

4-12-2019

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How to Distinguish Qualities and Dispositions

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M.A. Philosophy, University of Missouri- St. Louis, 2019

A Thesis Submitted to The Graduate School at the University of Missouri-St. Louis
in partial fulfillment of the requirements for the degree

Master of Arts in Philosophy

May 2019

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“The glass vase on the table is fragile.” One way to think about this statement is that “fragility” refers to a property of the vase. The vase's fragility causes it to shatter when particular background conditions are met, for example, if it is dropped on a hard floor from a sufficient height. On this view, dispositions like fragility or solubility are causal powers that a vase or a cube of sugar have. What it is to be fragile is to have the power to shatter when dropped. Alternatively, you might think that no matter how closely the vase is inspected there is no property of fragility or power that can be found. Rather, what one finds upon observation is that the vase has a particular microstructure that explains its potential to shatter when it interacts with other objects like hard floors.

In metaphysics, dispositionalists hold a view of the first kind. They claim that every property that a particular object has is a set of causal powers, whether that be its shape, material composition, electrical charge, or its fragility (Shoemaker, 1980; Mumford, 2004; Bird, 2007). Categoricalists hold a view of the second kind. According to this position, dispositional predicates like “fragility” ultimately refer to the interactions of categorical properties of the vase, such as its material composition with categorical properties of other objects (Armstrong, 1997; Lewis, 2007). When we say, “the vase is fragile,” this amounts to a kind of shorthand for how the actual, internal properties of the vase interact with actual properties of an object such as a hard floor, in accordance with laws of nature. These categorical properties of objects are inert without laws of nature. One can also take an intermediate position. Identity theorists hold that a categorical property and a disposition are only different ways of looking at one and the same property (Martin, 2007; Heil, 2010; Strawson, 2008). They prefer to use the term “quality” instead of “categorical property”, to avoid the implication that it is any more real or

actual than a disposition. Thus, according to the identity theorist, a property is identical to a quality, which is identical to a disposition. So the property of squareness is both the quality of being square-shaped and also a plurality of causal powers, or dispositions, such as producing a square imprint when pressed into a soft material. The property cannot be metaphysically reduced to one or the other.¹

What is the conceptual distinction between a quality and a disposition, though?

There have been two general approaches to answering this question. The first is to make a metaphysical assumption and try to work out the distinction from there. For example, a categoricist might say that a categorical/qualitative property like squareness is actual, while a disposition like fragility is merely potential (Armstrong, 1996). The second approach has been to take paradigmatic cases of each and compare them side-by-side. One might ask, what is it about the property that is picked out by “square-shaped,” that is different from the property picked out by “fragile” (Cross, 2005)? Yet, neither of these two approaches have produced an adequate conceptual distinction of the two.²

In this paper I offer a new approach to solving this puzzle. This will first require a look at the relationship between qualitative and dispositional predicates. Drawing from this examination, I aim to provide a positive characterization of each type of predicate

¹ Other intermediary views also show up in the literature. One such view is that some properties are qualities while others are dispositions. Another view holds that rather than a quality and a disposition being identical, they are instead distinct parts of the same property. For the purposes of this paper I will focus on categoricism, dispositionalism, and identity theory, although if my arguments are correct, the consequences will apply to these other intermediate views as well.

² For example, Cross argues that both qualities and dispositions must be irreducible primary elements of our ontology, but offers no definitive way to identify one from the other. And, as will be discussed in more detail later, Taylor (2018a) argues that the two cannot be distinguished in a way that separates the identity theory and dispositionalist positions. He thinks the ways qualities are conceptualized is not meaningfully distinct from how a dispositionalist characterizes dispositions.

from a metaphysically neutral standpoint. Finally, I will consider possible implications for the metaphysical debate about properties if my characterization is correct.

For the first two sections I assume that qualities and dispositions might be either real or apparent in order to remain metaphysically neutral on the nature of properties. In Section I I argue that a dispositional predicate applies to a particular object if and only if we can conceive of a qualitative predicate that is relevant to that disposition's manifestation.³ Ascribing one kind of predicate presupposes the ability to ascribe the other.⁴ Section II aims to make a meaningful distinction between qualitative and dispositional predicates. Building off of examples from Section I, we can start with the qualitative predicate that expresses a property and examine how that differs from a dispositional predicate that applies, in virtue of that property, to the same object. Conversely, if we start with a dispositional predicate that applies to an object, we can examine how the object satisfies a qualitative predicate that is relevant to the manifestation. From insights drawn from this exercise, I offer a positive conceptual characterization of each. On my account, qualitative predicates capture a property in isolation from other properties at a fixed moment in time, while dispositional predicates capture a property in relation to other properties through an activity or process over time.

