather that the premises of the thought experiment are impossible to begin with?

Morrandir wrote: Again, seemingness is not actualness. (I am not sure if there are such words in English, but what the heck). I agree with you that this thought experiment does not refute the physicalist.

But the premises impossible? Well, they are hypothetical, of course, but so is the stance of physicalism (after all, a physicalist is not claiming that we already know all the facts, at least if he is sane). But I do not see them as overly problematic. Suppose a blind person and a physics book (written for blind people) including all the facts physics search for. A book with which all physical studies would end (of course, applying of physics would not). This is enough, I think. We only ask: does the blind person now have all the relevant information associated with experiencing redness?

Nope. The book does. The blind person would die of old age before getting through even a small fraction of it, and even then would have forgotten most of what he learned.

So yes, the premises are impossible. That is why my version of the thought experiment is better. A computer capable of storing and processing all of the information is not impossible. And it can only surgically provide the blind man with the knowledge of what it is like to see red, if it possesses all of the relevant facts.

DM wrote: Which is utterly irrelevent. They don't know, nor do they have a complete description of it. That does not mean that it can't be explained. Just that they do not know the explanation.

Morrandir wrote: The idea is that I as a man could never know what it is like. Not even if my amazing hypothetical computer surgically altered your brain to give you the memory of having given birth? Or do you think that this is impossible?

DM wrote: So you are talking about the experience itself, right? If so, then what is "knowing what it is like to see red", if not possessing the memory of having had that experience?

Morrandir wrote: You tell me. But in any case, that is not really the issue: the issue is whether this possession of the memory as you call it adds information. That is, if there is any difference (information-wise) between mr. X and mr. Y who both know all there is in principle to know about everything physics-wise, where mr. X has experienced red and mr. Y happens to be blind, for his misfortune.

I see no reason to think that there would be, nor do I see how there possibly could be, without some sort of substance dualism at work.

DM wrote: Will she learn any new facts about seeing red? No, she will not. Will she learn something new in the sense of gaining the memory of having had an experience she never had before? Yes, she will. The latter does not in any way contradict physicalism.

Morrandir wrote: Oh, but it does! It does contradict reductionist physicalism. She learns something information-wise (but I agree that in the sense you speak of it here, she does not learn a "fact"). She gains information.

What information does she gain? Where is it stored? How does she think about it?

Morrandir wrote: It may be that Mary thought experiment uses the word "know" in a different sense (not all agree that subjective mental states cannot be known - in fact, it seems that a reductionist physicalist should even disagree that there are such subjective mental states that are inaccessible through any means). But whether the Mary thought experiment is well formed is not really the issue, I assume, but the question it poses. Call it information then. I remember it being about "learning something new", so it does not really even use the word "know" in any relevant sense (it uses it in the case of physical facts, but we both agree that those can be known).

Well, it states that she knows all of the physical facts, and then asks if she can learn anything new. If what she learns isn't facts, then it is a total non-starter, since it doesn't claim that she has learned everything that can be learned, only that she knows all of the facts.

It is well understood that the brain can learn by other means than simply being told facts, and is also well understood that some things cannot be learned by simply being told facts. Again, this has to do with how
the brain works, and specifically how it learns. It has nothing to do with physicalism.

**DM wrote:** But this certainly in no way suggests that such an explanation is not possible.  
**Morrandir wrote:** No, but it does suggest that it would be extremely hard. And it challenges anyone who thinks such an explanation can be given to at least explain how that could be in principle done. (We can study quarks if we have sharp enough measurement devices etc, so that can be explained in principle - even knowledge of what lies within a black hole can be in theory explained through explaining the physics involved in producing such an entity, even if we cannot ever see inside them (if we can't)).  
Likewise for experiences. We need the ability to accurately measure what is happening in the brain, and the computational ability to process that information. From this, we should be able to provide a complete physical description of what we think of as our experiences.

