

Against Instantiation

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[Forthcoming in the *Australasian Journal of Philosophy*]

Abstract

According to traditional universalism, properties are instantiated by objects, where instantiation is a ‘tie’ that binds objects and properties into facts. I offer two arguments against this view. I then develop an alternative higher-order account which holds that properties are primitively predicated of objects yet, unlike traditional nominalism, are nevertheless genuinely real. When it’s a fact that Fo , it’s not because object o *instantiates* F -ness, but just that Fo – where F still exists. Against orthodox higher-order approaches, however, my arguments against instantiation also serve to support a *sparse* conception of properties. In developing the view, I introduce an extension of ontological and ideological commitment in the form of *syntactic* commitment.

When we make claims about the world, these claims often take the form of predicating features of objects. So when we talk about Sparky the electron’s negative charge, we predicate the property *negatively charged* onto Sparky. We might then think that there are facts in the world corresponding to such predications. There is an object Sparky and a property *negatively charged*, and somehow they come together to form a fact about Sparky’s charge. But such facts cannot consist in the mere existence of the object and the mere existence of the property. Proto the proton exists and the property *negatively charged* exists, but Proto is not negatively charged. Similarly, Sparky the electron exists and the property *positively charged* exists, but Sparky is not positively charged. Somehow, rather, Sparky is brought together with *negatively*

charged to form a fact about Sparky's charge, while Proto is brought together with *positively charged* to form a fact about Proto's charge. What is this 'bringing together'?¹

According to **universalism**, properties are multiply repeatable universals that are **instantiated** by objects to form facts. So *negatively charged* is really the universal Negatively-Charged-ness, and Sparky has this charge because Sparky *instantiates* Negatively-Charged-ness. According to one version of the view, the predicate 'instantiates' corresponds to a universal of Instantiation, so that when one or more objects instantiates a universal, then this consists in those objects and that universal bearing the further universal of Instantiation to one another. According to another version, the predicate 'instantiates' is a primitive bit of ideology.² The fundamental theory of the world admits of claims like 'Sparky instantiates Negatively-Charged-ness', but the 'instantiates' predicate is not given any analysis at all. On either version of universalism, however, a fact requires relationality between the object and the property, either in the form of a universal of Instantiation or a primitive relational predicate 'instantiates'.³

In this paper, I argue that facts don't involve anything that 'stands between' an object and its properties. In the linguistic mode, the best description of reality does not admit of names for universals like Instantiation or allow for predicates like 'instantiates'. Thus, I reject universalism – at least as it has been conceived in recent philosophical times. Yet, I also reject nominalism, since I still take properties to exist,

¹ In the early days of analytic philosophy, this problem went under the guise of the 'unity of the proposition' (Russell 1903: secs. 49-54).

² You can read Lewis (1983) as suggesting that this is Armstrong's (1978) view.

³ Another type of view is **trope theory** (Williams 1953; Martin 1980; Campbell 1981, 1990), which holds that properties are existing entities but that denies there are universals in the sense of multiply repeatable aspects of reality. Properties are instead one-off qualities. Yet such views still posit relationality between objects and their tropes, either in the form of a trope of instantiation or compresence or a primitive predicate of 'instantiates' or 'compresent' (Daly 1994). Likewise, the **bundle theory** (Russell 1940; Paul 2004, 2006, 2012) that takes objects to be bundles of universals united by compresence also posits a universal of Compresence-ness or appeals to a primitive predicate 'compresent'. These views face the same sort of problems that I will raise against traditional universalism.

and indeed to be multiply repeatable aspects of reality. By contrast to both universalism and nominalism, **primitivism** holds that facts take the form of primitive predications of properties directly, where such properties are fully real. Thus, I adopt a higher-order framework according to which properties exist in a second-order sense as predicational aspects of reality. Unlike an orthodox higher-order approach, however, my view denies that properties are *abundant*, since the very same arguments I use against instantiation suggest that properties are *sparse*. Therefore, I defend what is in many ways a traditional realism about properties, while nevertheless doing away with any relationality between objects and their properties.

1. Instantiation

Universalism holds that properties exist and are repeatable entities able to be had by distinct things. Traditionally, this ‘having’ is understood in terms of ‘instantiates’. So the fact Fo is taken to be the fact that the object o instantiates the universal F -ness. But what is ‘instantiates’ here? On one version of the view, it is a relational universal of Instantiation holding between o and F -ness. On another, there is no such universal but rather the theory makes use of a primitive predicate ‘instantiates’, so that Fo amounts to o *instantiates* F -ness such that no analysis of ‘instantiates’ is to be given. In what follows, let lowercase ‘instantiation’ be systematically ambiguous between ‘the universal of Instantiation’ and ‘the primitive predicate ‘instantiates’”.

Do universalists appeal to instantiation? Yes, many of them. David Armstrong suggests such a view when he says, “ a ’s being F is something more than just its constituents a and F ” (1989: 110) so that “we have to allow the introduction of a fundamental tie or nexus: instantiation” (1989: 109). Gustav Bergmann claims

that the “three additional constituents of [a fact] are, accordingly, the two “properties” of (1) individuality and (2) universality, and the “nexus” of exemplification” (1960: 21). P.F. Strawson holds that “Any term, particular or universal, must be capable of being assertively tied to some other term or terms so as to yield a significant result, a proposition” (1959: 167), and that “such assertible links between terms as these are not to be construed as ordinary relations. Let us speak of them as non-relational ties” (1959: 167). So while these thinkers perhaps deny that instantiation is another *universal*, they are still tempted to think of it as a further *relational* aspect of reality. Armstrong speaks of a “tie” and “nexus”, Strawson speaks of “links” and “ties”, and Bergman speaks of a constituent of every fact being the “nexus” of exemplification.

Going further, E.J. Lowe explicitly claims that instantiation is a relation:

In my view, to say that Dobbin is a horse is indeed to affirm a relation – the relation of instantiation – between two objects, one a particular and the other a kind: though I should emphasize that instantiation is no ordinary relation, any more than is its close relative, identity (1998: 157).