³ Articulating precisely the way in which the predicate is relevant is difficult. Even pinpointing the exact nature of causal relevance is difficult (McKittrick, 2005). While this question of relevance is worth further investigation, I will leave it for another project. For my purposes, I simply wish to point out what I take to be non-controversial and non-question begging, which is that, if the vase were plastic instead of glass, it would no longer be fragile. Furthermore, the glass composition is relevant to the vase's fragility in a way that, for example, its color is not.

⁴ Whether these predicates ultimately apply to real qualities and/or dispositions will depend on the metaphysical nature of properties. For the purposes of distinguishing the two conceptually, we need only see that any quality could feasibly entail a disposition and vice versa. This will be particularly important in cases where qualities and dispositions can be conceived but our epistemic limitations offer no way of verifying their existence.

Section III briefly considers an objection to my view based on accounts of consciousness as the qualitative aspect of experience. Finally, in Section IV I argue that while this does not rule out any metaphysical position, it does score a point in favor of the identity theory of properties.

I. Properties in Qualitative and Dispositional Terms

1a. Paradigm Cases

A paradigm case of a dispositional predicate is “fragility”. To attribute fragility to a vase is to say that it is disposed to act in a particular way (say, to shatter) given the right background conditions (being struck sufficiently hard). As Prior, Pargetter, and Jackson (1982, p. 251) point out, in the case of a vase we can identify a relevant quality, or as they refer to it, categorical basis that is associated with its fragility. If the vase is made of glass, we might point to the microstructural features of the glass as that relevant basis. Were the vase made of plastic instead, it would not be fragile. Thus, the vase satisfies the qualitative predicate, “having microstructure α ”, which accounts for its fragility. Whether the fragility or the microstructure is ultimately real and causally efficacious, the point is that if you have a dispositional predicate like “fragility,” there is a related qualitative predicate that is relevant to the disposition's manifestation that the object also satisfies.

Some categoricalists, like Armstrong (1996), argue that dispositions reduce to their categorical bases. According to this view, explaining the macro-level disposition of fragility involves looking at lower level details, such as the molecular bonds and chemical composition of the vase. Categoricalists of this kind, therefore, naturally descend to lower levels of explanation to find a dispositional predicate's associated

qualitative predicate. It is worth noting that we need not do so. If someone were to ask, “What makes the vase fragile?”, a perfectly sensible response would be, “That it is made of glass.” One other way to put this is that the dispositional predicate, “fragility” can be equally associated with the qualitative description, “being composed of glass,” and, “being composed of silicon dioxide molecules bonded in such a way.” Even if describing the microstructure provides greater explanatory power in some contexts, it is not as if only the microstructure is fragile, and the glass is not. Therefore, finding an associated qualitative predicate for a disposition – in this case fragility – does not require moving to lower levels of explanation. This will become particularly relevant later when I address “fundamental” dispositions, which are dispositions that cannot be attributed to lower level structural details.

Beginning from the other end, a paradigm example of a qualitative predicate is shape. Sydney Shoemaker (1980, p. 114) uses the example of being knife-shaped, but to keep the illustration simple and clear we can use being square-shaped. Suppose we have a square block of steel. Shoemaker's argument is that despite appearing qualitative, when the property of squareness is combined with the property of being hard as is the case with the steel block, the squareness contributes to the causal powers of the block. In virtue of what was taken to be the purely qualitative feature of being square, the steel block has the disposition to leave an imprint of the same shape when pressed into soft wax. Shoemaker's claim is that each property comes with a set of associated causal powers. Therefore, all the properties of an object, even the other supposedly qualitative ones, are ultimately dispositional.

Since my account thus far is intended to be neutral, it is important to note that Shoemaker may be wrong to assume that his conclusions are about properties rather than predicates. Suppose someone like Armstrong is correct that dispositions reduce to categorical bases. Call the disposition to produce a square imprint if pressed into a soft substance like wax, *squimprintability*. For Armstrong, squimprintability is no more real or causally efficacious than fragility. Just as fragility reduced to the vase's qualitative microstructure, so squimprintability reduces to the qualitative shape and material composition of the block. Whether Shoemaker is right or not about every property being a set of causal powers, his analysis reveals something important about predicates. Any property that can be identified by a qualitative predicate, like “being square-shaped”, will also have related dispositional predicates, like “squimprintability,” that apply to it.