**DM wrote:** 1) If I surgically alter Mary's brain to be the way it would be if she had seen red before, would she then know what it is like to see red?  
**Morrandir wrote:** I am not sure. I fail to see the relevance.  
The relevance is that if you answer "yes", then that means that whatever information you believe Mary gains in the classical version of the experiment, must be provided by the surgical procedure. But of course, it cannot provide any information that Mary in the classical experiment doesn't already know.

**Morrandir wrote:** I would think that my memory in the strict sense of seeing red is not the same as experiencing the red now.  
Irrelevant. I am not asking whether it would cause her to have the experience, but rather whether she would know what the experience is like or not.

**Morrandir wrote:** But in the wide sense as you seem to use it, then I would say that if we can cause Mary to experience red (you are after all saying that experiencing red is the same as remembering that, so we can use them interchangibly in your situation) then Mary would know what it is like to experience red, yes.  
Nothing in the present discussion seems to hang on this: we can cause Mary to see red in less drastic means by showing her a red mailbox, if we so desire.  
I think you missed the point. The surgical procedure cannot possibly provide her with information that isn't in the book given to Mary in your thought experiment.

**DM wrote:** 2) If I surgically alter your brain to be the way it would be if you had never seen red before, would you still know what it is like to see red?  
**Morrandir wrote:** If you erase all the information I have had from experiencing red, then surely I do not know what it is like. I have, quite simply, forgot. But I do not see the relevance of this either. If you erase everything in my brain that allows me to know that the Earth is round, I would not know that. A more interesting question would be whether I could re-capture either of these pieces of knowledge.  
Again, you are missing the point. I can only surgically remove information which is physically encoded in your brain. Such information must necessarily be known by Mary in the classical experiment. If there is information which she would gain when she actually experiences red, then that information is not physically encoded in the brain, and the surgical procedure won't remove it.

**DM wrote:** I think the answer to these two questions are "Yes" and "No", respectively. Do you agree?  
**Morrandir wrote:** I agree.  
Then Mary can't gain any new information when she experiences red in the classical experiment. If she did, then that information would either have to be encoded in her brain (which contradicts the premise that she already knew all the physical facts), or it is not encoded in her brain, in which case a surgical procedure cannot remove it.

**DM wrote:** If not, why? What is Mary missing in the first case? What do you still have in the second case that somebody who has never seen red would not have?  
**Morrandir wrote:** Well, it would be hypothetical, so I will not go there.  
The whole Mary thought experiment is hypothetical!!!
**Morrandir wrote:** GAH! How rude of you! That is NOT Mary there, but an abomination, a perversion. You have ruined beautiful Mary, bringing this horrible creature in the stead with the belief that we would not recognize the atrocity!

"What is he foaming about?" you may ask. Well, really, just feeling like dramatic. The point is: in premise one you speak of facts as physical facts. Then in premise three you speak of "learning something new". Then in the conclusion this "learning something new" deviously transmutates into "learning a new fact", which is of course through premise one the same as "learning a new physical fact", which is totally against the idea of Mary. What Mary is trying to show is that that-which-you-learn is NOT a physical fact. Either it is trying to show that there are facts that are not physical, or that there is relevant information that is not coded as physical facts. Or, in fact, pun intended, it does not show those.

That is exactly the point I was making.

Only by *deviously transmuting* "leaning something new" into "learning a new fact", do we arrive at a contradiction, thus allowing for the conclusion that premise 1 is false. The point is that if this new "something" she learns is not a fact, then the conclusion does not follow.

**Morrandir wrote:** but only sets forth that as a challenge or as a problem. (But your formulation here is an argument).

No, no, mr. Death Monkey. Even with all those infernal and nightmarish red glowing eyes of yours, this is intolerable!

Note that I said "the Mary argument", not "the Mary thought experiment". I was referring to the argument, which has been put forth in this thread (as well as many other places), that if Mary *does* learn something new, then physicalism is false. I am quite aware that the thought experiment itself is not an argument.

