

What can a brain really do?

Mind-body problem either undecidable or materialism is false.

A mathematical experiential intuition to a possible refutation of materialism

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Gödel proved that in formal logical systems there are interesting questions that cannot be answered within a given system which are then undecidable. As natural sciences, especially physics use much mathematics and logic it is conceivable that there could be theoretically undecidable problems in science. Normally in empirical science questions can often be answered empirically as e.g. when observation showed that Einstein's theory of relativity gave accurate predictions where Newton's classical physics did not.

But the mind-body problem seems not to be empirically answerable because the empirical content of existing mind-body "theories" is very lean as no "theory" seemingly can predict what experiences are possible and which are not.

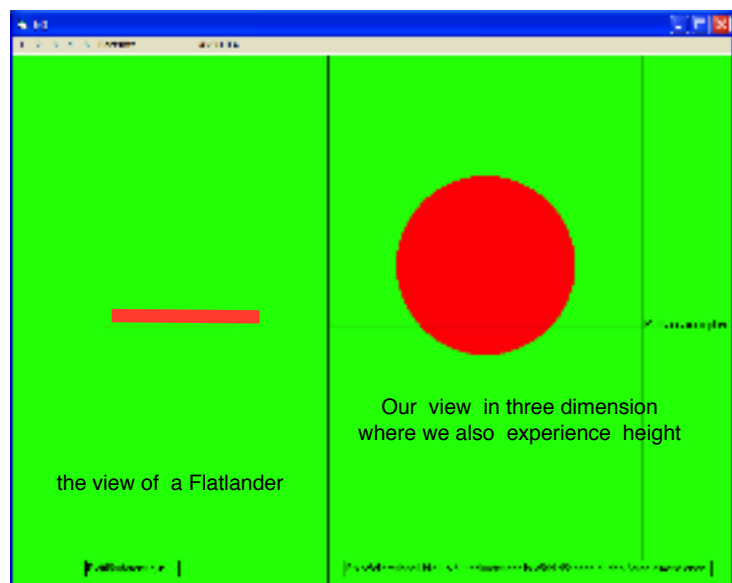
Non-materialistic views on the mind-body-problem cannot be falsified by empirical data and are therefore unscientific in the meaning of Popper. But the materialistic views are equally bad in this respect, as there seems not to exist any empirical phenomenon that can be observed in ordinary life, before death, which must be accepted as a falsification of the materialistic view. A model to illustrate this is the "experiences of a flatlander" for whom it cannot be empirically decided within

flatland science if the phenomena they experiences exist only in two dimensions or are projections of higher dimensions. Flatlanders see a point coming from nowhere and growing to a line and then contracts and vanish even if in reality is a disk passing Flatland thus undecidable within Flatland. Even if a Flatlander have had a 3D vision and could have our experience of the phenomena in three dimensions and thus know the existence of three dimensions he cannot prove it to the still flat Flatlander. But if Flatlanders

could have our experience of the phenomena in three dimensions the question could be decided experientially. .

By analogy if and when we experience the life after death this will be a falsification of materialism but falsifiability and Popperian scientificity must be defined in the life before death.

But could not good evidence for parapsychological phenomena be a falsification? No because every experience which is reported in this life uses the brain and could by materialist as they always do, be interpreted as "it was strange it must be something in the brain". But this



fundamental limitation depends on that parapsychology (to my knowledge) focus on information, which must be checked in ordinarily life. For example even the best cases of mediumistic information from alleged dead people can only be checked with data available in this world of life before death and therefore Super-ESP can never be excluded on empirical grounds.

So my first conclusion is that the mind-body problem is undecidable within existing science.

This is also supported by a thorough analysis of this question done by the professor in philosophy David Chalmers, see e.g. his book “the character of consciousness” (1) where he criticise the materialistic reductionism which only solves the easy problem about the behaviour. But it cannot solve the hard problem about how conscious experiences are related to the brain and he states that epiphenomenalism, dualism and Russelian monism (that is that there is an inner aspect of all matter which have phenomenal or proto-phenomena character) are three possible and equally plausible solutions of the hard problem.