A slightly different version of the same point is illustrated by Mellor (1982). Satisfying subjunctive conditionals has traditionally been a defining characteristic of dispositional predicates. To say that the vase is fragile is to say that, if it were dropped onto a hard surface, then it would shatter. However, the properties picked out by qualitative predicates also satisfy subjunctive conditionals, argues Mellor. If the corners of a triangle were properly counted, then the result would be three. As mentioned above, “being *x*-shaped” is typically considered as a paradigm case of a qualitative predicate. Admittedly, we might take this to mean that the relationship between subjunctive conditionals and dispositions has been misunderstood. However, if the standard assumption that there is a meaningful connection between the two is correct, I take both

Shoemaker and Mellor to show that even properties associated with paradigmatic cases of qualitative predicates can also be described dispositionally.⁵

While I take paradigm cases to be a good starting point, my claim goes further. It is not that some properties that satisfy dispositional predicates also conceivably satisfy qualitative ones and vice versa. Rather, this pattern of satisfying both applies to *every* instance of a property. This means it should hold in even the most extreme cases of apparent qualitative and dispositional properties. Does my hypothesis stand up to such a challenge?

1b. Extreme Cases

Some philosophers have argued that there are dispositions that lack categorical bases entirely (Blackburn, 1990; McKittrick, 2003, 2018; Mumford, 2006). These have been referred to as “ungrounded”, “bare”, “pure” or “baseless” dispositions (McKittrick, 2018, p 131). Baseless dispositions, it is argued, show that properties cannot be fundamentally categorical, since at the lowest-level we find only dispositions. The details of such a view can be spelled out in a number of ways, one of which is by reference to fundamental particles. The idea here is that, so far as we can tell, the fundamental subatomic particles are structureless but still have dispositions (e.g. spin, charge). Unlike the fragility of the vase, which we might attribute to the glass' microstructure, there is no categorical base that can explain the dispositions of a fundamental particle (Molnar, 2003, p 132).

⁵ In Section II I will explain why subjunctive conditionals are associated with dispositions. This explanation follows from how I propose dispositional predicates should be characterized. So while I think the connection between dispositions and subjunctive conditionals is justified, at this stage I simply follow the common assumption [explain which assumption you are talking about] rather than argue they are meaningfully related.

Suppose such an account is correct. Let's say that a quark is this kind of entity and cannot be broken down into any further structural details, but satisfies the dispositional predicate, “spins”. Does our inability to reduce the disposition to any underlying structure commit us to the claim that the quark cannot possibly satisfy a qualitative predicate that is relevant to its spinning? Two points help to demonstrate why we are not committed to such a claim.

First, as Williams (2011) argues, science is in the business of unearthing the effects – i.e. manifestations of the dispositions – of a thing. Regardless of what exists at the “fundamental” level in nature, the fundamental level discovered by science is bound to be one of dispositions. Williams states:

“Because the dispositional characterization applied to the fundamental entities is an inescapable consequence of the methodology, that the characterization is exclusively dispositional provides no evidence that the fundamental properties are exclusively dispositional—even if that happens to be the case.” (p 79)

In other words, we should not conclude that the quark's properties are purely dispositional from the fact that we cannot observe the quality relevant to the disposition's manifestation. Rather, that we find the quark's dispositional predicates instead of its qualitative ones is a necessary consequence of the way in which it is investigated.

The second point is that Williams' conclusion applies even if the quark has no structural details it can be broken down into. Recall the example of the vase. Finding a relevant qualitative predicate associated with fragility did not require descent to microstructural details. The glass' microstructure was not fragile in a way that the glass itself was not. Suppose the same is true of the quark. We can only confirm its dispositional predicate, “spins”.

However, even if it has no lower level structural details, there very well could be a qualitative predicate that applies to the quark that is analogous to the vase's predicate, "being glass."⁶ We could feasibly attribute to quarks qualitative predicates based on their dispositional differences. For example, a quark with up-spin might be attributed the qualitative predicate, "being upward-oriented," while a quark with down spin might satisfy the qualitative predicate, "being downward-oriented." Which qualitative predicates, if any, are actually satisfied by the quark will stem from its metaphysical nature. While our epistemic limitations, therefore, leave verification of these qualities out of reach, the aim here is to explore the relationship between dispositional and qualitative predicates. In this case, what first appeared to be "pure" dispositions can also be conceived in qualitative terms that are analogous to the vase's "being glass." Even in this extreme case, the presence of a dispositional predicate brings with it the ability to conceive of a relevant qualitative predicate. In the absence of contradictory evidence, it seems plausible that every dispositional predicate is related to a qualitative one in similar fashion.

Moving to qualities, arguably the most extreme version of a qualitative predicate comes from David Lewis (2009). According to Lewis we can conceive of an "idler," which is a property that is devoid of any casual powers. While we would never be able to

⁶ Admittedly this may feel out of sync with our usual methods of explanation. It is hard to see how to provide an answer to the question, "Why does the quark have spin?", if there is no underlying categorical basis. As an ontological account of properties, however, it does not seem particularly problematic for any of the positions. A categorialist can claim that fundamental properties are governed by laws that account for their apparent dispositions. A dispositionalist can claim that these fundamental powers are exactly what the particles are. And an identity theorist would argue that it makes sense that fundamental particles have both dispositions and qualities, because anything with properties will be both dispositional and qualitative. And similarly for other mixed views of properties.

detect an idler, since, as we saw above, we gain knowledge of properties through their effects, it would nonetheless exist as a quality of some object(s).