**Morrandir wrote:** Mary, as it should be:

1. Mary knows all physical facts. (Mutatis mutandis the second premise)
2. Upon seeing the colour for the first time, Mary learns something new.
3. C: Upon seeing the colour for the first time, Mary learns something new that either is not a fact, but includes information, or is a non-physical fact.

This is of course Mary as an argument against physicalist. Such an argument can be created through Mary, but is not the point of Mary. Nonetheless, as an argument it should be like this.

This is nothing more than a rephrasing of the version I gave. When you make the leap from "Mary learns something new" to "Mary learns something new that is a non-physical fact", you are *deviously transmuting* "leaning something new" into "learning a new fact". As for "is not a fact, but includes information", that is just nonsense. If what she learns includes information, then that information constitutes facts.

By Death Monkey (Kevin Dolan)

**Morrandir wrote:** Physicalism may be right, but before that they must be able to explain this apparent gap between subjectivity and objectivity. And indeed, if a physicalist says "there is no such gap", then he of course solves the problem - provided that he can prove that.

I would say that if it cannot be proven that there is such a gap, then there is no "problem" for us to be solving. Given that the belief that this gap exists is based entirely on intuition, I see no reason assume that the gap is anything more than a product of our own intuitive preconceptions. If and when it is shown to be a real problem, then we should worry about it. Until then, we have plenty of real problems to worry about instead.

**Morrandir wrote:** I think we all agree that the problem is the line between subjectivity and objectivity. I think everyone is, within this distinction, able to understand that science's objective triumphs cannot be analogized to work to solve this problem. There must be some other way.

I do not agree with this. On the contrary, to claim that subjective experiences are not something which
objectively exist, is to presume dualism.

I see no reason to make such a presumption.

**Morrandir wrote:** In this discussion it seems we have reached something interesting, after a lot of not-so-interesting debate. That is the informational aspect of experience. The physicalist as you have portrayed him, DM, claims first that there are only physical facts. He also denies, through this, that there is any facts to be learned in experiencing something - all can be explained.

Not exactly. Clearly we do learn physical facts by experiencing things. After all, having facts explained to us is just another experience. The point I made was that if we assume (impossible as it is) that somebody already knows all the physical facts, then the experience will not provide him with any new physical facts. It will provide physical facts, but they are facts he already knows.

Furthermore, I submit that even if there is such a thing as a non-physical fact, there is no way that our experiences could provide them, because there is no way for us to know those facts at all. This follows directly from the fact that remembering, thinking, and thus knowing, are all things which our brains do.

**Morrandir wrote:** So how to solve the problem? I see only this way out, and I think that our discussion and our lines of thoughts come down to this: you should prove that there can be no non-physical facts - and I of course as the devil's advocate here should do my utmost to show that you are not doing well enough.

Do you agree?

No. Why should the burden of proof be on me? After all, it is fundamentally impossible to prove that there are no non-physical facts. In any event, that is not even what I am claiming.

If you wish to claim that there not only are non-physical facts, but more to the point, that we actually know some of them, then you should explain how you think such a thing is even possible? How could we possibly know a non-physical fact in the first place?

Likewise, since I claim that we do not know any non-physical facts, what I need to be doing is not to prove that non-physical facts do not exist (again, impossible), but instead provide a compelling argument for why I think such facts would necessarily be unknowable. I have done exactly that (at least, I think it is a compelling argument).

**DM wrote:** What makes you think that these similarities to other experiences are not part of the physical facts? Indeed, they must be, since all Andrew was actually doing was verbally expressing to you similarities between his memories of those things. Indeed, what he was explaining was his memory of the experience!

**Morrandir wrote:** The point I tried to make was this: to show that you can give a physical account of any experience (of its relevant parts at least), you must give that purely on the physical level. Andrew used other experiences in his analogies. This will not do, because it assumes that the other experiences are physical, but that begs the question.