Likewise, in defending a species of relativism, Jack Spencer takes instantiation to be a relation by holding that there is an instantiation relation that can vary its extension relative to different parameters: “if double variabilism is true, then *O*, at *t1*, is bent, and bent *simpliciter*. *O* stands in the unplugged binary instantiation relation to the unplugged unary property *being bent*” (2016: 454-455).

Other universalists even try to analyze instantiation in terms of some other relation. Thus, Javier Cumpa claims that instantiation is the relation of *scientific entailment* (2017: 162-163). Sam Cowling treats properties as locations in quality-space and analyzes instantiation as the relation of *occupation* (2013). And Donald Baxter (2001) and the later Armstrong (2004) take instantiation to be the relation of *partial identity*.

Insofar as instantiation is analyzed in terms of some other relation, then instantiation is a relation – presumably, a relational universal.

Summarizing, some proponents of universals take there to be an instantiation relation and, hence, a universal of Instantiation, while others take universalism to require a primitive predicate of ‘instantiates’. Either way, facts involve a relationality between objects and universals. This relationality is clear when it comes to positing a universal of Instantiation. But how does a primitive predicate of ‘instantiates’ involve relationality? Isn’t it just a bit of language?⁴ No, because ideological commitment is still worldly commitment. Fundamental ideology posits worldly structure. As Ted Sider says,

A fundamental theory’s ideology is as much a part of its representational content as its ontology, for it represents the world as having structure corresponding to its primitive expressions. And the world according to an ideologically bloated theory has a vastly more complex structure than the world according to an ideologically leaner theory; such complexity is not to be posited lightly. (2011: vii)

I concur with Sider. The predicate ‘instantiates’ is playing a fundamental role in the universalist’s theory. It’s supposed to account for the difference between, on the one hand, the mere existence of an object and the mere existence of a universal and, on the other, the fact that the object has that universal. The appeal to instantiation is what is supposed to separate facts from a bare list of objects and properties. Therefore, the universalist who takes ‘instantiates’ to be a primitive predicate can’t simply claim that the predicate

⁴ I thank an anonymous referee for raising this objection.

‘instantiates’ is just a bit of language. They must hold that relational predicate ‘instantiates’ corresponds to some aspect of the world’s structure, namely a form of relationality between objects and their universals.

In what follows, I argue against the appeal to instantiation. This will be in two steps. First, I argue that the best form of instantiationism is the version that appeals to a primitive predicate ‘instantiates’ and not a universal of Instantiation. Second, I argue that we should do away with this predicate in favor of primitive predications of properties directly, where such properties are not just real but also sparse.

2. Instantiationism and Primitivism

In this section, I develop the best form of universalism with instantiation and distinguish it from the primitivist view that holds that facts take the form of primitive predications of properties directly.

2.1 Instantiationism

The best version of universalism with instantiation appeals not to a universal of Instantiation but rather to a primitive predicate ‘instantiates’. For the most basic facts about an object *o* having the universal *F*-ness, it’s fundamental that *o instantiates F*-ness. Likewise, for the most basic relational facts about the universal *R*-ness holding between objects *o* and *u* it’s fundamental that *o and u instantiate R*-ness. And so on. Higher-level instantiation facts, such as facts about people having mental properties, might be grounded in lower-level instantiation facts, such as those about the physical properties of their bodies. But when it comes to the most basic facts about things having properties – such as: Sparky *instantiates* Negatively-

Charged-ness – there’s no further accounting for how the predicate ‘instantiates’ works. Call this view **instantiationism**.⁵

Why uphold instantiationism, as opposed to treating instantiation as a universal? Primarily because it avoids Bradley’s Regress (Bradley 1893). To formulate the regress, take **grounding** to be a form of asymmetric metaphysical dependence such that certain facts hold *in virtue of* certain other facts (Fine 2012; Rosen 2010; Schaffer 2009). And let ‘*T*’ be a variably polyadic predicate for *instantiates*, while ‘*I*-ness’ names a universal of Instantiation.⁶ Then, the regress comes from the following principle:

If $Fo_1\dots o_n$, then $Fo_1\dots o_n$ is grounded by $I(F\text{-ness}, o_1\dots o_n)$, where ‘*F*’ is schematic for any predicate and ‘ o_1 ’...‘ o_n ’ are any singular terms.

Take a fact Fo . The regress is:

Fo is grounded by $I(F\text{-ness}, o)$,

$I(F\text{-ness}, o)$ is grounded by $I(I\text{-ness}, F\text{-ness}, o)$,

$I(I\text{-ness}, F\text{-ness}, o)$ is grounded by $I(I\text{-ness}, I\text{-ness}, F\text{-ness}, o)$,

and so on...

⁵ Thanks to Ted Sider for help formulating instantiationism

⁶ The regress could be run where there is a different primitive instantiation predicate for each adicity. The principle would just appeal to the $n+1$ -place instantiation predicate when there are n objects.

The regress is vicious. Each step of instantiation needs to be underwritten by a further instantiation of Instantiation, which never comes to an end. At no point does the dependence chain for Fo stop. But this seems impossible. Presumably, grounding is well-founded (Schaffer 2010: 62; Bennett 2011). Therefore, the dependence chain would have to terminate at some point in order to initiate the generation of Fo .

Universalists are threatened by the regress, since their view is that true predications are to be understood in terms of objects instantiating universals. So when ‘Sparky is negatively charged’ is true, then this is because Sparky *instantiates* Negatively-Charged-ness. This is supposed to be a general view, at first pass applying to all true predications. So since ‘Sparky *instantiates* Negatively-Charged-ness’ is itself a true predication, then the view seems to say that the predicate ‘instantiates’ must correspond to a universal that is itself instantiated. Universalists who independently treat instantiation as a universal are especially threatened by the regress, since not only to do they make this general claim about how to understand true predications, but they also already accept that instantiation is a universal and so already admit the existence of *I*-ness.

