DAVIDSON ON PSYCHOPHYSICAL LAWS

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According to Davidson there aren't any psychophysical laws. That is, there aren't any laws that connect mental predicates with physical predicates; laws like "x believes that P if and only if x is in C", where C describes some physical condition of x. Or more generally x satisfies mental predicate M if and only if x satisfies physical predicate P.

It has been notoriously difficult[1] to pinpoint exactly the argument for this view in Davidson's work. In 'Mental Events' (1970) where he first presented his argument and as of today the place where he gives his most detailed views on the subject, it is particularly difficult to understand as he seems to mix[2] a number of issues that do not hang together in any obvious way, which of course tends to obscure his reasoning. I will thus begin with a reconstruction of the argument, based mainly

[1] As an example Thomas Nagel in a note of his article 'What is like to be a Bat?' claims while discussing Davidson's view on psychophysical laws not to understand the argument advanced.

[2] We are presented with three strands of ideas: the normative and the principles of rationality, the distinction between homonomic and heteronomic laws, and Davidson's likening of mental and physical predicates to the nomological connection of grue and emeralds, predicates that we are told to know a priori that are not made for each other. I find particularly hard to understand his argument whereby he reaches the conclusion that grueness however is an inductive property of emerires. To me not only the deliverances of intuition but also of reason point to opposite directions.

on Kim (1985) that is of some importance[3] to the understanding of the argument that to my mind promises to clarify this issue.

The following passage is a cue for Kim's reconstruction,

> «*There are no strict psychophysical laws because of the disparate commitments of the mental and the physical schemes. It is a feature of physical reality that physical change can be explained by laws that connect it with other changes and conditions physically described. It is a feature of the mental that the attribution of mental phenomena must be responsible to the background of reasons, beliefs, and intentions of the individual. There cannot be tight connections between the realms if each is to retain allegiance to its proper source of evidence.*» (*'Mental Events' (1970), p. 222)*»

Here we can find in cryptic fashion the following argument, let us call it the master argument, against the existence of psychophysical laws:

1. Mental phenomena are constrained and constituted by the norms of rationality
2. Physical phenomena are not constrained nor constituted by the norms of rationality.
3. It is essential to each realm, either mental or physical, that it conforms to its commitments.
4. In the case of the existence of psychophysical laws, either the mental or the physical or both would not conform to its essential commitments.

Conclusion

There aren't any psychophysical laws. (No Bridge Laws)

In what follows I will examine this argument; since its validity does not seem to be in doubt, the nature of my examination will be based on an inquire into the reasons we to have to hold on to the premises. It is clear that the burden and difficulty is on the understanding and deploy-

[3] Evnine (1991), for example, takes it to be *the* way to interpret Davidson on psychophysical laws.

ment of premise 4. Let me state right now that I believe this argument to provide the right way to interpret Davidson, notwithstanding the way that Kim develops the argument, especially premise 4, will have to be substantially modified in a way that only the bare bones provided by the previous argument are maintained.

Let us begin, however, by examining the nature of the mental and the physical and the constitutive commitments that bound them, so as to make explicit their difference.

What are the commitments of the mental? For Davidson the commitments of the mental are connected to the principle of charity and are explicit in the task of interpreting a person on the base of his/her behaviour. For a successful interpretation, one should advance holistically and respect the normative character of rationality. Charity here means that I endeavour to see you rationally[4].

Holistic because:

> «*There is no assigning beliefs to a person one by one on the basis of his verbal behaviour, his choices, or other local signs no matter how plain and evident, for we make sense of particular beliefs only as they cohere with other beliefs, with preferences, with intentions, hopes, fears, expectations, and the rest. (p. 221)*»

The point is that we could not simply claim that someone believed that snow is white, even if they pointed to a sample of it and uttered the sentence "snow is white" if we didn't think that they also believe that snow is not of the same colour as the deep blue ocean; that snow is not a living being etc. If they believed any one of those things that *might* lead us to withhold the claim. On the other hand, to accept the claim is to accept that they also *intend* to point to the sample of snow, that they *understand* the terms of their utterance, that they *want* to communicate their thoughts, etc. Not only cannot the attribution of a particular belief or any other mental state be done single-handed, it also must proceed normatively, that is, it must respect principles of rationality. These prin-

[4] Kim takes it more as a principle of rationality maximization. But maybe this is a little too strong and is probably the reason why that he goes wrong later on.

ciples more or less indicate which mental states can, cannot, or should go together[5]. The main issue here is coherence between beliefs, desires, actions and other mental states.