It is not begging the question at all. Again, even if you assume that there is some non-physical aspect to his experiences, Andrew is not actually making reference to any of them in his description. He is only describing his memories, which are physical. If there were any non-physical aspects to his experiences, they were not stored in his memory, and are not being referenced in his description.

**DM wrote:** It becomes a physical explanation the moment we realize that it is referring entirely to memories of past experiences, which are physical structures in the brain.

**Morrandir wrote:** I believe I said in the earlier post that this is irrelevant. I gave these reasons for my claim: it does not matter whether the "what it is like to"-part is about the experience-as-a-brain-state or about the memory-as-a-brain-state. We can change, if you like, the idea to: what is it like to remember the experience of red. It makes no difference, because we are not trying to say what the physical equivalent of an experience is, but whether this physical equivalent is all there is, information-wise, to the experience. Therefore I suggest that we drop the matter of memory, because it does not change the real problem and our disagreement on it only serves to confuse the discussion. Do you agree to this?
No, I do not. My entire argument is based on the fact that it is not irrelevant. You seem to want to claim that there is more to experiences than just brain processes. Maybe there is. But my point is that if there is, then it is impossible for you to know about it.

In order for you to know non-physical information, you would need some non-physical mechanism for doing so. You would need some non-physical way to store and process that information. In other words, dualism.

**Morrandir wrote:** I would say to the physicalist: why don't we just wait and see? He seems to think that this is unnecessary, because he already knows what will happen. I and many others simply find their explanations lacking.

Why not take the same approach with all phenomena which are not yet completely understood? Every gap in our knowledge is a potential hiding spot for supernaturalism. But the fact remains that in order for there to be non-physical aspects of our experiences which we are actually capable of knowing about, there must be some sort of interaction between our brains, and something non-physical. There is considerable evidence that no such interactions exist. That is my reason for being confident that there is nothing non-physical involved.

**DM wrote:** I agree with number 1. I do not see any reason to think that there are any facts about our experiences which science cannot, at least in principle, reveal to us.

**Morrandir wrote:** Your faith is remarkable.

It is not faith. Not any more than believing that the laws of physics will be the same tomorrow as they are today. In both cases, it is nothing more than the assumption of naturalism.

**Morrandir wrote:** Yet for one such as I that lacks this faith, is there any other way you could reassure me?

You could start by asking yourself why you have so much faith in naturalism when it comes to other matters, but not this.

**Morrandir wrote:** I think that science has boasted that its difference to religion is that it can give compelling reasons, not just demand faith. I see a lot of reasons to doubt the physicalist.

I do not see any. On the contrary, I see very compelling reasons to believe that we are not aware of any non-physical things.

**DM wrote:** That is because asking "what is it like to be x" is not asking for a set of facts about something. It is a trick of language. It sounds like you are asking for some set of facts, but what you are really asking for is to have a specific physical process occur in your brain.

**Morrandir wrote:** Explain the trick of language to me. As far as I can see, it is not a trick of language. Let me claim the following: when I say "what it is like to experience green is different from what it is like to experience red", I do state a fact.

Yes, in this case you are stating a fact. However, I should note that the fact which you are stating is one about your physical memories, which you assert has no relevance to "what the experience is like".

**Morrandir wrote:** You and I both know it, because you surely agree that it is different how it is like to experience sadness or remorse. Being happy is not like being hungry. These are all facts. Yet here you go, claiming that "what it is like to be x" (or better, "what it is like to experience x") is not about a set of facts. You are using the expression in different contexts. I already addressed this issue earlier in this thread. If by "what the experience is like" you mean the relationships between it and other experiences, then you are talking about physical facts. Furthermore, you are talking about facts which can be learned without ever having had the experiences in question. In particular, you are talking about facts which Mary would know from reading her books.

If, on the other hand, by "what the experience is like" you are talking about what it is like to actually have the experience, then you are actually talking about an experience, not a set of facts.

These are two completely different usages of the phrase. That is what I mean when I say it is a trick of
DM wrote: But claiming that there are no non-physical influences on the brain is not, and that is exactly what knowing non-physical facts would imply.

