

Mind — the Gap.

An outline of the main philosophical positions held about the mind

The mind is a curious thing. What is it? Just a product of the electrochemical circuitry of the brain? The materialist will say so and many a neuroscientist, with MRI scanner at hand, will show us some lit-up areas of our brains corresponding to particular thoughts. Is that it then? Is that conscious thought?

Well – it is clearly not as simple as that. This article is a rapid tour of the main philosophical positions concerning the mind over the past few centuries. As a mere introduction it may whet appetites to read the original works of some fine minds.

Let us start with Descartes (1596-1650). In his 'Meditations'¹ he came to the strong dualist conclusion that the mind is distinct from the body (which includes the brain). Greek philosophers held similar dualist views. As a 'thinking thing' Descartes concluded that everything physical is 'extended' – in other words the body and all else that is material has dimensions; something the mind lacks. He also concluded that the mind was indivisible, whereas all material things are divisible. These thoughts made him certain that the mind is not material; even if intimately linked to and 'intermingled with' the brain. His philosophy of mind remains powerful and many of the twists and turns of modern philosophy are based on the idea that he must be wrong; how could a non-material mind have causal effect on the material body? His claim that the mind is indivisible is supported, interestingly, by certain forms of neuro-surgery.² When the Corpus Callosum (the bundle of nerve fibres connecting the two brain hemispheres) is severed, the hemispheres are isolated from one another and yet this has no effect on the integrity of any such patient's personality or continuity as one person.

Leibniz (1646-1716) felt much the same as Descartes and remarked that if one was to go into a piece of machinery, such as an enormous mill, we could not therein find any evidence for thought – he likened this to us entering into the brain and looking amongst the 'machinery' for thoughts.³ We would not find them. Which at least makes us sit up and ask ourselves – where is consciousness within a physical system?

With the advance of an 'enlightened' materialism in the 20th century there was a vogue within the logical positivist school of philosophy for a behaviourist approach to the mind.⁴ This was an attempt to make scientific and measurable any statement we might have about thoughts. Essentially, according to this view, (now considered false by most), we can only measure and know the mind through observation of a person's behaviour. Indeed such behaviour was considered to be all there was to the mind. A pain therefore could be simply a combination of screaming, wincing and withdrawing. What the behaviourists left out however was the very essence of thought, which is an internal process that is experienced.

Type Identity theory is a view that has held sway with many philosophers of mind. This holds that an experience such as a pain simply is the firing of certain nerve fibres (such as C fibres).⁵ In other words the pain is identical to the nerve fibres firing. This is now considered unlikely by most, particularly since the work of Kripke, (1940 -)⁶, who argues convincingly that it is very likely that such a thing as pain could occur without those exact C fibres firing (such as in an alien who does not have C fibres). Likewise, he argues convincingly that it is more than likely that such a brain event as C fibres firing could occur without any pain.

The philosophical view known as *Functionalism* has prevailed in some quarters.⁷ This holds that a

mental state is a functional state of the whole organism. In other words it is something that occurs when certain internal states, with their causal relationships, occur along with the inputs and outputs that the organism experiences. This rather mechanistic view has however been more or less abandoned, particularly since Ned Block (1942 -) illustrated (in his famous 'Chinese thought experiment') how one could reproduce the exact functional states without any thought occurring.⁸

Davidson (1917-2003) is known for his *Anomalous Monism*.⁹ The problem he tried to tackle was this:

1/ The mind is causal, in other words thoughts can cause things to happen in the world. He gives the example of a submarine commander deciding to fire a torpedo.

2/Causality in the universe implies laws that must exist to account for one thing causing another.

3/The mind however is not bound by law but is free.

Now clearly these observations are incompatible. What Davidson tried to do was to free the mind from the brute physical state of brain events. He proposed that the mind is 'supervenient'; that is produced by physical brain events but not the same as them. This supervenient mind is therefore somehow free from physical laws. Kim however has convinced most that this cannot work; if the brain state, which is physical, produces thought, then the thought is inseparably linked to the physical and could not be free.¹⁰

Eliminativism is an extreme materialist view. Its chief proponent, Paul Churchland (1942 -), maintains that neuroscience will eliminate all psychological concepts as we come to understand the precise science of the brain.¹¹ As such there is no such thing as the mind – simply neurological events. This reductionist account of thought leaves one cold however. How can love be reduced to nerve action potentials? How could a belief (that eliminativism is true, for instance) be merely the firing of neurons? Indeed, could such a belief be either true or false?

