

Making sense of powerful qualities

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Preprint of a paper appearing in *Synthese*

Abstract

According to the powerful qualities view, properties are both powerful and qualitative. Indeed, on this view the powerfulness of a property is identical to its qualitativity. Proponents claim that this view provides an attractive alternative to both the view that properties are pure powers and the view that they are pure qualities. It remains unclear, however, whether the claimed identity between powerfulness and qualitativity can be made coherent in a way that allows the powerful qualities view to constitute this sort of alternative. I argue here that this can be done, given a particular conception of both the qualitativity and powerfulness of properties. On this conception, a property is qualitative just in the sense that its essence is fixed independently of any distinct properties, and it is powerful just if its essence grounds its dispositional role.

1 Introduction

A major debate in the metaphysics of properties concerns whether sparse properties are powers or qualities. Categoricalists hold that all sparse properties are qualities and not powers, while pure powers theorists hold that at least some sparse properties are powers and not qualities. Proponents of the powerful qualities view (PQ) reject both of these positions and hold, instead, that properties are simultaneously qualitative and powerful. In fact, PQ theorists claim that any property's qualitativity is identical to its powerfulness.

According to proponents, PQ constitutes an attractive third way between categoricalism and powers theory that incorporates key advantages of both theories. Critics, however, have often alleged that PQ is incoherent, as, on a standard interpretation, powers are properties that essentially play their dispositional roles, while qualities are properties that do not. The standard response, whether implicit or explicit, is that PQ theorists are working with a different conception of powers and qualities. Taylor (2018), however, has recently argued that the alternative conceptions proposed by PQ theorists fail to clearly distinguish PQ from the pure powers view. The upshot is that, despite PQ being an influential and widely discussed position, it remains unclear whether it can provide a coherent alternative to categoricalism and pure powers theory. Moreover, even if PQ can provide such an alternative, it remains obscure how powers and qualities ought to be understood within PQ.

Here I respond to this unsatisfactory situation by arguing that a particular conception of powers and qualities provides a promising way to make sense of PQ as a coherent alternative to categoricalism and pure powers theory. On this conception, a property's qualitativity consists in its having an essence that does not involve genuinely distinct properties, while its powerfulness consists in its having an essence that grounds its occupation of its dispositional role. I argue that, given this conception of powerfulness and qualitativity, PQ looks both coherent and well-suited to provide the desired third way in the categoricalism/pure powers theory debate.

The immediate consequence is that, contra critics, it seems that good sense can be made of how PQ constitutes such a third way. A further consequence, though, is that there are grounds to favour the specific formulation of PQ discussed here. Given the substantial difficulties in making sense of PQ as a genuine alternative to both categoricalism and pure powers theory, the fact that this formulation delivers a promising way to do so provides substantial initial grounds to favour it.

It should be noted, though, that this formulation of PQ is not novel. Yates (2018) has recently explicitly defended this sort of approach to PQ, while Jacobs (2011) and Tugby (2012) have defended closely related truth-making accounts of PQ. Furthermore, other well-known accounts of PQ could plausibly be interpreted in line with the formulation under discussion here.¹ My goal in this paper, then, is not to defend a novel account of powerful qualities, but rather to argue that an extant – and arguably widely endorsed – account of powerful qualities can provide a coherent third way between categoricism and powers theory.

It should also be noted that my goal here is neither to develop this version of PQ into a detailed theory nor to argue in favour either of PQ in general or of this particular version of PQ. Instead, my aim is to clearly demonstrate how the relevant conception of powers and qualities provides a promising way to formulate PQ as a coherent alternative to both pure powers theory and categoricism. How best to develop this formulation into a detailed version of PQ and whether the resulting theory ought to be accepted are substantial questions that I here leave open. If the argument in this paper is accepted, however, then there are substantial grounds to think that the prospects of PQ depend significantly on the answers to these questions.

I begin in section 2 by clarifying the difficulty that Taylor's argument raises for PQ. In section 3, I argue that understanding powerful qualities as qualitative just in the sense that their essences are fixed independently of their connections to genuinely distinct properties allows them to be clearly distinguished from pure powers. I, then, argue in section 4 that this conception of the qualitativity of powerful qualities also allows them to have the key advantage over pure powers that PQ theorists have

¹ See, for instance, Heil (2003: 112–115) and Ingthorsson (2013: 75–78). Also, see Smith (2016: 251–253) for a discussion of the plausibility of interpreting Heil's view along these lines. One obvious difficulty with such an interpretation is that Heil (2016) rejects grounding.

claimed. In sections 5, 6 and 7, I turn my attention to the idea that properties are powerful in the sense that their essences ground their dispositional roles. In section 5, I introduce and clarify this account of the powerfulness of properties before arguing, in section 6, that conjoining this account with the conception of qualitativity developed in sections 4 and 5 results in a coherent version of PQ. In section 7, I argue that this version of PQ is well-suited to do a significant part, but not all, of the theoretical work of pure powers theory. I conclude that this version of PQ provides a promising way to make sense of how PQ might constitute a genuine third way that delivers important advantages of both pure powers theory and categoricism.