Morrandir wrote: I am not, have not, and will not argue here for mental causation. What I am saying is completely compatible with pretty much anything, starting from epiphenomenalism. Perhaps the "what is it like"-part is causally idle, but that does not make it any less real. It just makes it escape the means of physics. I am not arguing for epiphenomenalism either, however, but merely wanting an explanation how the physicalist would even in principle explain the "what is it like"-part.

Well, I look at it this way. The following three possibilities:

1) Nothing more than brain processes is involved.
2) Epiphenomenalism (something else is involved, but it does not effect the brain).
3) Interactive dualism (something else is involved, and it interacts with the brain).

These possibilities are exhaustive. Either there is something more to it than brain processes, or there is not. And if there is, then either it does affect the brain, or it does not.

That said, epiphenomenalism is incoherent, because if does not affect the brain, then we don't know about it. And if we don't know about it, then by definition it isn't an aspect of our experiences (plus we have no reason to believe it exists at all).

Interactive dualism is incompatible with the available evidence.

So that pretty much covers it. My belief that it can be explained is based on the above. I do not claim to have the explanation. Scientists are working on it. What I do claim is that the above constitutes a very good reason to believe that it can be explained.

Morrandir wrote: I am quite willing to say: I do not know what the consciousness is and I cannot explain it. It is the physicalist that says that he has this knowledge, and at first I was intrigued, now I feel a bit betrayed.

The physicalist does not claim to have this knowledge. The physicalist only claims that there is substantial evidence to indicate that there is nothing more to it than brain processes.

DM wrote: This statement is false. Physicalism does not claim that she has learned everything that there is to know about experiencing red. Only that she knows all of the facts about experiencing red.

Morrandir wrote: So there is to know something else than facts?

Again, that depends on how you define "know". It is certainly not knowledge in the epistemological sense of a justified belief.

I could say that I know how to walk, but when I say this, I am referring to far more than knowledge of facts. Far more than beliefs (justified or not). I am also talking about having learned things like balance and motor-skills. Motor-skills are not knowledge in the epistemological sense, but we are still talking about them when we say that we know how to walk.

Morrandir wrote: Some non-physical truth-makers, then? Some non-physical information?

No. That is just the point. It is not information at all, physical or otherwise.

Morrandir wrote: What is there for her to know, if not facts that are physical? It seems that here you succumb to the fall of physicalism, but I do not think you do. So what is going on?

Again, if by knowledge you mean "justified belief", then it isn't knowledge. What it is, is neural structure. The term "learning" is used to refer to all changes in brain structure due to sensory input and thought. Clearly not all of this constitutes "justified beliefs".

So again, it is a question of semantics. What do you mean by "know"?
DM wrote: What she learns is not knowledge of facts, so physicalism is just fine. I see absolutely no justification for claiming that she would learn any new facts about experiencing red.

Morrandir wrote: This is based on the yet-unsupported claim that all facts are physical. That begs the question against Mary, whose purpose is to show that not all facts are physical. It is not based on that claim. I am not saying that since she can’t learn any new physical facts, what she learns cannot be facts. What I am saying is that what she learns simply isn’t facts at all.

Imagine, for example, that epiphenomenalism is correct, and there are non-physical facts about the experience. Now imagine doing the experiment twice. Once with Mary, and once with a p-zombie.

Would the outcome be any different? I don’t see how it could be. If you claim that Mary learns any new facts, then the zombie must learn them too. Otherwise Mary would possess knowledge the zombie doesn’t. Ask them both if they learned any new facts. If Mary says “yes”, then the zombie must as well. But clearly the zombie can only learn physical facts.

They will both gain the memory of seeing red. They will both extract facts from this experience, and recognize that they are facts which they already know. If there are any non-physical facts about the experience, then Mary cannot know them without possessing different brain structures than those of the zombie.

DM wrote: No, I mean facts.