But this should not be seen as an epistemological matter. For, while the intended use of radical interpretation is to articulate the interrelations between mental states and behaviour, this is an exercise that Davidson takes up to demonstrate the *ontological nature* of intentional mental states. These are constitutively holistic and normative. As such, we know even before beginning our interpretative work towards a person that she/he will hold a large batch of beliefs, desires and other mental states, and these will be *largely* coherent and rational. Such a priori elements of mental states are taken by Davidson to be constitutive of folk psychology, something that we all, as persons, as agents, already know a lot about and are not prepared to hold ransom to the empirical.

That is, we could never find out that people (from their viewpoint of course) desire what is bad for them, believe what is false, that they stand for inconsistent beliefs, etc. And the reason why is that if our best interpretation scheme of a putative agent required that we attributed to him such pattern of irrationality we would have to withhold our view of she/him as an agent or person[6].

Now compare our knowledge of folk psychology with our knowledge of the physical world. What we find especially visible is the existence of laws that rule the behaviour of particles and objects. These laws tell us that given certain determinate conditions, certain states of affairs will follow with nomological necessity. So, whatever our prior beliefs about the external world of mass and particle may be, we stand ready to change them to accommodate the findings of the empirical sciences respecting the way things really are.

The essential difference between the commitments of the mental and the commitments of the physical, for Davidson, is not that one is a priori and the other a posteriori, or one holistic and the other not, since both an a priori element and the existence of an holistic character is

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[5] Other principles prominent in Davidson are the 'principle of continence' and the 'principle of total evidence'.

[6] I will qualify this later on, particularly the difficulty presented by standing for inconsistent beliefs.

present in physical theory[7].

The difference is that folk psychology is based on normative rules that are constrained by the constitutive ideal of rationality, whereas physical theory is *not* thus constrained.

We can now see how premise 4 does its work. To illustrate[8] this point, suppose that the following psychological (1), psychophysical (2) and (3) and physical laws (4) were true:

(1) If S were to believe p, S would also believe q.
(2) Necessarily, a person believes p if and only if he is in state B1.
(3) Necessarily, a person believes q if and only if he is in state B2.
(4) If S were in state B1, he would be in state B2.

Kim takes it that from (1), (2) and (3) we can conclude that (4). And it would seem that from (4), (3) and (2) we can conclude that (1). So in the first instance we could show how the norms of rationality can be a source of justification of purely physical laws, thereby bringing to physical theory sources of evidence that do not have a place in it. In that case we could find out the existence of a physical law, just by reflecting on the a priori principles of rationality plus the existence of bridge laws. And this should surely strike us as absurd. One way to see the absurdity of it might be to reflect on the fact that the principles of rationality, the principles of interpretation, have a vaster applicability than the laws of nature, i.e. they "rule" over a larger number of worlds. But what about nomologically impossible worlds? It seems that they would have to coincide with purely irrational or a-rational worlds!

A similar argument can be deployed from the bottom up: in such a case physical theory would constrain the application of the principles of rationality in the attribution of mental states, thereby encroaching

[7] We are told, as a point about physical objects and the measurement of length that a "whole set of axioms, laws, or postulates for the measurement of length is partly constitutive of the idea of a system of macroscopic, rigid, physical objects" (Mental Events, p. 221). The holistic and a priori character of physical theory is explicit in the statement that we could not make sense of the idea of the measurement of length without deploying and accepting simultaneously and a priory the *transitivity* and *asymmetry* of the *longer than* relation.

[8] Example taken from Kim (1985), p. 207

on the domain of the intentional and pre-empting the application of the principles of rationality in the attribution of mental states, in turn making those states cease to be intentional – there is no conception of the mental when it is constrained by principles other than those of rationality.

So it would seem that we have pinpointed what Davidson was working towards in 'Mental Events'. Bridge laws would contaminate each realm in a way that cannot be accepted; consequently, there cannot be bridge laws. I think there is something right here but it cannot be exactly because of the argument developed so far. Taking cue from Yalowitz (1995), something quite trivial in the preceding argument can be shown to be at odds with Davidson's position. Looking at (1) we can see that it has the form of a strict law, an assumption that is fundamental to the argument, as we shall see in a moment. However, Davidson is quite strict about this matter, and this line of thought is something that runs through all his work with extreme cogency, in particular in 'Psychology as Philosophy'.