Instantiationism, however, stops the regress. If Fo is a most basic fact about an object having a property, then it’s fundamental that $I(F\text{-ness}, o)$. The best way to understand this, to my mind, is that the instantiationist holds that the expression ‘ Fo ’ is a misleading way of getting at what is better expressed by ‘ $I(F\text{-ness}, o)$ ’, where $I(F\text{-ness}, o)$ is fundamental. The important point, though, is that $I(F\text{-ness}, o)$ does not itself need to be grounded. It can still be the case that high-level facts like $I(G\text{-ness}, u)$ are ultimately grounded in fundamental facts like $I(F\text{-ness}, o)$. But there is no infinite regress, because fundamental instantiation facts are not themselves grounded. Therefore, instantiationism denies the most general form of the principle generating the regress. While other predicates – at the least those that ‘carve at the joints of reality’ – fall under the principle, the same does not apply to ‘instantiates’. This is partly why the predicate is primitive.

By contrast, treating instantiation as a universal either falls afoul of this regress or ends up positing a primitive predicate ‘instantiates’ anyway. If instantiation is a universal of *I*-ness, then it’s had by objects and universals when it’s instantiated by them. So then either this pattern continues for instantiation itself and so generates the regress, or at some point the instantiation of *I*-ness must be fundamental such that its brute that certain objects and universals *instantiate* *I*-ness. But in the latter case there is a primitive use of the predicate ‘instantiates’, so it’s more parsimonious to just then treat instantiation as expressed by a primitive predicate in all cases. Thus, the best version of universalism with instantiation takes instantiation to be expressed by a primitive predicate ‘instantiates’.

Yet, as I remarked earlier, an appeal to a primitive predicate ‘instantiates’ is not metaphysically innocent. It’s not just a bit of language, but rather playing a crucial role in how the universalist’s theory represents the structure of the world. In using a primitive predicate ‘instantiates’, the instantiationist is positing fundamental relationality between objects and their universals.

2.ii Primitivism

Against this, **primitivism** holds that properties correspond to primitive predications directly. When the claim ‘Sparky is negatively charged’ is true, it’s not because Sparky *instantiates* Negatively-Charged-ness, but instead because *Negatively-Charged*(Sparky). More generally, for the most basic sorts of facts, they don’t take the form ‘*I*(*F*-ness, *o*)’ or ‘*I*(*R*-ness, *o*, *u*)’ but rather simply take the form ‘*Fo*’ and ‘*Rou*’, and so on. Facts do not contain any relationality akin to *instantiates*.

Primitivism is thus best understood within a higher-order framework. While objects fall under the first-order quantifier ‘ $\exists x$ ’ that quantifies into nominal position, properties fall under an irreducibly second-order quantifier ‘ $\exists X$ ’ that quantifies into predicate position. So properties exist in a *second-order* way.

Moreover, in the higher-order idiom not only can we quantify into predicate position, but we can describe properties using predicates of predicates. Thus, in the context of primitivism the term ‘property’ attaches to a predicate, as in ‘the property F ’, whereas in the context of instantiationism the term ‘property’ attaches to a name for a particular, as in ‘the property F -ness’. From here on, when I write on behalf of primitivism my quantification over properties and predications of them is to be understood in this higher-order way.

Primitivism holds that facts simply take the form ‘ Fo ’, but when it’s a fact that Fo not only is it the case that $\exists x(x=o)$ but also that $\exists X(X=F)$. Higher-orderists reject any attempt to reduce the second-order quantifier to the first-order quantifier, which would amount to treating properties as objects (Williamson 2013: 254-261; Jones 2018: 814). Instead, properties and objects form two distinct ontological categories aptly quantified over by two irreducibly distinct forms of quantification (Hale 2013: 20).⁷ Yet this does nothing to reduce the reality of what exists in a second-order way. The view is fully realist even though the quantifier for properties is second-order.

Therefore, the primitivist treats predicates as expressing real properties. From their perspective, then, the instantiationist posits an additional aspect of reality, since their use of ‘instantiates’ commits them to the property *instantiates*. For monadic facts, the instantiationist holds that facts fundamentally take the form ‘ $I(F\text{-ness}, o)$ ’, but, by the primitivist’s lights, this means the instantiationist posits not just F -ness and o but also I , since to uphold $I(F\text{-ness}, o)$ is to be committed to $\exists XX(F\text{-ness}, o)$ and not just $\exists xI(F\text{-ness}, x)$ and $\exists yI(y, o)$. By contrast, the primitivist holds that facts just take the form ‘ Fo ’, so they only posit F and o .

⁷ This is a different form of ontological pluralism than that defended by Kris McDaniel (2017) and discussed by Jason Turner (2010), which holds there are fundamentally different kinds of first-order entities corresponding to different first-order quantifiers. Though nothing in principle stops these views from being combined.

From ‘ Fo ’ one cannot infer that there is some property R such that Fo if and only if $R(F, o)$. Similarly for facts featuring more than one object.

How, though, does the primitivist distinguish between the mere existence of object o over there and property F over here from the fact that Fo ? Doesn’t there need to be some aspect of reality in addition to just F and o ? Doesn’t there need to be something that accounts for how Sparky and *negatively charged* lead to *Negatively-Charged*(Sparky), which distinguishes this from how Sparky and *positively charged* don’t lead to *Positively-Charged*(Sparky)?⁸

The primitivist does, however, make a distinction between, on the one hand, the mere existence of Sparky and *negatively charged* and, on the other, the fact *Negatively-Charged*(Sparky). To put it in the linguistic mode, the difference is that ‘*Negatively-Charged*(Sparky)’ features the syntactic operation of predication, whereas ‘Sparky’ and ‘*negatively charged*’ do not. Metaphysically, the primitivist holds that there is worldly structure corresponding to the act of predication. Crucially, such predication is not itself a predicate, unlike ‘instantiates’. While a third-order relation like R above *could* be defined that holds between predicational aspect of reality F and objectual aspect of reality o just in case Fo , this relation is not the worldly structure corresponding to predication. Rather, it would be a relation grounded in the structure already exhibited by Fo . Moreover, it’s open to the primitivist to deny that there is any such third-order relation at all. As I discuss later, the best form of primitivism upholds a sparse view of properties, so I myself am inclined to deny that there is such a relation. Therefore, the primitivist does posit new structure in moving from F and o to Fo . But it’s structure corresponding to the syntactic operation of predication. It’s not additional *relational* structure corresponding to a relational predicate or a name for a relational

⁸ I thank an anonymous referee for asking these sorts of questions.

universal. By contrast, the instantiationist not only has structure corresponding to predication but also structure corresponding to the predicate ‘instantiates’.

