

3. What is identity? What is the relevance of a definition of 'identity' to the problem of the relation between mind and body?

I am my brain. My mind is a material/physical entity that is located in my brain. The rich tapestry of memories, thoughts, feelings, perceptions, language, and its meaning, are firing neurons in my brain. Brain as part of my body is identical to my mind/soul/consciousness. It could not be clearer. The mind body identity theory relies on the indiscernibility of identicals (Leibniz' Law) that states: 'If A is identical to B then every property of A is a property of B and vice versa.'

On the face of it, however, there are many problems with a theory based on identity meaning the same. What do we mean by 'the same'? We need to know the criterion of identity for an object to know whether it is identical to another. It is not difficult to accept that water and H₂O are the same, as the criterion of identity for water is the same as the criterion of identity for H₂O. It is more difficult to accept that mind and brain have the same essential properties. There are many and obvious differences.

The mind may be described as subjective experience, whereas the material brain and body are experienced objectively. There is no necessary connection between the two. Indeed, we can say that all we really know is the subjective world. The objective world is experienced in our mind. We can doubt the objective world exists, but we cannot doubt we are thinking because, by doubting, we must be thinking. This fundamental piece of Cartesian logic is stunning and supported by Hume's paradox that physical objects do not exist without the mind. You can imagine thinking without your body but you can't imagine thinking without your mind.

A brain scanner may be able to show where in the brain a pain may be received, or where the colour red may be processed, but this is not the same as the feeling of pain subjectively experienced or the experience of seeing red for example. The neurobiologist cannot detect the experience of seeing red in the brain. We can know everything about the process of seeing red but that is not the same as the subjective experience of seeing red. How do neurons become a pain or a desire? Language, rationality and mathematical reasoning are not obviously physical. We can think about things that don't exist. We have intentionality – directedness, aboutness. Mental states have a phenomenological field – back to the experience of things like seeing red (the qualia). There is an explanatory gap here between physical states and mental states.

The mind/brain identity theorist has to overcome the problem that mind states and brain states are not the same. Hilary Putnam's multi-realizability theory makes a strong case that different brain states, for example in the wide variety of life forms, can experience the same mental states of pain for example. Will the different brain states of AI or aliens experience

the same mental states? Further, you are conscious of many things at once. There is a kind of unity of experience at any one moment of a variety of mental states but where in the brain is this unity processed? There does not seem to be a CPU located in the physical brain.

It would appear then that an argument for identity between a physical brain and non-physical mind is not possible. It is not plausible to say that the belief snow is white has a brain state.

Unfortunately for the dualist, there are some issues with the whole notion of a separate mind. The above arguments have moved away from what we might mean by 'the same'. We must root the problem in our understanding of criterion of identity. The problem of whether things are the same or different comes down to meaning. Water and H₂O are the same because we can identify their criterion of identity and see they are the same. There is a serious issue with any kind of discernible criterion of identity for the mind. It may be a spectator in the theatre of consciousness; its memories may be true or false; these memories may be passed on by one subject to another; the mind could be continuous or discontinuous; is there one unique self? or endless possibilities in endless worlds? Where do mental states take place if not in the brain? There is no empirical evidence for any mental substance with which to compare to the brain.

If the mind and brain are separate, then where is the explanation for their interaction? To be taken seriously, the dualist needs to explain the interaction in detail. Princess Elizabeth of Bohemia indeed wrote to Descartes asking him to explain what rules/laws or causal interactions occurred between these distinct entities, and it seems Descartes could only point to a new, or third set of laws, that may be primitive to the universe that could then explain the interaction. Well, it does not take much reasoning to stipulate that in fact the mind is neurally dependent. Without a material brain, the mind cannot exist. Dualists might point to the brain being an instrument or receiver for the mind but without showing us what the mind is or where it is located.

Then there is the problem of evolutionary history. We now understand that human life has emerged from other life forms. The body and its dependent mind have developed over time. There can be no independent mental substance that has always existed clinging onto life forms waiting for them to evolve to a point where the mind can be realised. In effect we can say dualists ultimately do not explain anything. And most poignantly, they do not even explain what is mind. They give us no criterion of identity to even attempt an argument for a difference between our brain and what?

In terms of the title question, if we define identity as all properties being the same for both parties then we might claim there are obvious differences that make mind and brain separate entities particularly if we regard them as states. However, if we need to identify

strict criterion for each party, then it is difficult to know what the mind is other than what we can identify in the brain.

The question also asks us to use identity to help us to examine the 'relation' between mind and body which in itself suggests they are different. For things to have a relationship they have to be different. So it might be suggested that identity has no relevance as it must mean the same and two things cannot be the same unless they are the same so that we end up saying these two different things the same. How can two things that relate to one another be the same?

To move towards a compromise of mind and body being the same but different in some way might be appealing but not in the context of identity. We might claim they are qualitatively identical in that they share properties but remain distinct like identical twins. That mind is some separate force residing in the brain that emerges. Consciousness is a fundamental structure of the universe like time or space. Mind is an organisation or pattern of energy within the neural system. These theories attempt to solve the mind body problem and suggest we just have to wait for science to produce the evidence as it has with so much else though it appears we are heading toward a scientific theory of understanding which suggests we can hold two opposing views simultaneously, which changes the game entirely and makes a definition of identity contradict itself.