Just before introducing (1), Kim makes the following relevant remark:

> «*Let p be the statement 'Ypsilanti is within 10 miles of Ann Arbor' and q the statement 'Ypsilanti is within 20 miles of Ann Arbor'. The rule of rationality maximization presumably requires that whenever we attribute to a person the belief that p we must also attribute to him the belief that q. This much deductive closure seems required of any systems of beliefs. (p. 207)*»

But I think that even a brief acquaintance with Davidson's work would convince us that he would not subscribe to such a view. The mistake is in the *must*, in "whenever we attribute to a person the belief that p we *must* also attribute to him the belief that q". While we should normally suppose that people generally believe the obvious implications of their beliefs, there seems to be many cases where it would be rational to withhold the attribution. The point is that even in a more plausible case, as when we say that if he holds p then he should not hold that non-q, we could devise a situation where he could have strong evidence (in his light) for non-q. And so it could be rational of him to hold the

belief. But wouldn't he be holding a contradiction in such a case? Well, according to Davidson, provided that he doesn't hold the proposition 'p and not q', he could be held rational, by, say, having those beliefs in regimented sections of the mind[9].

A more prosaic way to look to the *ceteris paribus* nature of the mental might be to note that any psychological law might have its antecedents satisfied while a blow in the head will prevent the expected outcome. The point is, paraphrasing Davidson, that too much happens in the mental realm that is not mental and so cannot be accommodated in psychological laws. The psychological is blind to the nature of those interferences.

But then (1) would have to be rewritten as:

(1*) *Ceteris paribus*, if S were to believe p, S would also believe q.

But then the existence of bridge laws between the physical and the mental, provided by (2) and (3), would only favour the derivation of

(4*) *Ceteris paribus*, if S were in state B1, he would be in state B2.

Now, the question that one should ask is – is the derivation of (4*) together with premises (2) and (3) from (1*) an imposition of the principles of rationality on the evidential grounds of physical theory? And we can answer that it isn't, because the existence of escape clauses permits the variation of physical laws from world to world without thereby implying the violation of the norms of rationality. How much variation can be supported while keeping the amount of parallelism required by the existence of bridge laws is an open question, but I think that so much as this is possible:

(4') *Ceteris paribus*, if S were in state B1, he would be in state B2, 99% of cases or in state C, 1% of cases.

[9] I discuss this view of Davidson at length in "Irrationality and Division" (unpublished manuscript).

In such a case we could not find out from the a priori principles of rationality plus the bridge laws in which world we were – the result of the constrains not being strong enough to impinge on the physical. Moreover, the nomological possible worlds would form, as they should, a firm subclass of the rational possible worlds.

What about the other derivation, from bottom up? Yalowitz takes the view that a similar argument can be set up to show that (4*), (3), and (2) do not threaten the constitutive principles of (1*). And so he thinks that the master argument is flawed. But it seems to me that this is a mistake.

Let's recapitulate; the argument thus far has been that the mental and the physical have distinctive features, and the existence of bridge laws would dilute those features in a way that each could be said to lose its identity; moreover we have seen that for the right conclusion to follow we have to start with a premise that presupposes strict laws. Now, we have seen that there are no psychological strict laws. Nevertheless, we can save the master argument by noticing that Davidson holds that physical laws are strict laws, and that his reasons for that view are independent of his reason for mental anomalism[10]. So instead of beginning with (4*), we begin with (4) and from (3) and (2) conclude (1). But as we have seen we should have concluded (1*) consequently we have to rule out our hypothetical bridge laws.

Now the way that this is related to the master argument is obvious. Instead of focusing on the normativity of the mental, we focus on the fact that the mental cannot be subsumed by strict laws, whereas the physical can. And so the master argument is preserved.

One interesting conclusion of the master argument thus interpreted is that if we can rule out bridge laws between the psychological and the physical, we can do the same with any other realm that is ontological related with the physical, say by token identity, but that presupposes *ceteris paribus* laws.

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[10] Though I agree with Davidson on the strictness of physical laws, my reasons only partially coincide with his. In particular, I think one of the reason for that is the closure and comprehensiveness of the physical, though I do not think that these points are primary, as Davidson. However, here is not the place to discuss this.

REFERENCES

Davidson, D.
1970, 'Mental Events' in Davidson, 2001
1974, 'Psychology as Philosophy' in Davidson, 2001
2001, *Essays on Actions and Events*, Oxford: Clarendon Press

Evenine, S. 1991, 'Donald Davidson'. Stanford University Press.

Kim, J. 1985, 'Psychophysical Laws' *in* Kim, 1993
Kim, J. 1993, *Supervenience and the Mind*, Cambridge University Press

Yalowitz (1995), 'Rationality and the Argument for Anomalous Monism'. Philosophical Studies 87.