Stepping back, theories have various types of worldly commitment. There is ontological commitment in the sense of commitment to the existence of certain first-order entities. And, as I discussed above, there is ideological commitment in the sense of commitment to worldly structure corresponding to the primitive notions of a theory. In the higher-order context, ideological commitment involving predicates amounts to second-order commitment – commitment in the sense of the second-order quantifier. Yet in addition to ontological and ideological commitment, I think there is also **syntactic commitment**. This is commitment to worldly structure in the form of, well, *form*. It’s commitment to worldly structure matching the syntax of one’s theory. So in using a first-order existential quantifier, a theory is *syntactically* committed to the world exhibiting first-order quantificational structure. Roughly put, it’s committed to an objectual ‘category’ of being. In using a second-order quantifier, a theory is syntactically committed to the world exhibiting second-order quantificational structure. Roughly put, it’s committed to a predicational ‘category’ of being. Letting ‘predicatee’ mean the recipient of predication, then in appealing to a primitive syntactic operation of predication, the primitivist is *syntactically* committed to the world having predicational structure in the form of facts taking the shape: *predication* predicatee. So while there may be no *term* for such structure in the language of their theory, the primitivist is still using this syntactic structure. And I hold that this carries worldly commitment.

Thus, the primitivist accounts for the difference between just o and F , on the one hand, and Fo , on the other, in terms of additional structure. What distinguishes the mere existence of o and F from the fact Fo ? In the former case there is just worldly structure corresponding to quantification, whereas in the latter case there is also worldly structure corresponding to predication. What blocks the mere existence of o and

G from leading to the fact Go ? Because worldly structure corresponding to quantification doesn't automatically generate predicational structure.

Is this just moving water from one bucket to another? What is really gained by doing away with a relational predicate but committing to worldly predicational structure that brings objects and properties together? First, doing so removes some of the bloat of instantiationism, which has such predicational structure and also *instantiates* besides. For another, appealing to predicational structure gives us a way to understand how the mere existence of property F and o differ from the fact Fo without appealing to any relationality standing 'between' F and o in Fo . The primitivist is not committed to a relational aspect of reality standing between objects and their properties, since they do not have any name for a relational universal like 'Instantiation' or a relational predicate like 'instantiates'. Rather, facts are accounted for by worldly commitment to the shape of facts corresponding to the syntactic form of predications. There is no need for a 'tie' between predications and objects, because facts take the form: *predication* predicatee.

For ease of expression, we might use the term **wayifies** for the metaphysical structure corresponding to the act of predication. In the fact *Negatively-Charged*(Sparky) the property *negatively charged* wayifies Sparky, whereas Sparky is not wayified by the property *positively charged*. Strictly speaking, however, the primitivist does not think in the best language for their theory has a relational predicate 'wayifies' that holds between properties and objects. Rather, the term 'wayifies' serves as a loose way of talking meant to get at the truth that facts take the form of properties being primitively predicated of objects. In what follows, I will speak of 'wayifies', but this should be understood as getting at the structure *predication* predicatee.

3. Two Arguments Against Instantiation

I argue against instantiation by arguing that instantiationism – the best version of universalism that appeals to instantiation – faces severe difficulties. If the best view that appeals to instantiation doesn't work, then we should jettison the appeal to instantiation entirely. I offer two arguments: the argument from **extra widgets** and the argument from **walking like a duck**.

3.i Widgets

The instantiationist holds that facts like *o instantiate F-ness* are fundamental in that there is no account of how 'instantiate' applies to *o* and *F*. Thus, in the linguistic mode, they do not attempt to analyze all predication, which as David Lewis remarks "is an unattainable aim, and so an unreasonable aim" (1983: 353). Instead, the instantiationist analyzes predications of features in terms of naming objects and naming a universal and then predicating 'instantiates' of them, where the predicate 'instantiates' is not itself analyzed. However, once unanalyzed predication is admitted, then why not just allow unanalyzed predications of fundamental features at the start? Both the instantiationist and the primitivist have primitive predication, it's just that the instantiationist also has the primitive predicate 'instantiates' whereas the primitivist does not.

In the metaphysical mode, the instantiationist holds that *instantiates* brutally wayifies. But, then, once fundamental wayifying is admitted at all we should simply allow for fundamental wayifying by properties directly – where, contrary to nominalism, such properties nevertheless exist. If there is primitive

wayifying, then it's more parsimonious to simply take properties to wayify objects by themselves, without needing instantiation interposed between them. Instead of having objects and a property and, in addition, wayifying by *instantiates*, there are just the objects as inherent wayifees and the property as inherent wayifier. There is no need for the additional metaphysical structure of *instantiates*. More carefully, given instantiationism, *instantiates* fills the 'predication role' while the objects and property fill the 'predicatee role' in the structure of facts: *predication* predicatee. But, instead, we can just appeal directly to the property in the 'predication role' with the objects in the 'predicatee role'.

So, the extra widget argument: if *instantiates* fundamentally wayifies, then there is fundamental wayifying, so positing instantiation as opposed to wayifying by properties directly posits an unnecessary metaphysical widget.

3.ii Ducks

The instantiationist denies that 'instantiates' corresponds to a universal, on pain of a regress of instantiation. Instead, they hold that 'instantiates' does not work like other predicates, and so take it as primitive.⁹ However, I argue that insofar as the universalist appeals to a primitive predicate 'instantiates', then they are pushed to in fact hold that it corresponds to a universal given the way they generally link predications to the existence of universals. The predicate 'instantiates' plays much the same theoretical role as other predicates that – because they play this role – the universalist thinks correspond to universals. So by their own lights 'instantiates' should correspond to a universal. But treating instantiation as a universal leads to Bradley's Regress.

