

Events and the regress of pure powers: reply to Taylor

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Abstract

Taylor has recently argued that adopting either the standard Kimian or Davidsonian approaches to the metaphysics of events quite directly solves the regress of pure powers. I argue, though, that on closer inspection Taylor's proposal does not succeed, given either the Kimian or the Davidsonian account of events.

1. Taylor's new solution to the regress of pure powers

According to the pure powers view, every property is metaphysically individuated just by its dispositional nature, which consists in its dispositional connections to manifestations, and perhaps to stimuli.¹ Given that these manifestations and stimuli are themselves, or are constituted by, pure powers, their identity is fixed by their dispositional connections to further manifestations and stimuli, which are themselves pure powers. The apparent consequence is an infinite regress or circularity in the individuation of powers, on which every power is individuated by its relations to

¹ Vetter (2015) argues that stimuli are not constitutive of the dispositional natures of properties, while Bird (2007) holds that they are.

further powers. Critics allege that the resulting regress leaves properties with indeterminate identities and, consequently, is vicious.²

The standard response is to invoke graph theory to argue that powers can have determinate identities, even if every power's identity is fixed by its relations to further powers (Bird 2007: 138-146). This response, though, is highly controversial (see Barker 2009, Lowe 2010 and Oderberg 2011 for criticisms of the response) and, as a result, the regress objection remains influential.

Taylor (2021),³ however, has recently argued that the objection can be avoided by conjoining standard metaphysical accounts of events – specifically, a Davidsonian or Kimian account – with the independently motivated claim that manifestations and stimuli are events. The apparent result is a response to the regress objection that makes far less controversial assumptions than the graph-theoretic response. I argue, though, that this response does not succeed, given either a Kimian (§2 and §3) or a Davidsonian (§4) account of events.

2. The partial individuation regress

Taylor primarily develops his proposal by focusing on token-powers and Kimian events. He begins with the observation that the manifestations of token-powers are plausibly events. To take Taylor's (5) example, the manifestation of a vase's being fragile is plausibly the event of that vase breaking. On the Kimian account of events, any event consists of an object, a property and a time (Kim 1993: chs. 1 and 3). So, the event of *the vase's breaking* consists of the vase, the property, *breaking*, and the time of the breaking.

² The version of the regress objection outlined here follows the version that Bird (2007: 136–138) raises for the pure powers view, which is, in turn, closely related to those presented by Lowe (2006: 138) and Robinson (1982: 114–115),

³ All subsequent references to Taylor are to this paper.

Taylor (4–5), though, points out that a fragile vase could break at different times and, so, the time of breaking is not essential to the manifestation of the vase’s fragility. On the other hand, the vase’s fragility could only manifest in the breaking of *that vase*. The vase’s being fragile, then, is individuated by a manifestation that is jointly constituted by the property, *breaking*, and the particular vase. This result immediately distinguishes the vase’s fragility from every token-power with a manifestation not involving that vase.

As this example illustrates, given Kimian events, Taylor’s central idea is that token-powers are distinguished from each other by the objects that are constitutive of their manifestations. This proposal is strengthened, if token-powers have multiple manifestations or are partially individuated by their stimuli (5). In both cases, there will be further events that can aid in the individuation of token-powers.

This strategy, though, only works if objects are not constituted by pure powers. For this reason, Taylor (§5) thinks that his proposal requires that pure powers theorists accept at least a two-category ontology, involving a fundamental category of objects alongside a fundamental category of properties.

While Taylor does not spell out in detail how to extend this approach to power-types, he says that event-types ‘may be composed in a Kimian fashion by constituents including object-types’ (4). So, the idea appears to be that ‘object-types’ in the manifestations of power-types play the same individuating role as objects in the manifestations of token-powers.

Given Kimian events and event-types, then, Taylor’s proposal is that the manifestations of powers are partly constituted by irreducible objects or object-types. Because these objects or object-types are individuated independently of powers, they can play a role in individuating powers without generating a regress.

This proposal, though, still entails that the manifestations of both token-powers and power-types are *partly* constituted by powers and, so, that the identity of any power is *partially* fixed by its relations to further powers. Taylor is aware of this point and addresses it by distinguishing between two claims (6):

- i. Pure powers' identities are fixed entirely by their relations to other pure powers.
- ii. Pure powers' identities are fixed partially by their relations to other pure powers.

Taylor accepts that, while his response to the regress objection blocks (i), it does not block (ii), but he thinks that this result is acceptable because only (i), and not (ii), is genuinely problematic. The idea that (ii) is problematic, he says, 'amounts to an implausible insistence that relations to other properties must be *irrelevant* to a property's identity' (6). This idea, Taylor points out, would also rule out a mixed view on which some properties are pure powers and others are categorical.

Note, though, that the claim that relations to other properties are relevant to *some* properties' identities need not lead to a regress. Given the mixed view, for instance, the identity of a power might be partially fixed by its relation to some categorical property. Because the categorical property's identity is fixed independently of its relations to any other properties, no regress ensues.