Morrandir wrote: Questionbegging. By "fact" you mean "physical fact", because that is how you have defined it: there are no non-physical facts. But that begs the question against Mary. No, I mean facts, just like I said. I am perfectly willing to accept the possibility of non-physical facts. My point is that even if such facts exist, Mary does not learn any when she sees red. She can’t learn them. Not without some sort of interactive dualism.

DM wrote: I don’t understand this response. I just said that she doesn’t have the memory of having had the experience until she actually has it.

Morrandir wrote: I do not understand your fixation with having a memory. We are not trying to discern whether Mary has an experience, or a memory of such, but whether IF she would, THEN would she possess some information she would not otherwise possess.

Exactly. That is my whole point. When the physicalist agrees that she would learn something, he is not saying that she would gain information she does not already have. She won’t. He is just saying that she will gain a memory she didn’t already have.

As you said, the gaining of a new memory is not relevant to thought experiment. Again, that is the whole point. She does not learn any new facts, physical or otherwise.

DM wrote: They do contain informational value, but they are not just information. The facts which she could extract from her new memory will all be facts which she already knew.

Morrandir wrote: Mmm.. First, I am not saying experiencing something is just information, if that is what you suggest. But merely that they contain information. But I do not understand this bit anyhow. How can the facts she could extract from her new memory be something she already knew? I don't see the problem. This happens all the time. For example, I can read in a book that Paris is the capital of France. Somebody can tell me that it is. I can see it mentioned in a movie. Each time, I have new experiences which contain information I already know.

Indeed, for just about any experience you have, at least some of the information contained in the experience is information you already know. If it weren’t, every experience would come as a total surprise to you.

And that is really the issue with the Mary experiment. Does she gain any new information. There is no question that she gains information from the experience. The only question is whether or not she already has it all.
**Morrandir wrote:** That is because what we are interested is not whether Mary learns new facts after she has learned all the facts (most definitely she does not), but whether Mary learns something or gains information. If she does, then by your own words, it must be non-physical and physicalism falls. So let us agree: no new facts (which to you are always physical). But if new information, then physicalism bites the dust.

Yes, on this we are in agreement. I do not think she will gain any new information. I do not think that she possibly *could* gain new information.

**DM wrote:** For example, maybe she finds red aesthetically pleasing. She will have known, before ever seeing it, that she would. Maybe she finds the experience of seeing red to be somehow qualitatively similar to tasting something hot. Again, she will have known, before ever seeing it, that she would. All facts about the experience will already be known to her. All she lacks is the memory itself.

**Morrandir wrote:** You need to give some backup here. Maybe, yes, but apart from outrageous speculation, what is there to be concerned about?

Well, in the case of the specific examples I gave, it is quite clear that she will have this information, since they are quite clearly physical facts. Again, this follows from the fact that when she *does* see red, this information will be physically stored in her brain. Since she knows all the physical facts, she knows that this information will be stored in her brain.

As to the generalization to all facts about the experience being known to her, this follows from the fact that the only mechanism she has for knowing facts is to have them be stored in her brain.

**DM wrote:** Not even if my amazing hypothetical computer surgically altered your brain to give you the memory of having given birth? Or do you think that this is impossible?

**Morrandir wrote:** I do not care if it is factually impossible. That is not the issue. So let us assume that it was factually possible for a supercomputer to do that. I guess that if it can cause me to have an experience, then if the experience is "right", then I do experience what it is to experience that. The relevance of this seems to me quite thin, because it seems to have the same argumentative value as "if I brought in front of you a red disc and you saw it, would you then know what it is like to experience red". Sure. But it doesn't give you the experience of seeing red. It just modifies your brain to the state it would be if you had seen red in the past.

Again, as you said, the issue is about information. Can simply modifying your brain provide you with all of the information? If it can, then clearly the information is all physical. If it cannot, then we have a problem.

**DM wrote:** What information does she gain? Where is it stored? How does she think about it?

**Morrandir wrote:** The information of "what it is like to...". It is probably stored as a memory which is accessed so that I again experience the same thing (albeit with less vividness). I do not know how we think about our memories, sorry. I do that quite naturally. What is it like to experience the memory of experiencing red suffices for me quite as well.