2 The challenge in making sense of powerful qualities

John Heil (2005: 351), a well-known proponent of PQ, has claimed that the view 'is generally greeted with incredulous stares'. Quotes from both a prominent powers theorist and a prominent categoricist demonstrate this reaction. The powers theorist, George Molnar (2003: 155), responds to the view in the following way:

The very same thing is both dispositional and qualitative. How could that be, given that a power is a property that is essentially directed to a specific manifestation, whereas a quality is a property that is not essentially directed to any manifestation?

The response of the categoricist, David Armstrong (2005: 315), is strikingly similar:

I confess that I find this totally incredible. If anything is a category mistake, it is a category mistake to identify a quality—a categorical property—and a power, essentially something that points to a certain effect. They are just different, that's all.

These quotes, though, indicate not only the incredulity to which Heil refers but also a source of that incredulity. Specifically, the incredulity here is driven by the idea that any power is 'essentially directed

to a specific manifestation' or 'essentially something that points to a certain effect', while qualities are not.

While talk of powers essentially 'pointing to' or 'being directed to' their manifestations is common,² it is also metaphorical and not particularly clear. The idea underlying this metaphorical language is that powers are essentially dispositional properties. More precisely, a power is essentially directed at its manifestation just in the sense that it either is essentially a disposition for its manifestation or that it essentially bestows on any bearer a disposition for that manifestation. To claim that qualities are not essentially directed, then, is to claim that they are not, in this way, essentially dispositional.

So, Molnar and Armstrong's incredulity toward PQ ultimately stems from a conception of powers and qualities on which the former but not the latter are essentially dispositional. Given this conception of powers and qualities, PQ is straightforwardly incoherent and, consequently, incredulity toward it is entirely warranted. As this conception of powers and qualities is standard in the pure powers theory/categoricalism debate,³ the incredulous stare response to PQ is plausibly driven by the fact that, on a standard conception of powers and qualities, PQ is straightforwardly incoherent.

The only way around this difficulty for PQ theorists is to show that they are employing a different conception of powerfulness and qualitativity on which PQ plausibly comes out coherent.⁴ Taylor (2018)

² In addition to Armstrong and Molnar, both of whom also use this terminology in other places (Armstrong 1997:79; Molnar 2003: 60–81), examples include Heil (2003: 124), Bird (2007: 126), Martin (2008) and Tugby (2013: 456).

³ For this sort of conception of powers, see Swoyer (1982); Ellis and Lierse (1994); Shoemaker (1998); Ellis (2001); Bird (2007); Bauer (2013); Tugby (2013); Yates (2013). For the relevant conception of qualities, see Armstrong (1997: 80-83); Bird (2007: 67; 2016); Barker (2013: 606) and Tugby (2013: 462)

⁴ For this sort of response, see Heil (2003: 111–112) and Taylor (2013: 94; 2018: 1430).

argues in this vein that, once we clarify what PQ theorists actually mean by identifying properties' qualitativity with their powerfulness, the threat of incoherence dissipates. However, he also argues that clarifying PQ in this way demonstrates that it is, in fact, indistinguishable from the pure powers view.

Taylor begins by identifying two accounts that PQ theorists have given of the qualitativity of powerful qualities. Firstly, PQ theorists sometimes claim that powers are qualities just in the sense that they are occurrent properties – that is, they are fully real, actually existing properties.⁵ Secondly, PQ theorists often invoke qualia in elucidating qualities.⁶ While the central thought is that qualities, in general, are in some key respects like qualia, PQ theorists have often not been clear about just what these respects are. Taylor (2018: 1427), though, uses Jacobs' relatively detailed exposition of the idea to list the following ways in which qualities are like qualia: 'they differ from each other, not merely numerically, they have their own nature, and to encounter one is not to encounter them all'.

Taylor argues, however, that properties being qualitative in either of these ways does not distinguish them from pure powers. In the first place, that properties are qualitative just in the sense that they are occurrent fails to distinguish them from pure powers, because powers theorists standardly endorse the full reality and actuality of powers. In the second place, powers theorists also standardly hold that powers have their own natures and do not differ merely numerically.

Taylor, then, argues that the 'purity' of pure powers also fails to distinguish them from powerful qualities. Both PQ theorists and pure powers theorists will accept that powers are pure in the senses

⁵ Taylor (2018: 1425–1426) gives as examples Heil (2010: 70; 2012: 59), Martin (1996: 74) and Strawson (2008: 278). Another recent example is Jaworski (2016: 54–56).

⁶ Taylor's (1998: 1426–1427) examples are Martin (1997: 193), Heil (2003: 76), Carruth (2016: 34), Ingthorsson (2013: 66) and Jacobs (2011).

that they are not categorical – where ‘categorical’ simply means ‘non-dispositional’ or ‘non-powerful’ – and that their being is exhausted by their powerfulness. Of course, PQ theorists will say that powers are both powerful *and qualitative*. However, as they will also say that a power’s qualitativity is identical to its powerfulness, this claim cannot be taken to mean that the being of a powerful quality includes something other than its powerfulness. On the other hand, both PQ theorists and pure powers theorists will deny that powers are ‘pure’ in the sense of not being genuinely real features of entities or of not being amenable to description in non-dispositional terms.