Epiphenomenalism is a dualist position in that it holds the mind to be non-physical and distinct from the brain.¹² However, though the mind is produced by the brain (and is causally influenced by it), the mind has no causal effect on the physical brain or body. As such this view preserves the idea that only physical things can act on the physical. Contrast this with Descartes' dualism which demands that there is causal interaction between mental and physical – mental things both cause and are caused by physical things. As I have said, much of subsequent philosophy, including epiphenomenalism, is an effort to avoid Descartes' idea that a non-physical mind could have causal effect on the physical. However, epiphenomenalism leaves the mind in an unsatisfactory limbo – inert and unable to cause anything. This defies our common experience.

David Chalmers (1966 -) calls consciousness the 'hard problem' of philosophy of mind.¹³ Chalmers particularly concentrates on 'qualia'; the subjective qualities of conscious experience (such as what you experience when you smell a rose, see the colour red or enjoy a good wine). Qualia seem irreducible to mere neurological events. They are distinct personal experiences that are different to anything else. A robot that senses colour would not have qualia – merely the registration of certain wavelengths of light.

What about computers and artificial intelligence? Can we not envisage them having consciousness? Actually the answer appears to be a clear "No!" John Searle (1932 -), in his most famous paper 'Can computers think?'¹⁴ shows us that no matter how advanced a computer is, the information it holds and processes is derived (from us) and is based on digital symbols which cannot involve the consciousness we experience.

There is then the question of free-will. This is a serious challenge to the materialist who of course has to agree to the mind being entirely dependant on the physics of the brain and its environment.

As such it cannot be free because every brain event is determined by prior physical states. Quantum randomness does not help here either, because there is no autonomy or free-will in complete randomness.¹⁵ Many philosophers have therefore concluded that our thoughts are entirely determined and our freedom (and indeed all responsibility) is illusory. Anyone who upholds free-will is, like it or not, defending a dualist, non-material mind.

The materialist paradigm, which demands the abandonment of any sort of Cartesian dualism, is based on a prior assumption that only the physical can act on the physical. It is an unproven worldview and one which is seriously threatened by what we now know about the universe; its fine tuning and the evidence for a first, necessarily immaterial, cause.

The mind is still very much an enigma. Are we machines and nothing more? Or are we willing to accept, with Descartes, that the mind is something quite different? How we see the human race and ourselves as persons critically depends on these questions.

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DISCUSSION TRIGGER POINTS

1. What reaction do you have to any aspect of the information given in either paper?
2. What relevance do you find there is in this material to the 'God question'?
3. Do you think that holding the view that the soul can be entirely separate from physical aspects of the body should be fundamentally important in a theistic worldview?

¹Descartes, René. 1641. *Meditations on First Philosophy*. Cambridge University Press. 1985

²Bogen IE: Physiological consequences of complete or partial commissural section, in Apuzzo MLJ (ed): *Surgery of the Third Ventricle*, 2nd ed. Baltimore, Md: Williams & Wilkins, 1997

³Monadology 17. In *Leibniz Selections*, ed. Philip Weiner (New York: Charles Scribner's Sons, 1951), p. 536.

⁴Carnap, Rudolph. 1932. *Psychology in Physical Language*. Originally published in *Erkenntnis*, 3:107-42, 1932/33. Behaviourism is epitomised in this classic paper.

⁵Place U.T. Is consciousness a brain process? *British Journal of Psychology* 47: 44-50, 1956.

⁶Kripke S.A. 1980. *Naming and Necessity*, pp. 144-55. Harvard University Press.

⁷Putnam, Hilary. 1973. *The Nature of Mental States*. Originally "Psychological Predicates", in *Art, Mind and Religion* pp. 37-48. Univ. Of Pittsburgh Press. A classic paper supporting Functionalism.

⁸Block, Ned. *Troubles with functionalism* In C.W.Savage, ed., *Perception and Cognition* (University of Minnesota Press, 1978).

⁹Davidson, Donald. 1970 In L. Foster & J. Swanson, eds., *Experience and Theory*, pp. 79-101. Humanities Press.

¹⁰Kim, Jaegwon. *From Mind in a Physical World* (MIT Press, 1998), pp. 29-47

¹¹Churchland, Paul. *Eliminative Materialism and the Propositional Attitudes*. From *Journal of Philosophy* 78:67-90, 1981

¹²Jackson, Frank. *Epiphenomenal Qualia*. *Philosophical Quarterly* 32:127-136, 1982

¹³Chalmers, David. *Consciousness and its Place in Nature*. From *Blackwell Guide to the Philosophy of Mind*. Blackwell. 2002

¹⁴Searle, John. 1983. *Can computers Think?* From *Minds, Brains and Science*, pp. 28-41. Harvard University Press.

¹⁵See Swinburne, Richard. 1986. *The Evolution of the Soul*. Oxford University Press. P. 239 – 246. For helpful discussion about quantum effects on free will.