While many would reject even the possibility of such a property, for the sake of my argument the ontic status of idlers is irrelevant.⁷ Since my standpoint is neutral, we can borrow the concept of an idler without assuming the property actually exists. If any property ought to be impossible to describe in dispositional terms, it is an idler. However, even this most unlikely case of an idler can be described dispositionally. For example, we might form the following subjunctive conditional. If the idle property were subjected to any stimuli (if they can still be called that), the property would have no effect on surrounding properties. It also seems true to say that an idler is disposed to cease existing when the particular in which it is instantiated is destroyed.⁸ We might express this disposition to cease existing when the particular is destroyed by using a single dispositional predicate, say “*extinguishability*”. Despite having no causal powers, an idler would satisfy the dispositional predicate of “*extinguishability*”. Much like the case of what qualitative predicates are relevant to the dispositions of fundamental particles, we are faced with epistemic limitations. What dispositional predicates actually apply to the idler would necessarily remain inaccessible to us. I take this to show that regardless of one's view about the fundamental nature of properties, there is no property identified by a

⁷ Of course, for a dispositionalist or an identity theorist such a property could not exist. For a dispositionalist a property's existence is exhausted by its causal powers. Once you identify all the causal powers of an object, you've identified all the properties of that object. There could not be any additional property, such as an idler, that exists in the object beyond its powers. Similarly, for an identity theorist, what it is to be a property is to be both a quality and a power. The idea that you could have only one is merely abstraction.

⁸ One could come up with all sorts of alternatives since it is not clear where the idler exists in the object. If it is something like a spirit, maybe it is not destroyed, but exists outside of the object. Or maybe the idler transfers to a new object, perhaps even the destroying object. No matter which way this is imagined to go, the point seems to hold. The property no longer exists in the object exactly as it did before.

qualitative predicate, that cannot satisfy a subjunctive conditional or dispositional predicate.

If the picture that is laid out above is accurate, both paradigm and extreme cases of dispositional predicates are satisfied by objects that also (at least feasibly) satisfy qualitative predicates. Likewise, paradigm and extreme cases of qualitative predicates are satisfied by objects that can then be attributed with related dispositional predicates. The extreme cases are taken to be the most likely counterexamples to the claim that this pattern holds for predicates applied to any property, regardless of whether the property is metaphysically a quality, disposition, both, or some combination of the two. The claim that this pattern holds for every predicate that can be satisfied by a property or object is subject to further testing. Given the results of the extreme examples of “pure” dispositions and “idlers”, I take it to be likely that it does.

II. Characterizing Qualities and Dispositions

There is an intuitive difference between a qualitative and a dispositional predicate. Qualitative predicates seemingly refer to inherent features of an object, while dispositional predicates point outward to possible interactions. Attempts to spell this distinction out further have proven difficult, however (Cross, 2005; Taylor 2018a). A comprehensive survey of the ways qualities and dispositions have been distinguished is beyond the scope of this paper. However, it will be useful to at least start with a few examples of pitfalls that a meaningful characterization of the two needs to avoid.

It is worth making a quick note before moving forward. The debate about how to distinguish qualities and dispositions has taken place within a metaphysical context. The

claims have been about qualitative and dispositional *properties*. My aim is to distinguish the two conceptually, while remaining (at least in this section) metaphysically neutral. Therefore, every claim about a categorical/qualitative or dispositional property, for my purposes, should not assume their ultimate or fundamental existence. While engaging the literature will require reference to categorical and dispositional properties, each use of the term property should be thought of as accompanied by, “real or apparent.” The lessons from the debate about distinguishing properties, however, should carry over as I attempt to distinguish the two concepts.

2a. Problems with Past Attempts to Characterize Qualities and Dispositions

The first major challenge will be to give a characterization of qualities and dispositions that are distinct and non-overlapping. This issue has recently been raised by Taylor (2018a), who argues that identity theorists – who claim that a property is both a quality and a disposition – ultimately collapse into dispositionalism because there is no account of a quality that is not equally applicable to a disposition. For example, categorical or qualitative properties have typically been conceived of as wholly present, real, actual, and/or existing in the object. Cross (2005, p. 323) states that to attribute a categorical property to an object is to say, “something about how [the object] *actually* is.” Heil (2012, p. 59) says that, “qualities are here and now, actual, not merely potential, features of the objects of which they are qualities.” Returning to a paradigm case like squareness helps illustrate the point. The squareness of an object is actual and present in the object. It does not require anything for its manifestation.

