

DO TROPES RESOLVE THE PROBLEM OF MENTAL CAUSATION?

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One of the reasons why the problem of mental causation appears so intractable is that there is no general agreement about what would constitute a legitimate way of dealing with the problem. For instance, Donald Davidson appears to think that there is no problem for his theory because

- (i) Mental events are physical events
- (ii) These physical events are efficacious
- (iii) Causal relations hold between particulars and not in virtue of properties of particulars
- (iv) Events are particulars.¹

But his critics think that there is a separate question of whether mental events cause other events in virtue of their physical properties or their mental properties. They claim (falsely in my opinion) that other parts of Davidson's theory suggest that he is committed to replying 'in virtue of their physical properties', if only he would allow the question.²

Precisely the same difficulty arises with regard to David Robb's recent paper.³ Robb puts forward the idea that if we take tropes to be those things in virtue of which causal relations hold ('the properties of causation', p. 187), we can resolve one pressing problem of mental causation. *Tropes* are abstract particulars, wholly present in individuals but logically incapable of being present in two individuals at the same time. By contrast, *universals* are wholly present in individuals *and* capable of being present in more than one individual at the same time. To give Robb's illustration, on the trope view the yellowness of two bananas involves two distinct tropes of yellow. It is admitted that these two tropes are similar, but we must be careful not to say that they are similar because they share the trope yellow. *Concrete* particulars, on the other hand, *have* tropes – bananas have yellow tropes. Officially, Robb is neutral about types – that is, about whatever explains the fact that we can truly say two yellow bananas have the same colour. *Types* are either sets of resembling tropes or universals (see pp. 186–8).

¹ Donald Davidson, 'Thinking Causes', in J. Heil and A. Mele (eds), *Mental Causation* (Oxford UP, 1993), pp. 3–17.

² For instance J. Kim, 'Can Supervenience and "Non-Strict Laws" Save Anomalous Monism?', in Heil and Mele, pp. 19–26, at p. 23; B.P. McLaughlin, 'On Davidson's Response to the Charge of Epiphenomenalism', in Heil and Mele, pp. 27–40, at pp. 37–9; E. Sosa, 'Davidson's Thinking Causes', in Heil and Mele, pp. 41–50, at pp. 45–8.

³ D. Robb, 'The Properties of Mental Causation', *The Philosophical Quarterly*, 47 (1997), pp. 178–94.

Everybody can agree that tropes are causes.⁴ Robb seeks to establish that causal relations hold in virtue of tropes rather than types. His aim is to challenge the assumption that the properties of resemblance are the properties of causation (e.g., at p. 192). So when we say the pear depressed the scale pan in virtue of having weight – that the pear’s weight was causally relevant – we are talking of a weight trope, not type.⁵

My aim is to consider whether Robb’s trope approach is successful in resolving the problem he identifies (the answer will be ‘No’), and to compare his approach with the event approach criticized by him. I shall argue that no advance has been made on this other approach and, indeed, that the trope approach in general will not help us to resolve the problem of mental causation.

The problem Robb addresses is generated by the following three claims:

Distinctness: mental properties are not physical properties (p. 182)

Closure: every physical event has in its causal history only physical events and properties (p. 183)

Relevance: mental properties are (sometimes) causally relevant to physical events (p. 180).

Robb accepts that mental types are distinct from physical types – hence *Distinctness* holds for types. However, he denies that mental tropes are distinct from physical tropes. Hence he retains *Closure* for tropes – reading ‘tropes’ for ‘properties’ in the formulation above. But since mental tropes are physical tropes, he can retain *Relevance* – reading ‘tropes’ for ‘properties’ there too. So all is well with the world.

On hearing this solution, one is tempted to ask the same question as Davidson has been asked. Is it in virtue of a trope’s being a mental trope that mental tropes cause things? Question not allowed. It is a singular merit of Robb’s paper that he presents considerations to show how this question is less appropriate than the question posed for Davidson, and attempts to massage our objections away. But it is hard not to remain unsatisfied, feeling that the problem has been dealt with by meta-physical sleight of hand – and by a suitable dose of obstinacy at certain points.