The upshot is a seemingly serious threat to the coherence of the idea that PQ constitutes a third way between pure powers theory and categoricism. PQ cannot, on pain of contradiction, be formulated using the standard conception of powers and qualities as, respectively, essentially dispositional and not essentially dispositional. If Taylor’s argument is correct, however, the alternative conceptions that PQ theorists have provided fail to clearly distinguish powerful qualities from pure powers. The resulting challenge is to demonstrate that PQ can be coherently formulated in a way that allows it to constitute the desired sort of third way between categoricism and powers theory.

3 Intrinsic natures and the qualitativity of powerful qualities

The first step in meeting this challenge would be to identify a plausible sense of ‘quality’ that can distinguish powerful qualities from pure powers. I now argue that the sense of ‘quality’, common in the pure powers theory/categoricism debate, on which it refers to properties with intrinsic natures can do this work.

PQ theorists sometimes contrast pure powers with powerful qualities by claiming that the former, but not the latter, are relational (Jacobs 2011; Ingthorsson 2013; 2015). This suggests that the qualitativity of powerful qualities consists in their being non-relational in a way that contrasts with the relationality

of pure powers. One way this idea has been cashed out is as the view that pure powers, but not powerful qualities, are relations (Jacobs 2011; Ingthorsson 2013: 60).

Taylor (2018: footnote 4) briefly addresses this idea in a footnote and rejects it for three reasons. Firstly, he claims that it is dubious that powers theorists who give a relational account of powers think that powers are relations, especially given that they regard powers as intrinsic properties. Secondly, he points out that both Molnar and Heil deny that powers are relational. Thirdly, he claims that PQ and the pure powers view are 'in the same dialectical position here: both of them must accept the conditional that *if* powers are identical with relations, then properties themselves must be identical with relations'. I am now going to address the first two objections, while deferring a discussion of the third to the next section.

The first objection echoes a point that has been made a number of times in the literature. Where powers theorists have endorsed the relationality of powers, their idea has standardly been, not that powers are relations, but that they essentially stand in a second order dispositional relation with their manifestation properties.⁷ In this way, the essence or identity of a power is constituted or determined by its relation to a distinct property. As Bird (2007: 141), Barker (2013: 627) and Tugby (2013: 465) all make clear, though, that powers have this kind of relational essence does not entail that they are relations. Assuming that *fragility* is a power, that the nature of *fragility* is constituted by its relation to the property *being broken* is consistent with a vase's fragility not being a relation between the vase and anything else.

⁷ See Mumford (2004), Bird (2007) and Tugby (2013) for this sort of position.

Bird (2007: 141) and Tugby (2013: 465) also point out that the fact that powers are, in this sense, relational appears to be consistent with their being intrinsic properties. To make this point, it will be useful to employ the conception of intrinsic properties that Tugby (2013: 465) uses:

P is an intrinsic property of x if and only if x's having P is independent of the existence of distinct particulars and x's relation to them.

Clearly, if powers were relational in the sense of being relations, they could not be intrinsic in this sense. On the other hand, that powers have relational natures in the sense just outlined looks consistent with their being intrinsic properties. A power could essentially stand in a second order relation with its manifestation property, even if x's having that power is independent of the existence of distinct particulars and x's relation to them. For instance, even if fragility is essentially related to breaking, a vase can instantiate fragility without being related to anything that is broken or to any other particular.

Despite this point, it remains less than fully clear that pure powers can be intrinsic properties.

Ingthorsson (2013) points out that, while Bird and Molnar both claim that pure powers are intrinsic, they also both think that token powers are directed at their token manifestations. However, the latter commitment seems to entail that x's having a power depends on the existence of some distinct particular to which x is related by the 'directedness' relation.

As Ingthorsson notes, Bird and Molnar's attempts to accommodate unmanifested token powers clearly illustrates this result. For instance, to accommodate the directedness of such powers at their token manifestations, Bird posits that these manifestations actually exist as unrealised possibilities. The apparent implication is that token powers existentially depend on their token manifestations in a way that looks inconsistent with powers being intrinsic properties.

It seems possible, however, for powers theorists to avoid this result by claiming that, while power types are directed at their manifestation types, token powers are not directed at their token manifestations

(Mumford 2004: 194–195; Handfield 2008: 119; Tugby 2013). If powers are directed only at manifestation types, then it seems to follow that x 's instantiating a power need not depend on the existence of any distinct particulars.⁸ This approach seems to allow powers theorists to make sense of how powers can have the relational natures described above without being either relations or extrinsic properties.

The upshot of this discussion is that it is far from clear that the relational natures of pure powers entail either that they are relations or that they are extrinsic properties. Consequently, attempting to draw the distinction between pure powers and powerful qualities by claiming that the former are relations or extrinsic properties would require basing the distinction on a highly controversial claim. For this reason, attempting to draw the distinction in these ways is not a promising approach.