The problem is that for a dispositionalist a property like fragility meets all of these criteria. To assert that “this vase is fragile” is to attribute a wholly present, real, actual property of the vase, by their lights.⁹ Thus, we can see Taylor's concern. Armed with a definition of a quality such as “actual and in the object,” dispositionalism and the identity view collapse together. The identity theorist has nothing additional to say about a property qua quality that is not already captured by its dispositions. Therefore, our goal is to characterize the two in a way that *distinguishes* them from one another. If our criteria for qualities include “wholly present” and “actual”, and we cannot rule out these very same criteria for dispositions without begging the question, our characterization has failed.

Other attempts to distinguish qualities are similarly unhelpful. One might define qualitative predicates as ones that pick out quiddities – pure categorical properties that lack necessary causal connections. Alternatively, categorical properties might be construed as simply not the same kinds of things as dispositions (Armstrong, 2005) Such characterizations assume that categorical properties are the ones that *actually* exist. Since this begs the question about the nature of properties, any corresponding characterization of dispositions will be contentious.

Giving an adequate account of what distinguishes a dispositional predicate has proven equally challenging. Traditionally it was their intimate connection with non-trivial subjunctive conditionals that was thought to distinguish them (Cross, 2005). However, as

⁹ Heil himself points out that the way he defines qualities might overlap with the dispositions, or powers, of an object or property. Since he is an identity theorist, this does not pose a problem. A property is both a quality and a power. Therefore, that a property's quality and disposition are both “here and now, actual, not merely potential,” does not pose a problem or a contradiction for Heil.

we saw in multiple examples, even properties that are associated with the most paradigmatic examples of qualitative predicates entail subjunctive conditionals. Another way to define dispositions is as the causal powers of an object or property. The problem is that, like quiddities, this characterization begs the question about the nature of properties. Categoricalists like Armstrong and Prior et al. simply disagree with the definition, since they think that dispositions are not causal powers at all. So this distinction also offers no assistance.

Finally, we could say that dispositions are non-qualitative, or that qualities are non-dispositional. This is unhelpful in two regards. The first is that defining a thing in terms of what it is not, is uninformative. Saying that spoons are non-forks tells me almost nothing about what a spoon is. To be a useful definition requires saying something more positive and substantive about a thing. Secondly, even this seemingly noncontroversial definition of qualities and dispositions begs the question if one takes it to be a statement about properties. The identity theorist believes that a property is identical to a quality, which is identical to a disposition. Therefore, according to this view, it is false to say that a qualitative property is non-dispositional, or that a dispositional property is non-qualitative.

These past attempts to characterize qualities and dispositions give us an idea of the issues that need to be avoided when offering an account of the two. If we hope to provide a meaningful conception of both qualities and dispositions, that conception must avoid the three problems above. Namely:

- 1.It should have distinct, non-overlapping criteria for distinguishing each.
- 2.It should avoid begging the question about the metaphysical nature of properties.

3. It should be a positive characterization of each – i.e. neither should be defined negatively in terms of the other

2b. A New Approach

The standard approach to understanding the difference between qualitative and dispositional descriptions has been to look at paradigm instances of each and compare the two side-by-side. What is it about squareness that is different from fragility, one might ask. However, if the thesis that every property can be expressed in either qualitative or dispositional terms (Section I) is correct, it suggests a new approach to the issue. Instead of picking two different properties, we can pick any *single* property and ask what changes as we go from its description in qualitative terms to its description in dispositional terms or vice versa.

Take the example of squareness. What is the difference between saying of this

image; ■

“that is square-shaped,” and “if its corners were properly counted, the result would be four”? Or between saying “that block is square,” and “that block will produce a square imprint if pressed into soft wax”? The latter in each case introduces two things not found in the former. The first is a process over time. Proper counting and producing a square imprint are actions that occur over a period of time. Suppose we took a picture of the block next to a piece of wax. This represents a single instant in time. Within the atemporal context of the picture, the block's squareness is wholly present, but its ability to produce a square imprint is not. This is to say, at any moment of time t , all of an object's qualities are captured, in a way that its dispositions are not. It is important to note that this is not a metaphysical assertion. In the normal context of experience, a

dispositional property may be just as present and actual as a quality. The point is that when we conceptually strip away an object's movement through time, we isolate its qualities.