How can we resolve the issue? It is one thing to have nagging worries; it is quite another to have a substantial line of complaint. I suggest the following constraint upon any solution of the problem of mental causation (indeed, I suspect that the constraint has more general application and is fairly widely recognized) – the *bulge in the carpet* constraint:

⁴ See D. Ehring, ‘Mental Causation, Determinables, and Property Instances’, *Noûs*, 30 (1996), pp. 461–80, at pp. 465–7.

⁵ The position has also been advanced in C. and G. Macdonald, ‘Mental Causes and the Explanation of Action’ (MCEA), *The Philosophical Quarterly*, 36 (1986), pp. 145–58, repr. in L.F. Stevenson *et al.* (eds), *Mind, Causation and Action* (Oxford: Blackwell, 1986), pp. 35–48 (page references below to the latter), at pp. 37–40; G. Macdonald, ‘The Nature of Naturalism’ (NN), *Proceedings of the Aristotelian Society*, Suppl. Vol. 66 (1992), pp. 225–44, at pp. 231, 235–7; C. and G. Macdonald, ‘How to be Psychologically Relevant’ (HPR), in C. and G. Macdonald (eds), *Philosophy of Psychology* (Oxford: Blackwell, 1995), pp. 60–77; J. Heil, *The Nature of True Minds* (Cambridge UP, 1992), pp. 135–9. In HPR the Macdonalds talk in terms of property-instances, but claim that these are not tropes because the latter are essentially typed whereas the former are not (p. 74 fn. 9). Not much is made of this difference; we can safely ignore it here.

No candidate solution to a philosophical problem should raise another problem which appears just as intractable and which requires the resolution of an issue similar to that which made the original problem so intractable.

If it does, then it is plausible that the solution has been achieved by linguistic *fiat* and the problem has not gone away. So I counsel looking at Robb's proposal to see whether the problem of mental causation can be raised in a new way.

To get our bearings, let us return to the disallowed question. The issue is whether it is legitimate to ask 'Was it in virtue of being a mental trope or a physical trope that this particular trope caused *E*?'. Robb says (p. 191) that

A causally relevant property *F* simply does not have various aspects such that one can legitimately ask whether some but not others are responsible for *F*'s being causally relevant.

We do not ask whether mass was efficacious in virtue of being mass. He suggests that this point applies whatever view one adopts of the properties of causation.

In fact it does not seem to apply for any view, as the property of being air shows. My house burns down. It is quite legitimate to ask which aspect of air was responsible. The answer is that the air was causally relevant in virtue of being part oxygen. So it seems that *complex* properties do have aspects concerning which one can ask 'Was that responsible?', namely, their constituents. In Robb's own example a red ball is dropped on a sheet of metal, causing a dent. He suggests that, once we have recognized that there was a dent because the ball had mass, we should not ask the further question 'But was the mass causally relevant *qua* mass?'. This appears wrong. Suppose that cricket balls would have dented the metal whereas tennis balls (with less mass) would not. We might allow that the red ball causes a dent *qua* having mass, but go on to say that, more specifically, it was *qua* having a mass of 5lb. rather than just *qua* mass. It also seems that, if two properties stand as determinate to determinable, we can ask 'Which is relevant?'. So we have two perfectly clear senses in which properties can have aspects which raise questions of causal relevance.