The discussion here, however, does indicate another way that PQ theorists might be able to draw this distinction. Specifically, they could claim that powerful qualities, unlike pure powers, do not have the sorts of relational essences outlined above. This proposal, however, runs into Taylor's second objection to understanding powerful qualities as non-relational, which is that prominent PQ and powers theorists resist a relational conception of pure powers.

Importantly, though, these theorists deny that pure powers have relational essences by holding that, while pure powers essentially stand in a dispositional connection with their manifestations, this connection is not a genuine relation.⁹ Even if this claim is accepted, that pure powers essentially stand in

⁸ Tugby (2013), though, argues that this conclusion holds only given a Platonic, and not an Aristotelian, conception of universals. Yates (2016) gives a similar argument, although he thinks that the Aristotelian conception may be salvaged by being conjoined with an account of intrinsicality that better suits powers theory.

⁹ Heil (2003: 76–84) and Martin (2008: 65), the two most influential PQ theorists, both deny that that the dispositionality of powers need be a relation. However, they also both accept that this dispositionality involves

a dispositional connection with their manifestations still has an important implication for the natures of pure powers. Say that a property has an extrinsic nature just if its essence or identity is fixed by its connection to distinct properties. Then, that pure powers essentially stand in a dispositional connection with their manifestations, irrespective of whether this connection is a genuine relation, entails that pure powers have extrinsic natures.

For instance, that *fragility* essentially stands in a dispositional connection with *being broken* has the consequence that the essence or identity of *fragility* is fixed only by its connection to the distinct property of *being broken*. Consequently, *fragility* has an extrinsic nature. Obviously, that a property has this sort of extrinsic nature is consistent with the property being intrinsic to its bearer. As noted above, that a vase is fragile does not entail that the vase stands in any relations with distinct particulars. Pure powers, then, have extrinsic natures, in the sense just specified, even though they may be intrinsic to their bearers.

That pure powers have this sort of extrinsic nature, though, constitutes an important point of contrast with qualities. Apart from the negative conception of qualities simply as non-dispositional or non-modal properties, the most common way that qualities are conceived of in the categoricism/pure powers theory debate is as properties with essences that are determined entirely independently of any genuinely distinct properties.¹⁰ So, where properties have an intrinsic nature just if their essences are

some sort of dispositional connection with a manifestation (Heil 2003: 98; 108; Martin 2008: 4–7). Molnar (2003: 60–80) also denies that dispositionality involves a genuine relation with a manifestation, while accepting that it involves a form of directedness at a manifestation. See Tugby (2013: 460–461) for criticism of these approaches.

¹⁰ For examples of this concept of qualities, see Armstrong (1997: 80), Black (2000: 91), Bird (2007: 67) and Ingthorsson (2013: 57).

constituted or determined independently of their connections to distinct properties, qualities, as standardly understood in the powers theory/categoricalism debate, have an intrinsic nature.

Adopting the conception of a qualitative property as a property with an intrinsic nature, then, allows the PQ theorist to successfully distinguish powerful qualities from pure powers by ascribing to them a defining characteristic of qualities. Furthermore, developing PQ in terms of this conception of qualitativity provides a plausible way to develop the idea that powerful qualities contrast with pure powers due to the relationality of the latter. On this approach, powerful qualities differ from pure powers by lacking essential connections to distinct properties.

For many, this approach will bring to mind the literature on 'quiddities', as quiddities are often understood to be intrinsic natures of properties. So, one way to formulate the approach would be to say that powerful qualities, but not pure powers, have quiddities.

Taylor briefly discusses the idea that PQ theorists could identify the qualitativity of powerful qualities with their having quiddities. However, he rejects this idea on the basis that influential accounts of quiddities have the consequence that a property's having a quiddity cannot be identified with its powerfulness. In these cases, though, this consequence is due to a characteristic other than simply being an intrinsic nature that the account ascribes to quiddities. So, to avoid confusion with these sorts of conceptions of quiddities, I will here continue to talk of the intrinsic natures of properties, as defined above, rather than of quiddities.

4 Intrinsic natures, powerful qualities and the regress objection

I just argued that claiming that powerful qualities are qualitative in the sense that they have intrinsic natures allows them to be clearly distinguished from pure powers. I now argue that this conception of the qualitativity of powerful qualities also allows us to make good sense of PQ theorists' key argument

for favouring PQ over the pure powers view. According to this argument, PQ is superior to the pure powers view, because it evades the well-known regress objection to a powers ontology.

While the regress objection has been developed in a number of ways, Bird (2007: 135–138), drawing on Robinson (1982) and Lowe (2006), gives a clear and canonical formulation of the objection. According to this version of the objection, that properties are powers leads to a vicious regress or circularity in the metaphysical individuation of properties. Because powers have dispositional essences, their dispositional connections to their manifestations – and perhaps also to their stimuli – determine their identities. Powers theory, then, apparently has the consequence that the identity of any property is fixed by its connection to some further property. Critics, though, claim that this result leads to a vicious regress or circularity on which the identity of no property is ever fixed.

