

# **Materialism and the Mind and Body Problem: A Critical Analysis**

*Sean Agius*

The philosophy of mind has become dominated by the mind and body problem: the relation between the physical (the body) and the mental (the mind). Substance dualism had traditionally been the method for accounting for this problem. Substance dualism though, as we shall see, has been very ineffective in accounting for all problems. A consequence of this failure has been the rise of materialism in the forms of behaviorism, identity theory (also known as physicalism) and functionalism. Many tend to believe that materialism may provide us with the solution to the mind and body problem; however, in this essay I will argue that the materialist perspective, like the substance dualist tradition, is flawed. It can only account for the quantitative and objective aspects of the mind and not the qualitative and personal ones.

Substance dualism holds that the mind and the body are two completely distinct substances. This view has its foundations in the thought of Descartes. Descartes asserted that we are able to conceive of two distinct essences for the mind and body. The essence of the mind is thought or consciousnesses whilst the essence of the body is extension. We are able to conceive of each on their own, divorced from the other due to the fact that their distinct essences make them distinct substances. The best way to understand this notion in a Cartesian context would be to think of the mind as equivalent to the soul. The soul does not require the body to exist whilst the body

does not necessarily contain a soul. The corpse of a man for example is perceived as a body void of a soul.

This view obviously has its appeal; however, it has fallen out of favour in contemporary thought due to the problem of interaction. If mind and body are distinct then how in the world do they affect one another? How is it that the physical phenomenon, such as getting punched in the face, causes the mental phenomenon of pain? How is it that when one thinks about jumping in the air with one's mind, one's body winds up airborne? Descartes seemed to provide no proper hypothesis as to why this is so, (he did mention that the pineal gland might be the medium between the mind and body however this is not really noteworthy as it is perceived in philosophy as a weak argument). Descartes' disciples attempted to salvage dualism to relative success however the problem of interaction ultimately did heavily weaken the credibility of substance dualism and would become a major factor in the rise of materialism.

Materialism has its roots in monism, a rival view to dualism. Monism is the view that there is only one major substance. Monism exists in two different forms: mentalist monism and materialist monism (mentalist monism or idealism is the view that nothing but the spiritual exists; this is tantamount to the denial of the existence of matter.). Materialist monism or materialism has enjoyed a massive surge in popularity.

Behaviorism was the first materialist idea that took off in the philosophy of mind in the context of the mind and body problem. Behaviorism in philosophy is the view that the mind is the sum total

of the agent's behavioural dispositions. Behaviorism, though, is largely a product of psychology; the most prominent behaviorist, Skinner, was in fact a psychologist. The psychology-based behaviorism is commonly known as methodological behaviorism. In order to gain a proper understanding of it something must be said about the role of psychology. Psychology in its early days was referred to as the 'science of the mind'. By Cartesian standards, the mind is not scientific as it cannot be empirically studied. For this reason psychologists attempted to bestow upon psychology a scientific status by rejecting the notion of psychology as the study of the mind. Instead psychology became the study of behaviour, which is observable and thus scientific. The mind in psychology therefore became redundant.

Behaviorism was eventually given a philosophical tinge through the work of the logical behaviorists, who accepted the notion of the mind. The mind, though, was nothing more than actual or possible behaviour, and nothing immaterial unlike what Descartes believed. The mental state of pain thus became nothing more than behaviour that signifies pain such as to scream in agony or to grab your chest whilst grunting and so on. To believe that it is cold outside is to behave in a way that is synonymous with the belief, for example wearing a thick jacket. This takes up a logical form 'If A then B': 'If I believe that it is cold outside then I will wear a thick jacket'.

Behaviorism, though prominent for a significant duration, ultimately withered away. Materialism, though, did not wither away like behaviorism: a new type of materialism in the form of identity

theory was born. Identity theory is the view that the mind is equivalent to the brain or the nervous system as a whole. Mental states are caused by physical impulses in the brain or the nervous system. The example that the identity theorists used was this: pain is caused by C-fibre stimulation and thus the mental state of pain is equivalent to C-fibre stimulation just like water is equivalent to H<sub>2</sub>O.