⁹ I thank an anonymous reviewer for discussion about this paragraph.

Why think ‘instantiates’ would have to correspond to a universal? There is, first of all, the motivation from the **one over the many**. Universalists appeal to properties in order to account for similarity and dissimilarity between distinct things (Armstrong 1978, 1989). Why are Sparky and Shocky similar to one another? Universalists say: it’s partly because they each have the universal of Negatively-Charged-ness. One entity, Negatively-Charged-ness, covers the many of Sparky and Shocky. Why are Sparky and Proto dissimilar to one another? Universalists say: it’s partly because Sparky has Negatively-Charged-ness while Proto doesn’t, and Proto has Positively-Charged-ness while Sparky doesn’t. Sharing universals accounts for similarity, while differing with respect to them accounts for dissimilarity.

Another motivation comes from **generic connections**. These are general links between distinct features that underwrite explanations, and the universalist takes them to involve connections between universals.¹⁰ Consider laws of nature. One possible law is that negatively charged objects repel one another, which mediates why the electrons Sparky and Shocky coming near each other causes them to repel. Broadly speaking, the law would take the form: it’s a law that for any x and y , if x and y are negatively charged, then x and y repel one another. For the instantiationist, the law specifically involves instantiation of the universals Negatively-Charged-ness and Repelling-ness: it’s a law that for any x and y , if x and y *instantiate* Negatively-Charged-ness, then x and y together *instantiate* Repelling-ness. Consider, moreover, grounding principles. Sets are grounded in their members: for any x_1, x_2, \dots , if they are members of y and nothing else is, then the existence of x_1, x_2, \dots grounds y ’s existence. The universalist holds that this principle involves instantiation of the universal Set-Member-ness: if x_1, x_2, \dots along with y *instantiate* Set-Member-ness and nothing else does, then the existence of x_1, x_2, \dots grounds the existence of y . Such generic connections exemplified by

¹⁰ For discussion of generic connections, see Jonathan Schaffer (2017), though he doesn’t appeal to them to argue for properties.

laws of nature and grounding principles link properties to one another, so it would seem that the relevant properties must exist in order to be linked. And since such principles are generic in ranging over multiple instances, then the universalist holds that these properties are universals.

However, insofar as the universalist posits instantiation, then they must take ‘instantiates’ to satisfy the same motivations that lead them to treat other predicates as corresponding to universals.

The one over the many says that insofar as sharing a feature makes for similarity and not sharing it makes for dissimilarity then it’s a universal. But the instantiationist holds that *instantiates* makes for similarity between facts and dissimilarity between facts and non-facts. Any two facts are similar insofar as they are facts. But what makes them facts, as opposed to objects or properties? For the universalist, it’s because they all involve *instantiates*. Sparky being negatively charged involves Sparky *instantiating* Negatively-Charged-ness, and Proto being positively charged involves Proto *instantiating* Positively-Charged-ness. Both are facts because both involve *instantiates*. As for dissimilarity, why is the fact that Sparky is negatively charged dissimilar to an object, like Proto or even Sparky itself? Because, says the instantiationist, the fact that Sparky is negatively charged involves *instantiates* and neither Proto nor Sparky themselves do. But, then, sharing *instantiates* makes for similarity and differing with respect to *instantiates* makes for dissimilarity, so the motivation from the one over the many pushes the instantiationist to hold that the predicate ‘instantiates’ corresponds to a universal of Instantiation.

The motivation from generic connections is that insofar as a general link involves a feature then that feature is a universal. But, for the instantiationist, *instantiates* is involved in any such connection. Consider, again, the law that negatively charged things repel. For the instantiationist, this takes the form: it’s a law that for any x and y , if x and y *instantiate* Negatively-Charged-ness, then x and y together *instantiate* Repelling-ness. And also recall how the instantiationist formulates the grounding principle that

sets are grounded in their members: if x_1, x_2, \dots along with y *instantiate* Set-Member-ness and nothing else does, then the existence of x_1, x_2, \dots grounds the existence of y . Both these principles involve wayfying by *instantiates*, and so the motivation from generic connections suggests that *instantiates* is in fact a universal of Instantiation.

Might the instantiationist be able to deny that these principles commit them to the universal Instantiation, since in formulating them ‘instantiates’ is a predicate and not a name? No. If the instantiationist denies that predication of a feature requires the existence of a universal corresponding to that feature, then the motivation for universals from generic connections is undermined. Such principles can be formulated solely in terms of predicating properties and not naming them. Consider the way I originally formulated the law of nature: it’s a law that for any x and y , if x and y are negatively charged, then x and y repel one another. This involves the predicates ‘negatively charged’ and ‘repelling’, not names for features. And consider the way I originally formulated the grounding principle about sets: for any x_1, x_2, \dots , if they are members of y and nothing else is, then the existence of x_1, x_2, \dots grounds y ’s existence. This involves the predicate ‘member of’, not a name for such a relation. Thus, insofar as generic connections suggest the existence of universals, it’s because formulations of those connections involve corresponding predications. But the instantiationist appeals to the predicate ‘instantiates’ in their own formulation of the principles. Therefore, unless the instantiationist is to abandon the motivation from generic connections for positing universals, then they have to take instantiation to be a universal.

Hence, the claim that instantiation is a fundamental ‘tie’ in the sense of not being a universal is in tension with the traditional motivations for taking certain predicates to correspond to universals. However, if instantiation is a universal, then, as we saw, universalism faces Bradley’s Regress. I myself think these

traditional motivations for realism about properties are good ones. Yet, I don't think instantiation is required to capture them, as I discuss in the final section.

So, the walks like a duck argument: *instantiates* walks like a universal and talks like a universal, so insofar as there is an *instantiates* sort of wayifying then the universalist has to treat it as a universal – but this leads to Bradley's Regress – so we should deny that there is instantiation.