On TSC 2014 Chalmers held only two possibilities dualism and Russelian monism and on TSC 2015 he showed by a Copenhagen special interpretation of QM (which I think is bad) dualism interaction can be defended by mind collapsing the QM wave see note 5

So we have to choose on other grounds. Sometimes it is proposed that we according to the principle of Occam’s razor shall chose materialism, which is simpler. But materialism have not explained consciousness yet and more important; on what grounds shall we chose simplicity instead of meaning? Some also says materialism has more explanatory power but that really begs the question.

But there might still exist a more empirical approach, which can subjectively falsify materialism and therefore decide the question, in analogy with Flatlander experience higher dimensions.

Instead of looking for information, which the brain seems so good at, we can look at the very structure of experience at its base namely the number of dimensions we can experience. In our world we can experience three independent space directions: length, breadth and height and our physical space and all its material objects are three-dimensional. We can also experience changes in the three-dimensional objects, and thereby experience time. Thus, **our world is four-dimensional but we cannot point to any direction of the time dimension.**

I think this is as self-evident as anything can be and is also the basis of classical physics. As a thought-experiment we can try to experience a world as a linelander (who can move just back and forth) and a flatlander (who can move back and forth, and right and left) compared with us who can move back and forth, right and left, up and down. Also I think we could easily discriminate between this three different worlds.

Even if the materialistic belief is that the brain can produce all possible experiences how this can be done is not shown. Damasio writes that by the year 2050 it will be solved, but he knows that it is not yet done. (2).

A more limited and probably simpler problem should be to show if and how a three dimensional brain could produce experiences of more than three dimensions. This problem can be approached in three ways, which together could give a reasonable answer:

1. To construct a theory which shows how a three dimensional structure can produce something with four independent directions of movement. Or by analysis of possible alleged

materialistic theories for consciousness show that the project is impossible on logical and mathematical grounds.

2. To construct non-materialistic theories which do explain how we can experience more than three dimensions. This seems possible, see below.

3. To show that there exists experience, which includes more than three dimensions. This also seems possible, see below.

Ad 2. There is some ongoing work on a new view of consciousness based on an extension of Einstein's special theory of relativity. See (3) and <http://www.drpilotti.info/eng/towards-a-science-of-consciousness.html>

Add 3. As augured under Add 2 when people in NDE /OBE experiences their whole life at once and sometimes even can walk back and forward in time as if it was a space dimension , this can be interpreted as they experience four dimensions: our three dimensional space and time as a fourth dimension and even an extra time-dimension as they move in this four-dimensional space-time. In Beyond the brain (4) Stanislav Grof also reports that mathematically and physically educated scholars in psychedelic sessions could have insights not imaginable in ordinary states of consciousness to many dimensional space.

To call this hallucination is no explanation. It must at least be shown how a three dimensional brain can produce a hallucination of four dimension. That people say it clearly differ from dreams and hallucinations and is more real than reality can be seen as a support that it is an experience of a totally new quality which fits an experience of higher dimensions. True that these experiences cannot be objectively measured in our ordinary three-dimensional laborites so we can only have people's subjective experiences as indication. Again true that we can misinterpret our experiences. But I think it is fundamental how many dimensions we can experience so mistakes could be avoided. Again true some training is needed to have these experiences, if they can be voluntarily produced, and to train to focus on dimensionality. This might seem not scientific enough but if as proposed here the mind-body problem cannot be decided by ordinary science at all it seems to be what is left.

And it is not in opposition to good empirical since if it can be shown that there exists training procedures, which lead us to these experiences of higher dimension. All sciences demands training before you can do it proper. The problem here is that we probably must go beyond the dimensions we experience in ordinary life to fully understand consciousness and parapsychological phenomena. But when science goes into new fields we are not entitled to demand that the old views are enough.

Add 1. If one as I propose at first accepts the four-dimensional space-time as an objective reality this seems to complicate my strategy to show that a three-dimensional brain cannot create four-dimensional experiences. Because in the four-dimensional space-time the brain is also four-dimensional and can more easily be trusted to create four-dimensional experiences. True but a four-dimensional brain in space-time has an eternal existence. So this argument leads to some existence beyond or after the destruction of the old three-dimensional brain. Perhaps a life beyond death which is just the sum of what have been experienced but yet eternal.