Both categoricalists and PQ theorists¹¹ have claimed that the regress objection provides compelling grounds to hold, contra powers theory, that properties are qualities. It is clear how this line of reasoning is supposed to work for the categoricalist. The regress objection ostensibly shows that the existence of powers would have the unacceptable consequence that properties lack determinate identities. If so, then the categoricalist conclusion that properties must be qualities, in the sense of not being powers, appears to follow immediately.

It is not as obvious, however, how the objection is supposed to provide grounds to favour PQ over pure powers theory. The difficulty is that PQ theorists ascribe a sort of qualitativity to properties that is identical to their powerfulness. Ascribing this sort of qualitativity to properties, unlike ascribing the sort

¹¹ See Heil (2003: 107–108; 2012: 76; 2013: 31), Martin (2008) and Ingthorsson (2015). Taylor (2018) also points out that proponents of PQ often take the regress objection to be the key reason to favour PQ over pure powers theory.

of qualitativity that categoricalists endorse, clearly cannot block the regress simply by entailing that properties are not powers.

Taylor, in fact, argues that the PQ theorist's appeal to the qualitativity of properties cannot, in principle, block the regress objection. The objection ostensibly shows that the powerfulness of properties cannot fix their identities. According to the PQ theorist, though, a property's qualitativity is identical to its powerfulness. Consequently, if a property's powerfulness cannot fix its identity, then neither can its qualitativity. So, while categoricalists may be able to appeal to the qualitativity of properties to block the regress objection, PQ theorists cannot.

This argument, however, depends on the assumption that PQ theorists agree with pure powers theorists about the natures of powers. It is not obvious, though, that this assumption ought to be accepted. On a reasonable interpretation, when PQ theorists claim that powers are identical with qualities, they are proposing an alternative to the pure powers conception of the natures of properties. This interpretation opens up the possibility that the regress objection depends on a conception of the natures of powers that is held by pure powers theorists but not by PQ theorists.

Indeed, given the conception of the qualitativity of powerful qualities developed in the previous section, this possibility obtains. The regress objection is based on the idea that the essences of powerful properties are constituted by their connections to distinct properties in the form of their manifestations and, perhaps, their stimuli. The alleged vicious regress in the individuation of powers follows just from their having this characteristic. Consequently, the objection targets powers just in as far as they have extrinsic natures. So, given that powerful qualities have intrinsic natures while pure powers have extrinsic natures, the regress objection arises only for the latter, and not for the former, properties.

This discussion also indicates the problem with Taylor's third objection to the relational conception of the distinction between pure powers and powerful qualities. The objection was that, once powers are

identified with relations, PQ theorists must, just as much as pure powers theorists, accept that powers are relations. Turned into an objection to the current view, the objection would be that, if the PQ theorist claims that powers have extrinsic natures, then this claim must hold for powerful qualities just as much as for pure powers. Clearly, though, this objection also depends on the assumption that PQ theorists and pure powers theorists must share a conception of the natures of powers. As just made clear, though, on the view developed here, the two approaches differ precisely over whether powers have extrinsic or intrinsic natures.

The key idea behind the approach to PQ developed thus far, then, is that categoricists and powers theorists standardly make a mistaken assumption about the natures of powers. Specifically, they assume that powerful properties must be non-qualitative in the sense of having an extrinsic nature. This assumption, in turn, generates a false dilemma on which properties can do the theoretical work of powers only if they come with the metaphysical baggage of properties with extrinsic natures. PQ, on the current interpretation, avoids this false dilemma by claiming that powerful properties have intrinsic natures.

I have argued over the last couple of sections that this interpretation of PQ comes with significant advantages. In the first place, it provides a clear way to distinguish powerful qualities from pure powers, as ordinarily understood, by ascribing to them a standard characteristic of qualities. In the second place, it makes good sense of how PQ theorists have standardly attempted to argue that powerful qualities are to be preferred to pure powers.

5 Powerfulness and disposition-grounding essences

It is, however, not immediately obvious that the idea that powerful properties must have extrinsic natures is misguided. While the claim that a property's nature is both powerful and intrinsic is not obviously incoherent in the same way as the claim that properties both are and are not essentially

dispositional, a critic could still raise seemingly serious concerns about the claim's coherence. It seems reasonable to claim both that a powerful property just is a property with an essence that is constituted by being or bestowing a disposition and that to be a disposition is necessarily to stand in a connection with a manifestation. The consequence, though, is that powerful properties necessarily have extrinsic natures, and, consequently, the version of PQ formulated in the previous section is ultimately incoherent.

So, to make sense of the idea that PQ can provide a third way between categoricism and pure powers theory, the coherence of the idea that powerful properties have intrinsic natures still needs to be defended. In so doing, though, powerful properties need to be conceived of in a way that leaves it plausible that they can do at least a substantial part of the theoretical work for which they are standardly invoked. In the remainder of this section, I introduce and outline a conception of powerful properties that plausibly allows them both to have intrinsic natures and to do the necessary theoretical work.