4. Properties without Instantiation

Instead of appealing to instantiation, I hold that properties are second-order aspects of reality that brutally wayify objects. Properties are inherent qualifyings, where the capacity to qualify is not separate from the property. More technically, this is to say that properties aren't instantiated by objects. Instead of facts most fundamentally being of the form *o instantiates F* – or *I(F-ness, o)* – facts are most fundamentally of the form *Fo*. Properties are real, but the structure of facts maps onto the syntactical operation of predicating features of objects, and not onto the predicate 'instantiates' that is then predicated of objects and a property. There is just predication, not predication plus the need for a special predicate 'instantiates'.

Primitivism thus stops Bradley's Regress since it's not the case that *Fo* is grounded in *I(F-ness, o)*. This is not because *Fo* is identical to *I(F-ness, o)*, but rather because *Fo* does not involve instantiation at all.¹¹ In this way, primitivism stops Bradley's regress while avoiding the problems that plagued instantiationism.

¹¹ For this basic maneuver in the higher-order idiom, see Robert Trueman (2021: 134-135).

4.i No Instantiation, No Problems

The first problem was that instantiation is an extra widget. But primitivism does away with this extraneous doodad. If facts took the form $I(F\text{-ness}, o)$, then there would be *instantiates* between $F\text{-ness}$ and o . Whereas if facts took the form Fo , then there would just be Fo with no intermediary tie between F and o . So instead of taking there to be brute facts of the form $I(F\text{-ness}, o)$, the primitivist takes there to be brute facts of the form Fo where there is one less aspects of reality forming the fact.

In picture think, the universalist with instantiation thinks that the world consists of a corkboard where objects are tacks and properties are big plastic letters $F, G, H...$ such that a fact consists in a rubber band tying the letters to the head of a tack. The primitivist, by contrast, thinks the heads of the tacks just consist in plastic sequences of letters $FGH...$ so they do without the rubber band entirely.¹² Crucially, therefore, the primitivist doesn't ground instantiation facts in primitive wayifyings. They don't ground $I(F\text{-ness}, o)$ in Fo . Rather, they eliminate instantiation entirely. Once there is primitive wayifying, there is no need for instantiation – fundamental or not. Objects have their properties by being primitively wayified by them. To accept non-fundamental instantiation would still be to accept an extra metaphysical widget.

However, the instantiationist might object that although *within* each fact they posit an extra widget of *instantiates*, they only posit one manner of wayifying *across* all facts, namely *instantiates*. The primitivist, they object, posits a different manner of wayifying for each property: an F -way, a G -way, an H -way,.... So

¹² I thank an anonymous referee for help with this metaphor.

while the instantiationist is less parsimonious when it comes to the structure of a given fact, the primitivist is less parsimonious about the number of wayifyings.

But we need to tread carefully lest we misunderstood the view. Primitivism does not claim that there is a property F over here and an object o over there, where o comes to be had by F because of a special F -manner of wayifying W_F so that Fo because $W_F(F, o)$. This would reintroduce all the problems of instantiationism. Rather, primitivism holds that properties just *are* manners of wayifying in the sense that to say ' o has F ' is just a misleading way of indicating the fact that Fo . So to say there are different manners of wayifying is just to say there are different properties. F wayifies differently than G because Fo and Go are different facts. So the amount of wayifyings posited by primitivism is precisely the same as the number of properties, because manners of wayifying just are properties. Thus, primitivism is as parsimonious as one's ontology of properties.

How, though, is primitivism supposed to explain the similarity between facts, if not due to a shared wayifying like that of *instantiates*? It does so by appealing to the uniform structure behind Fo , Rou , and so on. Facts have a shared form corresponding to predication. The general similarity between any two facts comes about not from anything corresponding to a shared predicate *inside* each fact, but to the worldly structure of wayifying as such. Remember, speaking of wayifying is just a loose way of saying that facts have worldly structure corresponding to the act of predication: *predication* predicatee. All facts have this structure.

The second problem was that of walking like a duck. Instantiation plays much the same role as universals, and so if there is instantiation, then it should be taken to be a universal. But taking it to be a universal leads to a version of Bradley's regress. There is no such difficulty for primitivism. Similarity is accounted for by sharing properties as second-order aspects of reality. Dissimilarity is accounted for by

differing with respect to properties as second-order aspects of reality. The primitivist, moreover, captures generic connections in that they are formulated by way of predicating properties, not by naming them and then predicating ‘instantiates’. Recall the law that for any x and y , if x and y are negatively charged, then x and y repel one another. The primitivist holds that this law takes the form: it’s a law that for any x and y , if *Negatively-Charged*(x) and *Negatively-Charged*(y), then *Repel*(x, y). Recall, as well, the grounding principle about sets. The primitivist holds that this takes the form: for any x_1, x_2, \dots , if each x_1, x_2, \dots , *Set-Member*(x_n, y) and nothing else does, then *Grounds*(x_1, x_2, \dots, y). There is no need for instantiation in these connections.

The primitivist is therefore happy to allow that properties are universals in the sense of being repeatable aspects of reality that underwrite similarity and enter into generic connections. Primitivism is thus *realist* about properties, and not *nominalist* in the traditional sense. There are multiply repeatable aspects of reality that exist in a second-order predicational way.

4.ii Realism

Primitivism avoids regress by denying that anything needs to be interposed between an object and its properties. This same basic move is made by others. David Seargent (1985) rejects Bradley’s Regress by treating properties as *ways* as contrasted with *things*, where “if ‘ a has quality X ’ is translated as ‘ a is qualified in an X way’ the need for a relation between the thing a and its quality X similarly evaporates” (113). However, Seargent goes on to deny that such ways exist. Yet, then, taken at face value Seargent’s view becomes a version of **austere nominalism**, which holds that only objects exist even though it is true to describe objects in certain ways (Quine 1948; Devitt 1980; van Cleve 1994). According to this version of nominalism, when we speak of Sparky’s charge we primitively apply ‘negatively charged’ to Sparky, but there is no entity corresponding to the predicate.