But don't you see the problem here? Memories are stored as physical brain structures. Any information stored there *must* be physical. Indeed, it must be included in the physical facts Mary already knows, because she already knows what that brain state will be.

It makes absolutely no sense to say that she stores non-physical information in her brain. The fact that it is stored in the brain *implies* that it is physical information. If her big book of physical facts did not include this information, then that would mean that what her brain state would be after she sees red, is not stored in the book. But that is a contradiction, since that would mean that the book does not include all of the physical facts.

By Death Monkey (Kevin Dolan)

**DM wrote:** Furthermore, I submit that even if there is such a thing as a non-physical fact, there is no way that our experiences could provide them, because there is no way for us to know those facts at all. This
follows directly from the fact that remembering, thinking, and thus knowing, are all things which our brains do.

Analytic wrote: Then you've just proved, incidentally, that mathematical facts, be they about infinities, are physical facts because the brains of mathematicians are physical systems and mathematicians do remember, think, and know mathematical objects and facts.

I was clearly talking about facts about the world, not abstract facts.

Analytic wrote: In this way one could 'prove' about anything that it is physical because every believed, known or remembered fact is a fact for a brain which does the believing, knowing or remembering; brains are physical; therefore: every believed, known or remembered fact itself is physical. (This reminds me of a strange kind of 'physical solipsism' because of the first premise.) The physical brain-state in which one is when one is thinking, say, that the power set of naturals is uncountable must be a finite physical fact since the brain itself is finite; nevertheless, uncountable cardinalities are not finite. In other words, the brain can represent facts in a finite way through a particular brain-state without those facts themselves having to be about finite, that is, physical entities. Though this is not the Mary case, it at least makes room for non-physical facts that are represented in finite brains. The brain-state of a mathematician is about a non-physical fact but it is not identical to it.

Physical information in the brain can represent abstract facts, sure. That has nothing to do with my point, since such facts are not facts about the world, which is what I was talking about. [Ed. consider the physical brain encoding of the concept of a unicorn for example]

If you read through my entire argument, you will see that I am not claiming that non-physical facts cannot be represented physically in the brain. On the contrary, if interactive dualism is true, this would be very possible.

My point was one against epiphenomenalism. Specifically the idea of there being non-physical properties of consciousness which do not interact in any way with the physical world (and thus the brain). In such a case there is no way that any information about these properties could ever get into our brains in the first place.

There is no problem with abstract facts being represented in the brain, because they are not facts about anything real to begin with. They are just models which we invent. But if there are non-physical properties out there, and they do not interact with anything physical, then there is no way for information about them to be encoded in our brains in the first place.

By Death Monkey (Kevin Dolan)

Mikkel,

Exactly. Again, that is the whole point of the Mary thought experiment. The entire question is whether or not there are knowable non-physical facts about the world.

Abstract facts do not enter into it, because they are just interpretations of physical information in the brain as facts about something which isn't actually real.

Similarly, when people claim to know non-physical facts about the world, I would claim that they are really just interpreting physical information in their brains as facts about something which isn't actually real. They have beliefs about non-physical properties of the world, but these beliefs are not knowledge because they can not be justified.

The point of my argument was to show why they can not be justified. If there is no interactions between these non-physical properties and your brain, then there is no way for these properties to influence either the information encoded in your brain, or the way your brain interprets that information. This means that even if those properties were completely different, or non-existent, that your beliefs about them would be exactly the same.
There is simply no logical relationship between whether those beliefs are true, and whether or not you believe them. This is pretty much the definition of what it means for a belief to unjustified.
By Death Monkey (Kevin Dolan)

DM wrote: The entire question is whether or not there are knowable non-physical facts about the world.
Mikkel wrote: That is not the same as all facts are physical facts.
No, it is not. It allows for there to be facts which are not facts about the world at all (such as abstract facts). It also allows for there to be unknowable facts about the world which are not physical facts.