On this conception, properties are powerful just in the sense that they have natures or essences that ground their dispositional roles.¹² This conception of powerful properties has previously been discussed on a number of occasions. Smith (2016: 249–251) and Giannotti (2019: 6–7), for instance, both outline the conception without endorsing it, while Barker (2013: 644) briefly considers and rejects it. Yates (2018), on the other hand, has recently provided a detailed defence and development of one version of

¹² It should be noted, though, that one of the most prominent proponents of PQ, John Heil (2016), rejects the notion of grounding. Heil, then, could not endorse this account of the powerfulness of powerful qualities. Nonetheless, if the argument over the next couple of sections succeeds, then it indicates that there is some pressure for PQ theorists to accept grounding.

the view. Tugby (2013)¹³ and, especially, Jacobs (2011) also develop and defend closely related accounts on which the powerfulness of properties is understood in terms of truthmaking rather than grounding.¹⁴

I am not, however, going to consider in any detail how what I say here relates to these discussions.

Instead, my goal is just to demonstrate how conjoining the disposition-grounding conception of powerfulness with the conception of qualitativity developed in the previous section produces a coherent conception of powerful qualities, on which they are well-suited to do a significant part of the theoretical work of pure powers.

The notion of metaphysical grounding has recently received much attention, and there are extensive debates about how precisely it ought to be understood.¹⁵ What matters for current purposes, though, is just a couple of widely accepted characteristics of grounding. The first is that grounding is a relation of metaphysical determination in which the existence of the grounding entity makes it the case that the grounded entity also exists. The second is that the grounding relation is either itself an explanatory

¹³ While Tugby generally states his view in terms of truthmaking rather than grounding, he (Tugby 2012: 728) does at one point claim that ‘the qualitative aspects of a thing’s properties...ground its dispositions’. Presumably on this basis, Jaag (2014: 17–18) interprets Tugby (2012) as proposing a version of the disposition-grounding conception of powerful properties.

¹⁴ Barker (2013: 640–641, 644) and Jaag (2014: 17) criticise accounts of powerful properties in terms of the truthmaking relation.

¹⁵ Highly influential discussions and defences of the notion include Schaffer (2009: 2012), Rosen (2010) and Fine (2012). Both the precise nature of the grounding relation and whether any such relation ought to be posited remain highly controversial. These issues, though, are beyond the scope of the current discussion. My discussion will presuppose the plausibility of positing a relation of metaphysical grounding with a set of characteristics that are widely taken to characterise this relation.

relation or a relation that backs explanatory relations. The form of explanation in question is not causal explanation but rather the sort of explanation standardly picked out by 'in virtue of' locutions – that is, where ϕ grounds ψ , ψ obtains *in virtue of* ϕ .

Here I understand the proposal that the powerfulness of a powerful quality consists in its having an essence that grounds its occupation of its dispositional role just by reference to these characteristics. The proposal, then, is that for a property to be powerful is for its having its particular essence to metaphysically determine and, in the relevant sense, to explain its occupation of its dispositional role. What this proposal amounts to, though, depends significantly on whether the grounding in question is understood to be full or partial grounding. On the former view, for a property to be powerful is for its having its particular essence to fully determine and explain its dispositional role, while, on the latter view, for a property to be powerful is for its having its particular essence to partly determine and explain its dispositional role.

The standard view among PQ theorists appears to be that, in general, powerful qualities are responsible for the existence of dispositions only in conjunction with some set of 'partner powers' (Martin 1997; Heil 2003: 83; Ingthorsson 2013; Yates 2016). At least in a significant number of cases, it does seem that, if the qualitative essence of a property grounds its occupation of its dispositional role, it will do so only in conjunction with the essences of some set of 'manifestation partners'. For instance, it seems more plausible that the disposition of salt to dissolve in water is grounded in the essences of both salt and water than that it is grounded just in the essence of salt. Similarly, it seems that the disposition of water to dissolve in salt would have to be grounded both in the essence of water and in the essence of salt. Consequently, the proposal here is that powerful properties are powerful just in the sense that they have essences that at least partially ground their occupation of their dispositional roles.

6 The coherence of PQ

Using the conceptions of powerfulness and qualitativity developed thus far to formulate PQ produces a view on which the qualitativity of a powerful quality consists in its having an intrinsic nature, while its powerfulness consists in its having a nature that partly grounds its occupation of its dispositional role. A property's qualitativity, then, is identical to its powerfulness in the sense that both consist just in its having its particular nature, which is both intrinsic and a partial grounds for its occupation of its dispositional role. The immediate question is whether this formulation of PQ is coherent.

Barker (2013: 647–648) indicates one way that an argument against the coherence of the formulation might run. He claims that the philosophy of mind literature on the putative explanatory gap between physical states and states of phenomenal consciousness indicates that a property's qualitativity cannot ground its dispositionality. The thought is that that literature indicates an explanatory gap between functional states and qualitative states, such that no entity's qualitativity can, in itself, account for the entity's dispositionality.

However, this use of the explanatory gap seems misguided. The claim that there is such a gap is based on the idea that functional states cannot explain qualitative states. The claim that a property's qualitative nature grounds its dispositional role, on the other hand, has the implication that qualities, or their natures, explain functional states. Clearly, though, that functional states cannot explain qualitative states does not have the consequence that qualitative states cannot explain functional states.