On the other hand, (ii) entails that *every* property's identity is partially fixed by relations to further properties. This claim *does* lead to an identity regress, as it entails that every property's identity is partially fixed by some other property's identity. Opposition to (ii), then, need not depend on a general opposition to any property's identity being partially fixed by a relation to some other property, but rather on opposition to a *regress* in the partial individuation of properties.

Opposition to this regress is, furthermore, supported by the standard motivation for finding the regress of pure powers objectionable. This motivation is based on the idea that a regress or circularity in individuation relations makes it impossible for the relations to fix the identities of their relata. If this idea is right in the case of relations of full individuation, though, then it is unclear why it

shouldn't hold also for relations of partial individuation. The failure of the individuation relations, in turn, is supposed to be problematic because it entails that powers lack a determinate identity.⁴ This result, however, follows not just from a failure in the full individuation of powers but also from a failure in their partial individuation, as the latter still means that the identities of powers are not fully determined.

So, even if Taylor's Kimian response to the regress problem does everything that he hopes, it still allows a regress in the *partial* individuation of powers. This partial regress, though, appears to be sufficient to motivate critics' concern that a pure powers ontology entails the existence of entities with indeterminate identities. The result is that the response does not seem capable of actually solving the problem.

3. Kimian events and event-types

Even if this difficulty can be adequately addressed, though, there is another reason to think that Taylor's Kimian proposal fails. As I noted above, Taylor extends his strategy for Kimian events to event-types by proposing that event-types may be partially constituted by 'object-types'. This extension allows that event-types have components that need not be pure powers and, so, can, at least partially, individuate power-types without generating a regress. I do not think, though, that this extension works.

The immediate difficulty is that the proposal does not fit with a Kimian view of event-types, as Kim identifies event-types not with complexes but rather with the *properties* that partially constitute events (Kim 1993: ch. 1). So, for Kim, the event-type that is tokened in *a vase's breaking at a time* is simply the property, *breaking*.

⁴ See Bird (2007: 136–138) for a discussion of why the regress is best understood as aiming to show that powers have indeterminate identities.

On this account, because event-types just are properties, the pure powers view entails that they are pure powers. So, if the manifestations and stimuli of power-types are event-types, then every power-type is individuated just by further power-types. Consequently, conjoining Kim's account of event-types with Taylor's claim that power-types are individuated by event-types leads directly to the regress problem.

Presumably, it is for this reason that Taylor conjoins the Kimian account of events with his own proposal on which event-types are complexes that involve 'object-types' rather than with the Kimian account of event-types. While this move undermines Taylor's claim that his proposal avoids ad hoc commitments about the metaphysics of events, this bullet might be worth biting for an otherwise attractive response to the regress problem.

The question, then, is how to understand the relevant 'object-types'. As Taylor's proposal requires that objects be fundamental rather than reducible to properties, an obvious thought would be to conjoin the proposal with 'bare particularism' or substratum theory. Given substratum theory, though, there are no object-types that could do the work that Taylor requires. There is the type or category, *object*, but this type is far too broad to do the requisite individuating work. That a power-type's manifestation involves the type, *object*, does little, if anything, to individuate it.

A better candidate for a view on which objects are fundamental but there is, nonetheless, a substantive notion of object-types is the Aristotelian 'substance view' of objects (Ellis 2001; Loux 2006; Lowe 2006). On this account, objects are instances of *kinds* so that, for instance, an electron is an instance of the kind, *electron*. This approach provides a view on which objects do not reduce to properties and 'object-types' exist as kinds. It also seems to allow for a conception of event-types as complexes of kinds and properties – such as the kind, *electron*, and the property, *force-exertion* – that captures the idea that event-types involve object-types.

Conjoining Taylor's account of the individuation of power-types with this approach would further inflate the proposal's commitments. It would come not only with a commitment to fundamental

objects and a rejection of the Kimian account of event-types but also with a commitment to substantial kinds, which pure powers theorists have generally avoided. Natural kind essentialists, moreover, generally hold that kinds have certain powers essentially. Consequently, invoking kinds to individuate powers appears to lead to further circularity, as the kinds are themselves, at least partially, individuated by powers. In response, Taylor could deny that kinds have essential powers, but this would be a further substantial ad hoc commitment.

Even if the pure powers theorist were willing to take on these commitments, though, I do not think the approach can do the work that Taylor needs it to do. The difficulty is that the manifestation-types of standard examples of powers, such as flammability or fragility, do not involve specific kinds. While pure powers theorists who adopt a relatively sparse conception of properties may not be worried about these cases, a parallel difficulty arises for archetypal examples of *sparse* power-types, such as charge or gravitational mass.⁵ For instance, the manifestation and stimulus of the dispositions that follow from Coulomb's law involve no kinds but only the properties of force, charge and distance. Consequently, even allowing that irreducible kinds can feature in event-types, these kinds cannot help to individuate paradigmatic examples of power-types.