By contrast, I hold that properties exist – it's just that they don't need to be tied to objects via instantiation. Primitivism differs from austere nominalism in seeing structure in facts where the austere nominalist does not. When it's true that 'Sparky is negatively charged', the nominalist only thinks that Sparky exists, whereas the primitivist thinks that both Sparky and *negatively charged* exist. Sparky exists in the first-order way, while *negatively charged* exists in the second-order way. For the nominalist, there is no aspect of reality that is the *F* in *Fo* or the *R* in *Rou*, whereas the primitivist holds that in each case there is a property.

Thus, as I've said, primitivism takes a higher-order approach to properties, whereby properties exist in a higher-order sense corresponding to quantification into predicate position. Yet one may worry that this higher-order approach undermines primitivism's realist credentials. A popular view since Quine (1948) has been that the only way to express existence is using the first-order existential quantifier, and since primitivism takes properties to exist in the sense of the second-order quantifier, then it may seem that primitivism isn't realism but rather a form of nominalism after all.

Yet, I reject the claim that existence can only be expressed using the first-order quantifier. The higher-order quantifier involves genuine metaphysical commitment to new aspects of reality. Properties are different kinds of beings than objects, hence the latter falls under the first-order quantifier while the former falls under the second-order quantifier. But they both exist in their respective manners of existence. I take both quantifiers to be ontologically committal – in the broad sense of ontological commitment that goes beyond first-order entities. We should not take it as given that the world's structure only corresponds to first-order logic.

4.iii Sparseness

Primitivism takes a higher-order approach to properties in that it takes them to exist in a second-order way such that facts like Fo imply facts like $\exists X(X=F)$. However, I deny that properties are **abundant**, so I don't think that there is a property for every meaningful predicate. Properties, instead, are **sparse**. Even though the predicate 'negatively charged if observed before 2050 A.D. and positively charged otherwise' is meaningful, there is no corresponding property *negatively charged if observed before 2050 A.D. and positively charged otherwise*. Given a sparse conception, there are no facts consisting in predications of abundant properties. There is no fact *Negatively-charged-if-observed-before-2050-A.D.-and-positively-charged-otherwise*(Sparky) since there is no property to enter into this fact. The truth of claims involving predications of abundant properties are made true by facts involving sparse properties. So the claim 'Sparky is negatively charged if observed before 2050 A.D. and positively charged otherwise' is partly made true by the fact *Negatively-charged*(Sparky).

On a higher-order sparse conception of properties there can still be entities serving as abundant properties, they just wouldn't be properties in the strict sense of second-order predicational aspects of reality. If, say, abundant properties are needed to serve as contents of thoughts, then they might be first-order set-theoretic constructs (compare Lewis 1986: 56–7; Sider 2013: 764). But this sort of entity is not a second-order predicational aspect of reality. Those second-order aspects, according to my view, are sparse.

Why do I uphold a sparse conception of properties? Because, as brought out by the *walks like a duck* argument, I believe that two of the major reasons for positing properties is that they underwrite similarity and enter into generic connections. Two objects are similar insofar – and just insofar – as they share a property. This could not be so if properties were abundant, since sharing just an abundant property does not make for genuine similarity. An observed electron Sparky and observed proton Proto would share the abundant property expressed by 'negatively charged if observed before 2050 A.D. and positively charged

otherwise'. But this does not make them genuinely similar. Only if properties are sparse can sharing them – *merely* by sharing them – make for genuine similarity.

As for generic connections, I think that, in some hard to specify sense, properties must be 'apt' for entering into such explanatory generalizations. Whether actual properties must actually feature in such connections turns on the amount of contingency to these properties and connections. So take the property of mass in Newton's theory: *massive in the Newtonian way*. Depending on one's modal view of properties, this property may or may not exist in the actual world. And, likewise, the Newtonian law *Force = mass in Newtonian way* \times *acceleration* may or may not obtain unexemplified in this world, depending on one's modal view of connections. I don't want to take a stand on such issues here. So my claim is just that the property *massive in the Newtonian way* is sparse in that it's 'apt' for entering into a possible generic connection like Newton's second law. There is a possible world whose laws of nature include ones about Newtonian mass. But putative properties like *negatively charged if observed before 2050 A.D. and positively charged otherwise* are not even apt to enter into such connections, because they are too gerrymandered. A putative causal law that two particles that are negatively charged if observed before 2050 A.D. and positively charged otherwise repel one another would be best understood as consisting in connections about *positively charged* particles repelling and *negatively charged* particles repelling, or, perhaps, *same charged* particles repelling. Such properties do enter into generic connections involving laws of physics.

Therefore, my *walks like a duck* argument against instantiation also serves to suggest a sparse conception of properties. This cuts against the orthodoxy amongst higher-orderists, which is to accept a comprehension schema linking meaningful predicates to the existence of properties:

$\exists X \forall x_1 \dots x_n (Xx_1 \dots x_n \leftrightarrow A)$, where A is a sentence and ‘ X ’ does not occur free in A . (compare Hale 2013: 181; Trueman 2021: 71; Goodman forthcoming: sec. 3.1)

Similarly, Nick Jones accepts a higher-order version of existential generalization:

Classical Higher-Order Existential Generalization: From A , one may infer ‘ $\exists X A^{[X/F]}$ ’, where $A^{[X/F]}$ results from A by replacing (zero or more) occurrences of the predicate ‘ F ’ with ‘ X ’ (and (a) ‘ F ’ is free for ‘ X ’ in A , and (b) ‘ F ’ and ‘ X ’ are of the same degree). (2018: 812, some typographic changes are mine; see also Goodman forthcoming: sec. 3.1)

From this, Jones argues that for any predicate it’s the case that uncontroversial truths allow you to infer the second-order existence of a property corresponding to that predicate. So take the predicate ‘ F ’, then it’s a logical truth that

$$\forall x (Fx \leftrightarrow Fx)$$

from which classical higher-order existential generalization allows one to infer

$$\exists X \forall x (Xx \leftrightarrow Fx).$$

This inference pattern can be repeated for any n -adic predicate. Thus, Jones claims that you can derive each instance of a comprehension principle that says, roughly, for each predicate there second-order exists some corresponding property. Indeed, this sort of unrestricted existential generalization as well as some sort of comprehension principle form part of standard systems of higher-order logic.