Indeed, in the literature on consciousness it has been argued that the qualitativity of phenomenal properties sometimes grounds their occupation of their dispositional roles (Van Gulick 2014). The idea is that, for instance, a disposition to end a painful experience or to prolong a pleasurable experience can obtain just in virtue of the qualitative nature of being in pain or experiencing pleasure. Tugby (2012: 730), in fact, gives just this example as a plausible instance of a property's qualitative nature grounding its dispositionality. Contra Barker, then, the literature on consciousness does not indicate that all

attempts to ground functional states in the natures of qualities runs into an apparent explanatory gap. Instead, this literature actually provides potential examples of properties' qualitative natures grounding their occupation of their dispositional roles.

Moreover, phenomenal properties are not the only potential example of properties having qualitative natures that ground their dispositional roles. A second example, commonly employed by PQ theorists (Heil 2003: 86; Martin 2008: 44–45; Lowe 2010: 20–21; Ingthorsson 2013: 69–70), is geometrical properties. Geometrical properties, like phenomenal properties, are standard examples of qualities in the categoricism/powers theory debate. Plausibly, though, the natures of these properties, at least partially, ground their occupation of their dispositional roles. For instance, it seems plausible that the nature of *being a sphere* at least partly grounds the fact that *being a sphere* bestows the disposition to roll under appropriate conditions on at least some of its bearers. On the other hand, *being a cube* does not bestow such a disposition, because of how its nature differs from the nature of *being a sphere*.

Both the grounding claims involving phenomenal properties and those involving geometrical properties are, of course, controversial. The important point in the present context, however, is that, whether or not these claims ought ultimately to be accepted, they seem entirely coherent. In the first place, it seems coherent to think that, under appropriate conditions, spheres roll while cubes do not at least partly *in virtue of* the natures of *being a sphere* and *being a cube*. Similarly, it seems fully coherent to claim that anyone in pain will be disposed to end their painful experience at least partly *in virtue of* the qualitative nature of pain.

As mentioned above, in the categoricism/powers theory debate, geometrical and phenomenal properties are standard examples of qualities. As having an intrinsic nature is a central characteristic of the conception of qualities in this debate, these properties constitute paradigmatic examples of properties with intrinsic natures. So, I take it that the apparent coherence of the above grounding claims

provides significant support for the conclusion that it is coherent to claim that a property's having its intrinsic nature at least partially grounds its occupation of its dispositional role. Minimally, the plausibility of these examples leaves the burden of proof with anyone who wants to deny this conclusion.

7 Disposition-grounding essences and the theoretical work of pure powers

I have thus far argued that the version of PQ formulated in the previous section is both coherent and distinct from pure powers theory in a way that allows it to avoid the regress objection. The remaining question is, thus, whether it can also do the theoretical work of pure powers theory. I am now going to argue that, while it does not seem capable of doing all of that work, it is well-suited to do a substantial part thereof.

A key line of argument in favour of pure powers is that they provide particularly compelling accounts of a range of philosophically problematic phenomena. Powers theorists argue, for instance, that pure powers deliver attractive accounts of causation (Bird 2010; Mumford and Anjum 2011; Marmodoro 2017), nomic modality (Swoyer 1982; Ellis 2001; Kistler 2002; Molnar 2003; Mumford 2004; Bird 2007; Tugby 2016) and metaphysical modality (Borghini and Williams 2008; Contessa 2010; Vetter 2013; 2015; Yates 2015).

While the details of these accounts are complex and differ in significant respects, they generally involve two basic steps. In the first, the fact that powers have dispositional essences or identities is used to account for their occupation of their dispositional roles. In the second, the fact that powers occupy these dispositional roles is employed to give an account of causation, nomic modality or metaphysical modality. Pure powers, then, are supposed to be able to account for the target phenomena, just because their essences account for their occupation of their dispositional roles.

On the disposition-grounding conception of powerful properties, though, it also looks plausible that the essences of properties account for their occupation of their dispositional roles. As noted above, on this conception it seems plausible that a property's essence, in conjunction with the essences of its manifestation partners, will fully ground – and, so, account for – that property's occupation of its dispositional role. So, the conception of a property's powerfulness as its having a dispositional-role-grounding nature looks well-suited to capture the key characteristic that, according to pure powers theorists, allows powers to account for the target phenomena.

The argument just given is, of course, brief, and considering in detail how the dispositional-role-grounding view of powers fares in accommodating particular phenomena would likely be informative.

My goal here, though, is just to establish that there are good initial grounds to think that properties that are powerful in this sense are well-suited to do the relevant work. I take it that demonstrating that these properties look capable of possessing the key characteristic that allegedly allows pure powers to do that work suffices to establish this point.¹⁶

A second important motivation often given for privileging pure powers theory over categoricism is that the latter, but not the former, generates a significant sort of skepticism about properties and their

¹⁶ It should be noted that establishing this point does not require committing to any particular conception of dispositionality or dispositional roles or endorsing the idea that powers can, in fact, do the relevant work. What matters in the current context is just that *if* the claim that the essences of properties are constituted by their dispositional roles or dispositionality – for some conception of dispositional roles and dispositionality – can do the relevant work, *then* the claim that the essences of properties ground their dispositional roles or dispositionality looks well-suited to do the same work.

natures.¹⁷ This line of reasoning begins with the idea that all we can know about the fundamental properties of physical theory is that they occupy particular dispositional roles. Given pure powers theory, though, a property's essence consists just of its occupation of its dispositional role. So, in coming to know the property's dispositional role, we come to know its essence. However, if properties have the qualitative essences posited by categoricists, it appears that we cannot, in principle, know the essences of the fundamental properties of physical theory.

