17.D: the ***Philosophyldeas*** overview of

Property Dualism

The view that mind and body (though closely linked) are separate substances is no longer a popular view. The view that mind and brain are identical, and the mind is entirely physical, also arouses numerous discontents. Hence possible intermediate views are studied with great interest, with 'property dualism' attracting most attention. Brains are now understood in considerable detail, and thought is not merely located in the head, but closely related to specific brain areas and groups of neurons, but many reasons are still offered for saying that thought cannot be fully explained in physical terms. That is, thought has many aspects that apparently **won't reduce** to physical events.

Computers process information and can make decisions for us (such as thermostats), but their activities will obviously reduce to organised electronics. The evidence for the non-reducibility of the mind is the features that look **non-computable**. Thus it is suggested that values and duties ('normativity') could never be replicated in mere mechanisms. While the syntax of logic might be formalised on a machine, the higher levels of reason could never be physically implemented. The grammar of language may be fairly precise, but meaning, and the way thought is intrinsically 'about' things ('intentionality) won't reduce to procedures or mere chemistry. The prospect of making a conscious computer (with the vivid subjective experiences that implies) looks remote. And it is said that minds are more than the sum of their parts (they are 'holistic'), which a computer could never be. Even if we drop the analogy with computers, it is said that none of these qualities could ever be realised in something entirely physical. The world of the mind, for example, is described in concepts that have no application at the physical level.

Faced with these difficulties for reductive physicalism, and a matching set of problems for substance dualism, the quest was for an account of a physical object (the brain) with basic general features which made it an exception to the normal accounts of matter given by the physical sciences. Focusing on the causation involved gave rise to a new proposal. It is the hallmark of normal physical causation (such as between two billiard balls) that it conforms to laws with strict regularity, with (in principle) predictable outcomes. That is exactly what seems to be missing from the problematic non-computable features of the mind. The idea that there could be 'bridging' laws which connect values, higher reason, meaning and subjective experience to the strict regularities of brain chemistry looks impossible (especially if free will is involved). Thus while dualism is presumed to be false, the single substance of the brain has properties which are misfits in the networks of physics, so the new theory is called '**anomalous monism**'. The focus is on the properties, rather than the substances, implying a new sort of dualism, contained within a physical world.

Causation is normally expounded as a relation between events (arrival of first ball….departure of second ball), but this needs the events to be of a similar type, and so the problem seems to be that mental and physical events are different in type. If I quote the word 'gold' and then the word 'gold', this is said to be two tokens of one word-type. Thus the new theory rejects type-type physicalism (which asserts close similarity in the nature of mind and brain), but accepts **token-token identity** between the two realms, meaning that a given thought is a single mental-physical entity, even though the properties involved may have nothing in common.

If the two aspects of a thought were identical in type, this would offer a potential reduction, and hence explanation of the thought, but because the identity is only in the token, a thought remains a single puzzling object, with an internal relation between its two components which cannot be explained. The word '**supervenience**' is offered for this relation, implying a close and possibly inseparable bond, about which no further information can be given. If we accept that the supervenience bond is inexplicable, this means that the problem of mind and body can never be solved. A few philosophers (the 'Mysterians') accept this view, saying we can never have sufficient information to solve the puzzle, and must live with the uncertainty.

However, a supervenience relation can be one-way (if one ingredient is in charge) or mutual (if they are a team), so the relation involved still needs further clarification. That is, do brain events cause thoughts, or do thoughts cause brain events, or do they work together in harmony, as a single causal event? If the brain is in control, then presumably it causes behaviour, and the thoughts are a mere side-effect ('epiphenomenalism'), which would make them very strange entities. If the brain and the thought are causally unified they need to be of one type, so there seems to be no anomaly present, and so it isn't a form of dualism.

Hence the theory seems to require that the mind be in charge, with causal powers to move the brain, leading to behaviour. But this '**downward causation**' is controversial, because it adds a mysterious causal power to the universe, which has huge effects on planet Earth, and yet is outside of physics. In other words, it seems to necessarily require free will, about which there is considerable dispute. What looked like a minor dualistic feature of the world, invoked to explain a puzzle about our minds, has turned into a large metaphysical claim about causation.

A question facing any form of dualism is 'how does it fit into evolution?' That theory proposes that the Earth begins with physics and chemistry, from which biology and minds then evolve. If minds are fundamentally different, then how does this fundamental jump occur? The word '**emergence**' labels this phenomenon, since some new thing seems to have emerged, rather than a mere accumulation of small steps. Emergent properties can be obvious, or surprising, or inexplicable. If you make a tower of bricks, 'tallness' obviously emerges. If you drastically cool certain substances, electrical 'superconductivity' emerges; no one expected it, but quantum mechanics now largely explains it. The mind is said to be an inexplicable emergence, because of its non-computable features, but without some account of how this has happened, the property dualism theory has a weakness (though it suits Mysterianism).

Other critics of the theory challenge the claim that laws are needed, to link mind and brain. There may be causal laws for billiard balls, but anatomy is causal without having strict laws, and water exhibits liquidity without pairs of events. Dualism about properties also needs clarifying, since it may be no more mysterious than being round (a shape) and red (a colour), even though shapes cannot be reduced to colours, or vice versa. Physicalist critics also warn against presupposing dualism, in the initial discussion of how two things, mind and brain, are interrelated.