Robb suggests that another reason for rejecting this type of question is that there is a danger of vicious regress. If we allow that we can ask whether or not a particular aspect of a property is causally relevant, then we should also allow that we can ask whether a particular aspect of an aspect was causally relevant, and so on. This worry seems overstated. First, it is hard to see why the regress is vicious. Either there are aspectless properties or there are not. If there are aspectless properties, then there will be properties for which the regress comes to an end. If there are no aspectless properties, then it is true that there will always be a further question about whether an aspect of a particular property was causally relevant. But this seems entirely legitimate, given that there will always be aspects of aspects. The regress just reflects the way the world is, and there is nothing we can do about that. If Robb's argument did work, we could provide a similar argument to show that there must be some properties without aspects. If there were no aspectless properties, then we would have a regress. For each property, we would be able to ask what aspects it had. This would give rise to a whole series of questions of the sort Robb counsels against. So

there must be aspectless properties. But if there are aspectless properties, then there will be no regress in the case of causal relevance because we would reach bedrock with these aspectless properties. The upshot is that, if I am wrong about the regress not being vicious, then it seems we can appeal to this fact to demonstrate that it is all right to enquire about the causal relevance of aspects of properties.

These points at least throw into question Robb's claim (p. 191) that our practice of assuming that types are causally relevant is incoherent or misconceived. However, it is worth considering whether Robb can defend his strategy as a reform of our practice of attributing causal relevance even if it cannot capture unreconstructedly all that we are inclined to say. The thought would be that since the problem of mental causation does not arise in the new perspective, and since the three claims (*Distinctness*, *Closure* and *Relevance*) are independently compelling, we should reform our practice in the way that Robb indicates. Unfortunately, the problem does arise. It is only because a particular issue is ducked in Robb's paper that it apparently does not.

The distinctive feature of the trope approach is that what unites tropes under one type is not something that can be considered causally relevant. So the following two questions are disallowed, depending on how one understands types:

- (a) Was it the ball's possession of the universal mass or of the universal 5lb.-mass which was causally relevant?
- (b) Was it the ball's exact resemblance to other balls in respect of mass or in respect of 5lb.-mass which was causally relevant?

But we can find other ways of asking the same question within the trope perspective. Thus

- (c) Was the mass trope or the 5lb.-mass trope causally relevant? (Alternatively, was the ball's possession of a mass trope or its possession of a 5lb.-mass trope causally relevant?)

Why does Robb think that such questions cannot arise? It seems to me that the answer is that he has a certain view of when two tropes are identical. In this case, he thinks that the mass trope and the 5lb.-mass trope are identical, and so the contrast which question (c) draws is not appropriate. But now I think he faces something of a dilemma. Either (since tropes are the properties of causation) the legitimacy of these questions suggests he has the wrong view of trope identity, or their legitimacy is evidence that tropes are not the properties of causation. Let 'tripes' be thought of as property instances which make up the various aspects of tropes. Then perhaps it is tripes rather than tropes that are the properties of causation. The force of this dilemma becomes very clear when Robb squares up to the objection that the trope approach makes too many properties causally relevant. So I suggest that Robb should be taken as conceding that the trope view is open to the objection that faces Davidson's view (if that objection is phrased properly), and as attempting to provide a reply to it in his reply to a related objection from Yablo.⁶

⁶ S. Yablo, 'Mental Causation', *The Philosophical Review*, 101 (1992), pp. 245–80, at pp. 259–60.

Here is Robb's attempt to deal with the objection in terms of Yablo's example. Suppose (as Robb does) that there is one volume trope in Ella's voice as a result of which it is true that she sings at 70dB or more, 80dB and under 90dB. Any note of over 70dB will shatter the glass. Robb suggests that our inclination to say that

1. Ella's voice caused the glass to shatter in virtue of being over 70dB
is true, while

2. Ella's voice caused the glass to shatter in virtue of being under 90dB

is false should be explained by their different pragmatic implications. For (1) pragmatically implies that having an over-70dB trope is sufficient for causing the glass to shatter – which is true. Whereas (2) pragmatically implies that having an under-90dB trope is sufficient for causing the glass to shatter – which is not. There are occasions when it may be identical with a 50dB trope and have no such effect. For the sake of argument, let us agree that this explanation has a certain degree of plausibility in this case. It seems to me that we have only captured the notion of causal relevance by these means if this manoeuvre is *not* available for cases where we would clearly deny that a causal relation held in virtue of the property P.