Furthermore, categoricists, such as Lewis and Armstrong, claim not only that properties have qualitative essences but also that these essences do not at all determine the dispositional roles that they occupy. The apparent consequence is that the dispositional roles of the properties of physical theory can be freely permuted, such that any property can occupy any role. Lewis (2009) has famously argued that this result means that we cannot know which properties, in fact, occupy the dispositional roles identified by fundamental physical theory. Given this argument, categoricism leaves us 'irremediably ignorant' about which properties, in fact, occupy these dispositional roles, as well as about what essences those properties have..

Powers theorists often endorse both this argument and the further claim that the resulting skepticism about properties is objectionable. On this basis, they hold that the fact that pure powers theory avoids this sort of skepticism provides significant grounds to favour it over categoricism. So, providing a way around this sort of skepticism constitutes a significant part of the theoretical work for which pure powers are standardly invoked.

¹⁷ See Shoemaker (1980: 215; 1998: 75 fn 7), Ellis (2001: 114–115) and Bird (2007; 2005) for this sort of argument for powers theory.

The sorts of powerful qualities posited here, however, do not seem well-suited to do this work. Given that these properties have purely qualitative essences, knowledge of their dispositional roles plausibly leaves us ignorant about which essences they have. Furthermore, while the dispositional roles of these sorts of powerful qualities cannot be freely permuted, it does seem possible that two distinct properties could ground identical dispositional roles. Consequently, the version of PQ proposed here seems to lead, in a similar way to categoricalism, to the conclusion that we cannot know which properties occupy which dispositional roles.¹⁸

The result is that this version of PQ looks well-suited to do a substantial part, but not all, of the theoretical work of pure powers. In particular, it looks well-suited to provide the same sort of account as pure powers theory of phenomena such as nomic modality, metaphysical modality and causation, but looks ill-suited to avoid skeptical conclusions about properties. What this means for the relative plausibility of the two positions obviously depends on the weight that one assigns to these two parts of the case for pure powers.

The key consequence in the present context, though, is that the version of PQ considered here is well-suited to do a significant part of the work of pure powers theory. Given that I have already argued that this version of PQ is coherent and that it avoids the regress objection to pure powers, I conclude that it

¹⁸ Both Smith (2016: 249–256) and Yates (2018), in effect, argue for this conclusion. Yates also argues that a view on which all fundamental properties are pure powers but some non-fundamental properties are powerful qualities can avoid both the regress objection and skepticism about fundamental properties. In this regard, Yates's position appears to have an important advantage over the version of PQ discussed here. While further considering the comparison between these views looks like an important project, my goal here is just to argue that the view that properties are, in general, powerful qualities can provide a coherent alternative to both pure powers theory and categoricalism.

constitutes a coherent alternative to both categoricism and pure powers theory that promises to deliver important advantages of both positions.

8 Conclusion

I have defended the idea that PQ can coherently constitute an alternative to both pure powers theory and categoricism that delivers significant advantages of both positions. To do so, I formulated a version of PQ on which properties are qualitative in the sense that they have intrinsic natures, while they are powerful in the sense that they have natures that ground their occupation of their dispositional roles. I argued that this formulation provides a promising way to produce a version of PQ that is both coherent and combines significant aspects of the theoretical work of categoricism and pure powers theory.

Of course, this argument only supports the conclusion that the specific version of PQ formulated here can coherently constitute the desired sort of third way. Furthermore, in giving this argument I have also argued that alternative formulations of PQ generally fail to constitute this sort of account and that producing such an account is a formidable challenge. Consequently, that the formulation of PQ discussed here can meet this challenge is a significant point in its favour.

The argument given here, though, should not be mistaken for an attempt to show that either PQ in general or the specific version of PQ formulated here ought ultimately to be accepted. I have not argued that either view is overall preferable to either powers theory or categoricism. Indeed, if one thinks that the version of PQ formulated here is ultimately implausible, then the grounds given here to favour it over alternative versions of PQ ultimately count against PQ. In addition to not arguing that the version of PQ developed here should be adopted, I have also not attempted to develop the position in detail. For instance, I have not attempted to defend a particular understanding of the intrinsic natures of properties posited by the view or of the dispositional roles allegedly grounded by those natures. Instead,

these questions are among the significant questions left open by the conclusion of this paper, which is that PQ, at least as formulated here, can provide a coherent alternative to pure powers theory and categoricism.

Acknowledgements I would like to thank two anonymous referees for *Synthese* for particularly extensive and helpful comments that substantially improved this paper.

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