I do not see, then, how Taylor's attempt to fix the identities of power-types by invoking event-types that involve object-types can work. Making sense of the proposal requires adopting a set of substantial, seemingly ad hoc, metaphysical commitments. Even given these commitments, though, the approach still fails, because the manifestations and stimuli of archetypal power-types do not involve kinds.

4. Davidsonian events

⁵ Bird (2011) makes this point in the course of criticising Lowe's (2006) account of the laws of nature.

I have argued thus far that Taylor's proposal runs into serious problems when based on a Kimian account of events. I now argue that the proposal fares no better when combined with a Davidsonian account.

On the Davidsonian account that Taylor (3) employs, events are 'ontological primitives, individuated by their causal relations to other events'.⁶ While Taylor does not say in any detail how his proposal would run given this conception of events, the idea appears to be that Davidson's primitive events would take the place of objects in the Kimian account. So, because a token-power's manifestation and stimulus are primitive events, the power would be individuated by its relation to them without producing any regress or circularity in the individuation of powers.

This proposal comes with a commitment to the causal criterion for the individuation of events, but probably the most influential objection to this criterion is that it *generates a vicious regress or circularity in the individuation of events* (Lowe 1989). The basic problem is that, if every event is individuated just by its causal relations to other events, then every event is individuated by its relations to further events. So, invoking the Davidsonian account of events to avoid the regress problem simply trades one serious problem with a regress in individuation relations for another.

Moreover, given a standard power-theoretic account of causation, conjoining Taylor's proposal with the causal criterion generates a further circularity in individuation relations. Powers theorists generally hold that an event, *c*, is the cause of an event, *e*, at least partly in virtue of *c*'s involving a power or set of powers that has *e* as its manifestation (Mumford and Anjum 2011). For instance, striking a vase causes it to break at least partly in virtue of the vase's being fragile.

Given the causal criterion, though, the breaking of the vase is partly individuated by its being caused by the vase's being struck. So, the vase's being fragile is involved in determining that the vase's being struck causes its breaking, which in turn is involved in determining the identity of the vase's

⁶ This account is given in chapter 8 of (Davidson 2001).

breaking. Consequently, the vase's fragility is involved in determining the identity of the vase's breaking.

On Taylor's proposal, though, the identity of the vase's fragility is fixed by its connection to the vase's breaking. The result is a circularity in individuation relations, on which the identity of the vase's fragility is, at least partly, fixed by the vase's breaking, but the identity of the vase's breaking is also, at least partly, fixed by the vase's fragility.

Invoking the causal criterion to avoid the regress of pure powers, then, still leaves powers theorists with serious problems with a circularity or regress in individuation relations. There may, though, be a way to rescue the key idea behind Taylor's appeal to Davidsonian events. After giving up the causal criterion, Davidson (2001: 309-312) combined his primitivist view of events with a spatiotemporal criterion of individuation. According to this criterion, two events are identical just if they occur in exactly the same space and time. Unlike the causal criterion, this criterion does not lead to any obvious circularity in the individuation of events or powers. So, this account might fit better with Taylor's argument that Davidson's primitive events provide an independently motivated account of events that allows a pure powers ontology to avoid circular individuation relations.

A well-known concern about the spatiotemporal criterion, raised by Davidson (2001: 178) himself before adopting it, is that it produces a highly rough-grained individuation of events. Whatever one thinks of this characteristic of the criterion in general, it leaves the criterion incapable of individuating the manifestations of token-powers. A modified version of Davidson's famous counterexample to the spatiotemporal criterion, which is also similar to an example used by Taylor (5), demonstrates this point.

If a metal ball is placed on an inclined, heated metal plane, the ball's rolling down the plane coincides in space and time with the ball's becoming warmer. The spatiotemporal criterion, then, entails that these two events are identical. For the powers theorist, though, these events are distinct manifestations of distinct powers. The ball's power to heat up when exposed to a heated surface

does not have as its manifestation, or as part of its manifestation, the ball's rolling down an inclined plane. After all, this power could manifest without the ball rolling. So, for the powers theorist, these events must be distinct as only one of them is the manifestation of the ball's power to heat up when exposed to a heated surface.

The consequence is that, because distinct token-powers can have distinct manifestations that coincide in space and time, the manifestations of token-powers cannot be spatiotemporally individuated events. So, whatever one thinks of the rough-grain of the spatiotemporal criterion in general, it is too rough-grained to individuate the manifestations of token-powers.

Taylor's proposal, then, does not work on either Davidsonian approach. While the first approach generates further serious regress or circularity problems with individuation relations, the second is too rough-grained to individuate the manifestations of token-powers.

5. Conclusion

I have argued that Taylor's proposal does not succeed, given either a Kimian or a Davidsonian account of events. The upshot is that the pure powers theorist's best bet in responding to the regress problem remains the standard graph-theoretic response. For those who find the objections to this response compelling, the problem continues to provide good grounds to reject a pure powers ontology.⁷

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