But this is not so. Here is a case of causal relevance that has informed the discussion. Did the glass shatter as a result of the soprano's singing a note in virtue of its *pitch* or its *meaning*? We want the answer that it is the pitch which is causally relevant and not the meaning. The question is, how does the trope theorist get this answer? What stops someone from saying that the meaning of the note is causally relevant because the meaning trope is identical to the pitch trope? It is one thing to explain away borderline cases in the way that Robb recommends. It is quite another to appeal to different pragmatic implications to account for our feeling that something is not causally relevant, in cases absolutely central to our understanding of relevance. Until more has been said, any property which co-occurs with an instance of another property which is efficacious can be counted as causally relevant – dismissing possible objections that it is not as a matter of pragmatics.

The obvious thing to do at this stage is formulate constraints upon when two tropes can legitimately be considered identical and when they cannot. Presumably these conditions cannot just be that two tropes are identical if and only if the causal relevance of one implies the causal relevance of the other. That would trivialize the whole approach. Instead, we must provide an independent account of when two tropes are identical. For instance, we might hold that two types have the same trope on an occasion if one type supervenes on the other.⁷ But then we have to go on to explain why properties with these identity-conditions rather than those of tripes – which, let us suppose, involve identity (or necessary co-extension) of types rather than mere one-way supervenience – are the properties of causation. This just involves us in the problem of mental causation all over again. What we would now need to do is establish that mental tropes are identical to physical tropes according to our account of their identity-conditions, and then show that that makes mental tropes causally relevant. It is the second part – the need to show that trope identity

⁷ See MCEA pp. 39–40, 46–7; NN pp. 237–8; Heil pp. 135–9; HPR pp. 65–7.

brings with it relevance – that resurrects the problem. It is for this reason that I think that Robb's account (indeed, any trope account) fails to satisfy the *bulge in the carpet* constraint. The problem of mental causation has just been filtered through the problem of trope identity. But it is still there.

It is worth underlining this point because it is fundamental. Our commitment to the causal relevance of mental properties is sufficiently strong to provide us with grounds for believing any metaphysical story that succeeds over others in making mental properties causally relevant. This is the basis of claims that the mental properties must be identical with physical properties, or be determinables to determinate properties, or be properties which supervene upon physical properties (see Kim and Yablo). The question is whether the trope approach can provide a satisfying account of the causal relevance of the mental. If it is too easy to be identical to a causally relevant trope, this will provide no solace. So the burden is upon the proponent of such a solution to defend a particular account of when two tropes are identical which succeeds in denying efficacy to those properties that seem causally irrelevant and in allowing causal relevance to those which seem relevant – the very problem with which we started.

One way of driving this point home is to remark how little further forward we are from the position Robb ascribes to Davidson. Robb criticizes him for being unable to explain how mental properties are causally relevant. But Davidson could say that causal relations between events do not hold in virtue of properties at all, but rather (if anything) in virtue of the very events themselves. He could then give precisely the account of what we are inclined to think about causal relevance to which Robb seems ultimately driven. He could say that

- (a) The singing of the note caused the shattering of the glass in virtue of its being a singing of a note with a certain meaning
- (b) The singing of the note caused the shattering of the glass in virtue of its being a singing of a note with a certain pitch

were both true. That is because the descriptions following the 'in virtue of' phrase pick out classes of events. In this case, an efficacious event belonged to both classes. The only reason for judging (a) to be false and (b) to be true is that (a) and (b) respectively pragmatically imply that a singing of a note with a certain meaning and a singing of a note with a certain pitch are sufficient for the shattering of the glass. But the former pragmatic implication does not hold.

If Robb was not satisfied with such an answer for Davidson, then he should not be satisfied with his own response on behalf of tropes. A satisfactory reply in both cases is an account of trope identity or event identity that does not lose the distinctions we want to make about what is causally relevant and what is not. Until then, it is no comfort that mental tropes are physical tropes. Either the trope solution is false or, at best, it comes in just when the problem has been solved.⁸

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