The identity theorist view, though, had one massive flaw that ultimately forced a re-conception of the idea. The idea that the mind was nothing more than brain processes meant that it would be impossible to identify anything without a brain as possessing a mind. Imagine that we were to make contact with intelligent alien life, physically distinct from us. These aliens do not have brains, however are nonetheless intelligent. Surely we are able to claim that these aliens, though brainless, do indeed possess a mind and mental states! Identity theorists did not seem able to make this claim as they conceived only brain as mind.

This led to a shift from type-type identity theory to token-token identity theory. Token-token theory is the theory that whenever something conscious happens (Token 1) something physical also happens (Token 2). If I were to write the following: 'yellow yellow yellow' have I written three words? No, in reality I would have written three instances or tokens of the same word. The same can be said about the conscious and the physical; though distinct and not in any way reducible to one another, they are two instances or tokens of the same thing. They both occur simultaneously. Since the physical and the conscious are not

reducible to one another, the mental state (which is conscious) is not reducible to the brain (which is physical). Since a mental state is not reducible to the brain we can thus conceive of something without a brain as possessing mental states. The brain thus is not necessary but contingent for token-token theorists. This process of having conscious and physical tokens occurring simultaneously can occur within anything; in the case of humans it just happens to occur within the brain.

Token-token identity theory contributed greatly to the rise of functionalism. For functionalists, “what token brain states have that makes them mental states is a certain type of function in the overall behaviour of the organism” (Searle, 2004, p. 62); this function is irreducible to the physical. The functionalists stated that what is necessary is simple: the production of an output from an input. Reminiscent of the Turing Test, anything that produces intelligent outputs from inputs may be said to have a mind and mental states. Functionalists also tend to be proponents of strong AI. Even a computer which passes the Turing test may be classified as possessing a mind. Although functionalism is probably the most influential materialist theory today, I will not delve into it in greater detail than this. The functionalist account bares many intricacies (even relating to AI) that I do not have space to go into. However I believe that the idea of intelligent outputs from inputs as an analogy of the mind is more than sufficient to obtain an understanding of functionalism.

In my introduction I mentioned that all materialist accounts are flawed just like the substance dualist approach. Each individual

theory has been criticised for its specific flaws; however, this has not reduced materialism's popularity. It has simply led to revisions of these theories. For this reason I believe that we should find a problem which no materialist account can surmount. The extensive literature on consciousness as well as qualia may provide the means for developing this insurmountable problem.

Materialist accounts are brilliant at explaining how the 'the mind' works in a quantitative and objective sense. However, they cannot account for the qualitative and subjective aspect of the mind. Each activity seems to have a qualitative aspect. When one listens to Bach as opposed to Justin Bieber, what distinguishes the feeling? After all, one is listening to music in both cases. Philosophers have coined the term qualia to account for differences in one's qualitative feels when performing different activities. Materialists are yet to give a sufficient account of what causes this qualitative aspect; as of yet, they are only able to account for the quantitative.

Qualia relates to the 'What is it Like?' aspect of the mind. Nagel (1974) and Jackson (1986) provide further insight into the problems of materialism. Nagel shows how despite perhaps being able to account for the processes that create a bat's mental state, materialists still cannot show what it is like to be a bat. They can only describe. Despite explaining a bat's mind objectively they still cannot explain the subjective element of the mind and consciousness. Jackson used an example that may be more relatable. Imagine a scientist, Mary, who studies the science of colour perception. Mary has been raised in a black and white environment, void of colour. Would it be fair to say that Mary knows everything

about colour? Probably not; despite knowing much about colour, she has never actually experienced it and thus she does not know everything about it. She lacks the subjective and qualitative understanding, just like the materialist understanding of mind.

In conclusion, materialism, like substance dualism, is flawed. Undoubtedly the materialists will and indeed have tried to provide solutions for these problems; however, for the time being these solutions seem to be inadequate. The mind and body problem thus remains as much a mystery today, despite the rise of materialism, as it was in the substance dualist dominated past.

## ∞ References

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