The second element that the dispositional phrases add is potential interaction with other objects or properties. Counting the corners of a square requires a counter. Making a square imprint requires wax (or some other soft material). To say, “that block is square,” makes no reference to anything other than the block itself. The block's squareness is not contingent on anything outside of it, in the same way that manifesting its disposition to produce a square imprint is.¹⁰ Once again we must be clear on the matter. The disposition *itself* is not contingent on any another object. The vase is fragile regardless of whether it is struck sufficiently hard or not. However, when we ascribe a dispositional predicate to the square block, it points towards possible manifestations. Such manifestations are in fact contingent on another object.

Going from a vase's fragility to the corresponding quality of being composed of glass, we see the same shift in characterization. Fragility expresses something about the vase in terms of how it might interact with other objects, like baseball bats or hard floors, over some duration of time. To get to its corresponding quality, we focus solely on the vase's composition without regard to any other object or property. Furthermore, to say the vase is made of glass does not inherently imply any duration of time. Its being made of glass requires, conceptually, only one moment. As the photograph example was intended to illustrate, it could be fully expressed in a single frame of time.

¹⁰ I am not the first person to point to this. Martin (1996, p. 133) suggests replacing cause and effect with “reciprocal disposition partners for mutual manifestation.” While we speak of the disposition of a single object or property, it always points to other objects or properties.

The resulting picture is as follows:

Criterion of Qualitativity (CQ): A predicate describes a property *qualitatively* when (1) the predicate applying to an object does not presuppose the existence of any other properties or objects, and (2) it captures the property at a fixed, or single, moment in time.

Criterion of Dispositionality (CD): A property is described *dispositionally* when (1) the predicate applying to an object presupposes the existence of other properties or objects, and (2) it points to, or implies, a process or activity over time.

Cross seems to be pointing us in this direction when he says that dispositions are “outward directed” while categorical characterizations are “purely ‘inward’” (p. 323). The term inward is slightly misleading, though, in a way that my account is not. Inward implies that one needs to look inside or descend to lower levels of being to find the quality. A view like Armstrong's easily leads to this kind of characterization. Fragility reduces to some lower-level fact about the object's microstructure. As we saw, however, this move is not necessary. Saying that the vase is glass says something about *only* the vase (CQ1), but it is not clear that it necessarily looks *inward*. Put another way, it is not the case that the glass is some part, or component of the vase that we have to look inside to find. It is a property *of* the vase, not *inside* the vase.

Cross' characterization of dispositions as outward-directed also makes sense in light of CD1. To say that dispositional descriptions point to external properties and objects (CD1) is simply to make explicit what the “outward-direction” is. A dispositional predicate is outwardly directed *towards* those possible interactions with other objects. Therefore, I am not accusing Cross of drastically missing the mark in his characterization. On the contrary, my own account can be seen as a modified version of the very distinction he captures.

The previous two paragraphs highlight the explanatory power of CQ1 and CD1. However, CQ2 and CD2 prove illuminating as well. Suppose someone described a block of polonium in terms of what was happening to the internal composition as it decayed. Suppose they did so without any reference to the effects of the radiation on surrounding objects. This appears to be a “purely inward” examination of the block (seemingly CQ1). I think most people's intuition is to say that we are describing the block dispositionally when we describe internal changes, though.

The CD help us to account for this intuition. If we thought through this example, we could push back by saying that those internal changes still imply interaction with external objects (CD1). For example, we might say that the block's decay entails the emission of energy, which is bound to effect external objects, thus satisfying CD1. Much more straightforwardly, though, it satisfies CD2. It expresses a process over time within the block. The block does not have the quality of going from one internal state to another, it is disposed to do so over some duration. Of course, when all is said and done both criteria should be satisfied, so our justification for CD1 should hold as well. The point is merely that the CD together help to articulate our pre-existing intuition about the matter.

My account should be viewed as not only a clarification of Cross' view, but as building on the intuitions of other philosophers on the subject as well. Armstrong (1997, p 69) says that categorical properties have a nature that is, “self-contained, distinct from powers.” Ignoring the metaphysical assumption that categorical properties are not also powers, this makes sense. “Self-contained” suggests conceptual isolation from other objects. If my account above is right, the self-contained, qualitative description of a property is at least conceptually distinct from the dispositions or powers that property

may have. Returning to Heil's depiction of qualities, we can see that extra emphasis should be put on "here" and "now". Qualities are properties of objects *here*, in isolation from things out there (CQ1), at some particular *now* (CQ2). Both Armstrong and Heil's account of qualities can be seen as pointing towards the view I have articulated, in which qualities are conceptually distinct, isolated, atemporal depictions of properties.