But again if also the six-dimensional space-time is supposed to have an objective existence the afterlife can be believed to be more creative. And the basic scientific question can better be formulated: Can a four-dimensional brain create experiences with five or more dimensions? And as already stated there are anecdotal experiences of people near-death who sees there whole life, in a four dimensional spacetime and yet walk around in different periods

of their life, which seems to presuppose at least an extra time dimensions thus seemingly at least five dimensions.

And again Grof (4) report experiences of n-dimensional

So still I think the proposed analysis and injunction in 1-3 can have a reasonable possibility to solve this.

In summary: If materialism is true it can of course not be falsified. But it cannot be proved either as non-materialistic views on mind-body cannot be falsified. So then the question is really undecidable. If consciousness can exist without a brain and therefore can exist after death the question is at least decidable after death but perhaps not in the life before death as it can be so that materialism is still not possible to falsify within science and the question is again at least scientifically undecidable. But if the procedure suggested here is possible it might be that the mind-body question can be decidable in life before death and in the favor of non-materialism and life after death. So either the mind-body question is undecidable, genuinely or scientifically or it is decidable in the life before death or in the life after death in the favor of life after death. Therefore to find out if the question is decidable or not the best procedure is to try to show that mind is more than the brain, with the procedure proposed here or in other possible ways. *This claims a very unfavorable prospect for materialism. perhaps looks unfair but it is not see 6 below*

Ref: (1) Chalmers D., the character of consciousness, Oxford university Press 2010 <http://consc.net/chalmers/>

(2) Damasio A., Sc. American dec 1999

(3) Pavsic M., Unpublished work, <http://www-fl.ijs.si/~pavsic/>

Pilotti J., Unpublished work, <http://www.drpilotti.info/eng/>

Cole A,B, Nuovo Cimento 44 B, N, 1978

<http://www1.maths.leeds.ac.uk/~amt6eac/NewHomePage.html>

(4) Grof, S., Beyond the brain. State University of New York Press 1985 <http://www.stanislavgrof.com/>

5 A strong claim for panpsychism gives Philip Goff who had a very good presentation on TSC 2016 see video and articles and his book on <http://www.philipgoffphilosophy.com/video.html>

Strong criticism of Copenhagen QM and a realistic alternative yet not excluding consciousness but which for the time lies outside the scope of physics according to the Swedish mathematician Tomas Blomberg see his book which can be downloaded free at

<http://www.drpilotti.info/eng/deductive-theoretical-physics-Tomas-Blomberg.html>

Also Chalmers has argued that this only solves how mind can act on brain but not how brain can produce experiences and he have himself criticized QM to be just more of the same see

same critic from Pavo Pykkänen see

Pykkänen, P. (2007) Mind, Matter and the Implicate Order. Springer kap 6

and abstract 57 on TSC 2016

6 It can perhaps seem improbable and unjust with the strong asymmetry in that brain-materialism can never be proven true but only proven false whereas the "beyond brain"- hypothesis can never be proven false but only proven true. But this is due to the very strong limitation materialism try to pose on reality - in essence like "there is nothing more than we already know." Or in the first Commandment in the Flatland materialistic Church "You shall no other dimensions have than two (space + 1 time)" which can never be proven but is a sheer belief which only can be disproved.

In a way it can look like scientific courage to state a so strong belief as it must be very vulnerable. But in the hands of all pseudo scientific skeptics it is just sheer stupidity as when the professor in theoretical physics Thor Hans Hansson in Vetenskap och villfarelse in Swedish writes

now we know all there is to know about life.

Even if this was so HOW could we know it?

I wonder if he missed the history of physics which shows that in the end of 19th century many physicist claimed physics was just some more decimal to know and a professor advised Max Planck to study something else. Fortunately Planck followed his own curiosity and was the father of one of the greatest revolutions in physics and science Quantum Physics