

24.119 Minds and Machines

Handout 9: Anomalous Monism

Some philosophers claim that if some mental phenomenon doesn't reduce to physics (specifically neuroscience), then that mental phenomenon doesn't exist. Some philosophers claim that believings, desiring, hopings, etc. don't reduce to physics. Some philosophers do both -- for example, Paul Churchland (see "Eliminative Materialism and the Propositional Attitudes"). Therefore, Churchland concludes, no one has ever believed anything, desired anything, hoped anything, etc.

Davidson agrees with the second of Churchland's claims, but rejects the first. He calls his position "anomalous monism" ("monism" because Davidson is some kind of materialist, not a dualist; "anomalous" because he thinks the mental doesn't reduce to the physical).

We can think of anomalous monism as the conjunction of:

The (token) identity theory

"[E]very mental event...is a physical event" (p. 124)

and the third of Davidson's three principles:

(1) The principle of causal interaction (a stronger version than the official one on p. 116) "[E]very mental event is cause or effect of some physical event" (p. 124). (e.g. your remembering that 24.119 met today at 10 was one of the causes of your walking through the door of 4-231, the sun's shining causes you to believe that the sun is shining)

(2) The principle of the nomological (law-like) character of causality

If event c causes event e, then there is a (strict) law of the form "A-type events are followed by B-type events" (e.g. "Heating-copper-type events [insert other qualifications about the conditions of heating] are followed by expanding-copper-type events"), where c is of type A, and e is of type B.

(3) The anomalism of the mental

There are no strict laws on the basis of which mental events can be predicted and explained.

According to Davidson, the token identity theory follows from these three principles (see Davidson's "demonstration of identity" on p. 124).

What is a strict law? Start with "lawlike statements":

"Lawlike statements are general statements that support counterfactual and subjunctive claims, and are supported by their instances" (p. 121). For example, 'All swans are white' is a lawlike statement. It "supports counterfactual and subjunctive claims": suppose we have evidence for the truth of 'All swans are white'; then we have evidence for the truth of the "counterfactual conditional" 'If this had been a swan, it would have been white'. It is

"supported by its instances": observation of many white swans confirms the statement). Lawlikeness is a "a matter of degree": 'All coins in my pocket are quarters' is not (very) lawlike (cf. 'If this dime had been in my pocket, it would have been a quarter'), and 'All emeralds are grue' is even less so (p. 121). Sometimes a lawlike statement might be qualified (perhaps tacitly) by "generous escape clauses" (p. 121): phrases like 'in normal conditions', 'if no interfering factors are present', 'other things being equal', '*ceteris paribus*'. Let us call such statements '*ceteris paribus* lawlike statements'.

A lawlike statement (*ceteris paribus* or not) need not be true: 'All swans are white' and '*Ceteris paribus*, all swans are white' are lawlike but false. A *law* is a true lawlike statement; a *ceteris paribus* law is a true *ceteris paribus* lawlike statement; the rest are *strict* laws. '*Ceteris paribus*, $PV = nRT$ ', '*Ceteris paribus*, people tend to avoid extreme pain', '*Ceteris paribus*, if demand increases faster than supply, prices rise' are *ceteris paribus* laws, 'Nothing can be accelerated beyond c ' is a strict law.

Plausible examples of strict laws typically come from fundamental physics, because (according to Davidson) it aspires to be a "comprehensive closed theory" (p. 121). Laws in the other sciences (e.g. biology, economics, psychology), on the other hand, are always *ceteris paribus*. [One might ask some hard questions about "*ceteris paribus* laws". For instance, why isn't '*Ceteris paribus*, all Fs are G' guaranteed to be true? If there's an F that isn't G, then presumably "other things" aren't "equal"! However, we will assume here that *ceteris paribus* lawlike statements are not vacuous in this way, and that many are false.]

Davidson's (hard to follow) argument for the third principle is in part II of "Mental Events".

Assume, with Davidson, that (1) and (2) are true. Then it might seem that (3) is false, on the basis of the following argument:

Suppose that the principle of causal interaction is true. Specifically: physical event e_p causes mental event e_M (i.e. the principle of causal interaction is true). By the principle of the nomological character of causality, there is a strict law of the form "A-type events are followed by B-type events", and e_p is of type A, and e_M is of type B. But then, presumably, this law can be used to predict and explain e_M . (Remember our discussion last week of how laws can be used to give explanations.) Hence, if the first two principles are true, the third is false.

However, according to Davidson, this reasoning fails at the last step, because "the principle of the anomalism of the mental concerns events described as mental" (p. 119). Suppose that:

e_p = the interaction of light with the tomato at time t

e_M = your having a visual experience as of a tomato at time $t+$

The required "strict law", on Davidson's view, will be couched in purely physical

vocabulary. For example (leaving the details missing for simplicity), it might look like this: If such-and-such electromagnetic events occur [and such and such complicated physical system is in the vicinity, in such-and-such physical state] then a few milliseconds later a neural event of type N will occur. This law cannot be used to predict and explain e_M "as such", or "under mental descriptions", because (according to Davidson), although your having a visual experience as of a tomato at time $t+$ is a neural event of type N, not every neural event of type N is a visual experience as of a tomato (or even a visual experience of any kind).

An (imperfect) analogy might help. The world is a pool table plus the variety of colored balls (colliding elastically). "Chromatic properties" are the (chromatic) colors red, blue, yellow, etc. (analogous to mental properties). "Physical properties" are shape, size, mass, and motion (so we are pretending that there are fewer physical properties than there actually are). A "chromatic event" is an event picked out by a description of the form 'the collision between red [blue, green,...] ball x and green [red, blue,...] ball y, at t' (analogous to a mental event). A "physical event" is an event picked out by a description using purely "physical" vocabulary (no color words), for example 'the collision between ball x with momentum m_1 and ball y with momentum m_2 , at t'

Then:

The (token) identity theory

Every chromatic event is a physical event.

(1*) Chromatic events cause physical events and vice versa (indeed, every chromatic event is caused by a physical event).

(2*) If c causes e, there is a strict law (deriving from Newton's laws plus the layout of the snooker table) of the form "A-type events are followed by B-type events", where c is of type A and e is of type B.

(3*) There are no strict laws on the basis of which chromatic events ("so described") can be predicted and explained. [Exercise: convince yourself of this (this might involve filling out some details of the analogy)]

This analogy illustrates a common worry about anomalous monism. It seems that anomalous monism doesn't allow that mental properties are "causally efficacious", thus leading to epiphenomenalism (analogy: the chromatic properties are not causally efficacious). (See Kim, pp. 171-2.)