My account of dispositions similarly incorporates and explains past accounts. Claiming that dispositions are outwardly directed (Cross) or that they require disposition partners for manifestation (Martin, 1996) is in keeping with CD1. Both of these ways of framing dispositions incorporate the importance of potential interactions with other objects. Non-trivial subjunctive conditionals imply events (CD2) that entail multiple objects or properties (CD1). Recall the subjunctive conditional related to a triangle that has its corners counted. Counting implies both a duration of time and a counter to satisfy the conditional. Finally, if we equate dispositions with causal powers, causes entail some event (CD2) with a subsequent effect on something (CD1). The upshot of my account, therefore, is not simply that it remains in line with our intuitions. It also reveals the underlying connection between past characterizations.

Lastly, it is worth noting that my characterization succeeds in addressing the three issues that other attempts have run into:

1. The CD and CQ are distinct characterizations that do not share any overlapping criteria.
2. It does not beg the question about the metaphysical nature of properties, as one could still hold that one characterization or the other captures what a property fundamentally is (This will be addressed further in Section IV).
3. Neither qualitative predicates nor dispositional predicates are expressed negatively in relation to the other.

III. The Consciousness Objection

One possible concern regarding this characterization of qualities is that it is not clear how to apply it to consciousness. In the philosophical literature, one way to characterize consciousness is in terms of internal, phenomenal concepts. Phenomenal concepts characterize experiences in virtue of their phenomenal character—for example, ‘the experience of pain’ (Taylor, 2018b, p. 53). It seems that phenomenal concepts are used to describe experiences that occur over time, however. Moods, for example, seem to be phenomenal concepts used to express extended periods of attitudes or feelings. Consciousness, therefore, seems to violate CQ2. It is expressed in phenomenal concepts that extend over durations of time rather than ones that are captured in fixed moments as our criterion demands. This would refute my claim that CQ and CD apply to all qualities and dispositions.

Let's characterize phenomenal qualities in the commonly employed sense, what it is like to be x . Another way to put this is, what it feels like to be x . We can imagine a particular internal state or feeling (CQ1) at time t_1 (CQ2) in the same way that we can imagine any other quality at a fixed time.¹¹ To return to the snapshot illustration, we might look back at an old picture and think, “I was really happy at that moment.” Furthermore, the feeling at time t_1 disposes you to have other feelings as you experience internal change and interact with external objects¹² (QD1) through activities over time (QD2). For instance, my happiness at the instant the photo was taken might have

¹¹ Imagining any quality in purely fixed and isolated terms may very well be an abstraction. The point here is that imagining a feeling as fixed in a particular instant is analogous, and no less strange than imagining the quality of squareness as fixed in a particular instant.

¹² As was the case of describing the changes in polonium, it's not clear exactly what the best way to spell this out is. We could imagine describing mental changes that give rise to conscious feeling in terms of internal change rather than in terms of interactions with external objects. Just how much these internal changes point to, or imply external interactions is admittedly hazy in the account given here.

disposed me to act kindly towards others during the rest of that day.¹³ Thus, we have a phenomenal concept, happiness, that can be expressed in both qualitative and dispositional terms that satisfy CQ and CD. We can characterize happiness as captured in a single moment with reference to only the individual experiencing it, and we can characterize it as a disposition to have other phenomenal experiences in relation to other objects over time.

Much more would need to be fleshed out for a full defense of this view. Part of the challenge is simply the fact that consciousness remains a difficult topic. Therefore, my aspirations for this section remain modest. If the preceding paragraph at least offers one plausible route for understanding consciousness that is in keeping with CQ and CD, it has accomplished its aim. Pending a compelling and more complete account of consciousness that is in conflict with my characterization of categorical and dispositional predicates, I hope to have warded off initial concerns about the relationship between my account and accounts of the nature of consciousness.

IV. Metaphysical Consequences

Suppose that the arguments from Section I and II hold. That is to say, suppose that every property, whether fundamentally categorical, dispositional, both, or some combination of the two, can at least be expressed qualitatively or dispositionally.

¹³ I wish to avoid entering the discussion about the relationship between physical and phenomenal states, so I will not pursue the discussion deeply. However, the point might be illustrated even further by looking at the physical realizers of a particular conscious state and how a particular configuration at t_1 leads to subsequent configurations with similar conscious states. There might, therefore, be analogous qualitative and dispositional characterizations of the physical states that coincide with the qualitative and dispositional characterizations of the phenomenal experience.

Furthermore, suppose that qualitative descriptions are static and self-contained, while dispositional descriptions point to processes over time and external objects. Does applying these conclusions to the metaphysical debate about the nature of properties offer any assistance or insight?

I think the answer is both yes and no. As we would expect in a metaphysical debate, applying these conclusions does not leave us with an indisputable winner. The categoricalist can still say that we reveal what a property *really* is when we express it in fixed, isolated terms. The dispositionalist can still claim that what a property *really* is, is exhausted by its dynamic effects on other properties. In terms of settling the debate, therefore, these conclusions prove insufficient.