DM wrote: Abstract facts do not enter into it, because they are just interpretations of physical information in the brain as facts about something which isn't actually real.
Mikkel wrote: Now I really don't get it?!? Facts about something which isn't actually real, how can there be facts about something which isn't actually real, when all facts are physical facts. Abstract facts are also in the set of all facts are physical facts, right?!? That is still your claim, right?!? All facts are physical facts!!!
Wrong. I do not claim that facts which are not facts about the world, are physical facts. All physical facts are necessarily facts about the world. Abstract facts are not facts about the world, and thus not physical facts.

DM wrote: The entire question is whether or not there are knowable non-physical facts about the world.
space1 wrote: Well, according to you, the world consists of physical facts, so the conclusion naturally follows.
What do you mean "according to me"? I have made no such claim.

space1 wrote: However, I don't believe anybody else has spoken of non-physical facts. At least in response to my own remarks, it seems like a strawman. This is not the entire question.
Well, since I was responding to Mikkel, and not you, I don't see your point.

DM wrote: Abstract facts do not enter into it, because they are just interpretations of physical information in the brain as facts about something which isn't actually real.
space1 wrote: So, abstract facts aren't facts because they're just interpreted as facts when they're not really facts?
Or, when you say "they are just interpretations of physical information in the brain as facts" are you suggesting an homunculus which interprets the brain's physical information?
None of the above.

What I meant is exactly what I said. Abstract facts have no relevance to the argument I presented, because my argument was about facts about the world, and abstract facts are not facts about the world.

DM wrote: They have beliefs about non-physical properties of the world, but these beliefs are not knowledge because they can not be justified.
I know that Superman can fly and I'm sure this belief is justified. It's not a physical fact, of course. It's not a fact about the world either, and thus irrelevant, since I never said that abstract facts cannot be justified.

DM wrote: Again, this follows from the fact that when she does see red, this information will be physically stored in her brain. Since she knows all the physical facts, she knows that this information will be stored in her brain.
space1 wrote: But will she know what the experience itself is like?
I have already answered that question multiple times in this thread.

**spacer1 wrote:** Your position is that the experience is just a memory which is encoded in physical matter. No, that is not my position.

**spacer1 wrote:** The learning of a fact is also just gaining a memory which is encoded in physical matter. The learning of fictional characters is just gaining a memory. Saying that knowledge can be fully ontologically accounted for physically says nothing about the epistemological aspect of knowledge, which is the entire question of the Mary example. I have no idea what you are talking about here.

**Analytic wrote:** DM seems to say that real i.e. non-abstract facts are those that have causal power. The facts of mathematics do not have causal power. Therefore, the facts of mathematics are not real facts (but part of the model humans make). I'm not saying I agree with this; I'm saying this is how DM's argument seems to run.

Not exactly. I don’t even really like the idea of ”real” vs ”non-real”. Too much metaphysical baggage there. I would say that there are facts about the world, and abstract facts. The difference is that facts about the world are facts whether anybody knows them or not, and abstract facts are facts about imaginary systems which people have made up.

It is not necessary that all facts about the world have causal power. But any which do not, are unknowable. Abstract facts are knowable because we made them up to begin with. We define them to be true, and that is our justification for believing that they are true. Facts about the world cannot simply be defined to be true. In order to justify beliefs about them, we must have access to information about them. This requires that whatever properties the facts are about, have causal power.

Under interactive dualism, non-physical properties of the world can have causal power, and facts about them could thus be knowable. Under physicalism, only physical properties of the world have causal power, and thus any non-physical properties which may or may not exist, are unknowable. Some physicalists would go on to claim that no such properties exist at all. Others would say that they might exist, but since they are unknowable it is pointless to include them in any models. Still others (including myself) would argue that it is actually meaningless to say that such properties do, or do not, exist.

By Death Monkey (Kevin Dolan)