What I do think this account sheds light on, is what exactly each side must be willing to give up in order to defend their position. The categoricalist's ontology reduces to only the properties we can capture in still frames. What things really are is a series of these still frames connected by laws. Being, as opposed to becoming, is fundamental.¹⁴ Of course, contemporary categoricalists are not the first to defend such a position. Ontological accounts that afford being primacy and deem becoming (i.e. change) merely an illusion date back to Parmenides. While the views of modern categoricalists and Parmenides also have dissimilarities, highlighting the commonality they share in emphasizing being does elucidate what many philosophers find so unsettling about categoricalism. What is the source of change? Why is being any more fundamental than becoming? What are these "laws" posited by categoricalists that connect distinct instances of being?

¹⁴ This is not a completely novel idea in metaphysics. Strawson (2008) explicitly equates categorical with being.

On the other hand, the dispositionalist faces challenges of their own. The only being an object has is its power to affect other objects through time. That object imagined in abstraction, atemporally and isolated from all other objects cannot cause anything at all. Therefore, the dispositionalist seems committed to saying that an object at a single instant, in isolation from all other objects is no-thing at all.¹⁵ The dispositionalist's ontology is fundamentally becoming. This kind of ontological reduction also has ancient roots in the writings of Heraclitus, who famously claimed that everything is flux. This kind of view leads to puzzling questions. If a property is nothing but a set of powers, why does it feel as though we are saying something meaningful when we make a claim about how an object *is*, apart from what it can do? If dispositions point to *potential* interactions, and an object is nothing more than its dispositions, what is ever *actual* or *actualized*?

By my lights this at least gives a nod towards the intuitions of identity theorists like Martin and Heil. When we imagine a property as static and isolated, this is an abstraction. We simply do not experience properties in this way. Observing, discovering, and conceiving that the vase is made of glass are all events that happen in time. However, we still seem to capture something real and meaningful about the vase without referencing its causal powers. One aspect of what it is to be a property is to have this kind of identifiable, fixed nature at a given time. Fragility, by contrast, always points to future possibilities. Its meaning relies on our ability to conceive of such possibilities. Ascribing dispositions involves similar abstraction. The fragility of the vase implies possible

¹⁵ One possible response is to simply deny that such abstraction is truly conceivable. This would certainly be an interesting argument, but a sufficient analysis and response is beyond the scope of this paper.

manifestations that may never be actualized. Yet ascribing fragility still seems to tell us something meaningful *about the vase*.

According to the identity view, a property is identical to a disposition, which is identical to a quality. Suppose this is true. In each instance in which we identify a property, we should expect that it could be viewed in both qualitative and dispositional terms. If my argument from Section I is correct, that is precisely the case. Each instance of a property typically identified as a disposition has an accompanying qualitative characterization and vice versa. Furthermore, if the identity view is correct, we would also expect that the qualitative and dispositional aspects of a property are merely different ways of looking at, or understanding, one and the same thing. If the characterization I offer in Section II is correct, that expectation is also met. According to my account, describing a property in qualitative and dispositional terms are two distinct ways of looking at a given property. Finally, if my analysis from Section IV is accurate, the identity view most adequately captures our natural intuitions that being and becoming are equally real or fundamental. Objects seem to have the inherent potential to cause change in other things. But that potential is *in virtue of what they are*, rather than *what the thing itself is*. While perhaps not a decisive blow, it does seem that if the arguments of this paper are sound, it at least scores a point in favor of the identity view.

V. Conclusion

The standard approach to characterizing qualities and dispositions has been to start from a metaphysical position, like categoricism or dispositionalism, and articulate one's preferred conception from there. A dispositionalist might assert that qualities do not have any distinct ontology or meaningful character, since in actuality they are a set of

causal powers – i.e. dispositions. This essay has attempted to show that approaches of this sort have been misguided. Instead we should start from a metaphysically neutral perspective. When we do so, we see that qualitative and dispositional predicates never appear exclusively of one another. Regardless of whether qualities or dispositions are fundamental, ascribing one type of predicate to an object entails the possibility of attributing the other.

Furthermore, a neutral standpoint allows us to positively characterize both qualities and dispositions in a way that reveals what a categoricist or dispositionalist must be willing to sacrifice in their ontology. The categoricist is stuck with a series of instants. What is real are the properties contained within each isolated instant of pure being. The dispositionalist is stuck with an ontology that is pure powers, producing more powers, that point to potential future powers. This view reduces a thing's being to only what it might become. I, for one, think our ontology should afford space for both being and becoming. If every property can be viewed both qualitatively and dispositionally, why suppose we are looking at two different things? The most reasonable thing to say is that we are in fact looking at a single property in two ways. Therefore, if my characterization of qualities and dispositions holds, it should at least nudge us towards an identity view.

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