If a higher-order comprehension principle were accepted, however, then it would be in tension with my arguments against instantiation, since it leads to an abundant conception of properties. This might not be obvious for two reasons. First, my *walks like a duck* argument only requires a sufficiency claim: if a predicate tracks genuine similarity and expresses generic connections, then it corresponds to an existing property. If there are abundant properties, then, trivially, a predicate tracking genuine similarity and expressing generic connections corresponds to an existing property. Second, and relatedly, a higher-order comprehension principle entails that if the predicate ‘instantiates’ were meaningful, then there would be a property *instantiates*.¹³ So we have a quick higher-order argument that instantiation would have to be a property if ‘instantiates’ were taken to be a meaningful predicate. But this is close to the conclusion of my *walks like a duck* argument.

¹³ To see this, note that if a comprehension principle were accepted, then if the instantiationist accepts claims like

$$I(F\text{-ness}, o)$$

then they would also have to accept, as an instance of the comprehension principle, that

$$\exists X \forall x (X(F\text{-ness}, x) \leftrightarrow I(F\text{-ness}, x)).$$

And, likewise, from claims like

$$I(F\text{-ness}, o)$$

classical second-order existential generalization licenses the inference to $\exists X (X=I)$.

However, many universalists uphold a sparse conception of properties (Armstrong 1978), and so would reject the abundant conception nascent in the comprehension principle and unrestricted second-order existential generalization. Thus, the sufficiency claim becomes important in the context of a sparse theory of properties, since it's no longer trivial that a predicate corresponds to a property, while, at the same time, it's sufficient for a predicate to correspond to a property if it tracks genuine similarity and is able to help express generic connections. Therefore, my argument presumes a sparse theory of properties and aims to show that, even on this conception, if a predicate 'instantiates' were posited, then it would have to correspond to a property. Yet, aside from the dialectic with universalists, I think that a higher-orderist has independent reason uphold a sparse conception of properties, since, as I discussed above, it's suggested by two of the biggest motivations for positing properties at all.

Thus, to my mind, higher-orderists *should* uphold a sparse conception of properties, but *must* they? Can they simply introduce a predicate for sparseness that applies to some properties but not others (Hale 2013: 39; Jones 2018: 813)? No, because this move breaks the link between the existence of properties and their role in underwriting similarity and entering into generic connections. Merely sharing properties would not just by sharing them alone explain similarity, because only sharing a certain proper subset of properties would make for similarity. Likewise, properties would not be the sort of aspect of reality apt to enter into generic connections, since only a proper subset of properties would be. On an abundant view that simulates a sparse view, it's not the mere existence of a property that does the explanatory work, but rather their existence and also their having a special property of properties. But, to my mind, this is where the simulacrum goes wrong. The appeal to the mere existence of properties to accommodate these theoretical roles makes the explanation less mysterious than the appeal to some special property of properties. I have

an easier time seeing how existence endows a privileged status than I do seeing how this status could come from a particular property of properties.

Therefore, there is reason to go for a sparse higher-order conception of properties, and so deny the comprehension principle linking meaningful predicates to the existence of corresponding properties. Yet, as Jones shows, the classical rule for higher-order existential generalization leads to comprehension. So *can* the higher-orderist have a sparse conception? Yes, if they accept a higher-order free logic. So instead of classical existential generalization, they would instead go for a free logic version like:

Free Logic Higher-Order Existential Generalization: From A and $\exists X(X=F)$ one may infer $\exists X A^{[X/F]}$, where $A^{[X/F]}$ results from A by replacing (zero or more) occurrences of the predicate ' F ' with ' X ' and ' F ' is free for ' X ' in A . (compare Skiba 2020: 2812; see also Besson 2009 and Bacon, Hawthorne, & Uzquiano 2016)¹⁴

The appeal to free logic here is not some sort of ad hoc commitment. It's naturally aligned with a sparse conception of properties, and, moreover, free logic seems appropriate in the first-order case as well – we don't want a logical proof of the existence of God from ' $\text{God} = \text{God}$ ' to ' $\exists x(x=\text{God})$ '. Therefore, I think a higher-orderist should endorse a sparse conception of properties and invoke a free higher-order logic. Even given a restricted sparse conception, my argument is that the instantiationist is committed to a relation *instantiates*, and the primitivist does better by doing without.

¹⁴ Though Skiba argues for a hybrid view where there are higher-order universals and first-order tropes.

5. Derivative Instantiation?

So far I've argued against instantiation by arguing against the view that instantiation is ultimately fundamental. I took this to be the best view that posits instantiation, since taking instantiation to be grounded in further instantiation facts leads to Bradley's Regress. However, T. Scott Dixon argues that the universalist should take instantiation to be grounded, not in more instantiation, but rather in "how things are" (2018: 75). Given a fact *Fo*, Dixon's proposal is that *Fo* grounds *o instantiates F-ness*.¹⁵ Bradley's Regress is avoided, since instantiation ultimately grounds out in fundamental facts that don't involve it. Call this approach **derivative instantiationism** to distinguish it from the *brute* instantiationism that has been the target so far. Might derivative instantiationism fare better than its brute cousin? Might it even be preferable to the more radical primitivism that rejects instantiation entirely?¹⁶

Derivative instantiationism might seem to do better than brute instantiationism because it avoids my particular arguments against taking instantiation to be fundamental. To remind you, the walks like a duck argument claims that *instantiates* operates much like a universal, so the brute instantiationist should take there to be a universal of Instantiation, but then their view runs into Bradley's Regress after all. But, as I remarked just above, derivative instantiationism avoids this regress. While the view entails that there is a universal of Instantiation, since predications are taken to ground the instantiation of corresponding universals, this merely leads to an 'upward' regress that doesn't violate the well-foundedness of ground: *Fo*

¹⁵ Dixon distinguishes sentential grounding from fact grounding, so he distinguishes '*Fo* grounds *o instantiates F-ness*' from 'the fact [*Fo*] grounds the fact [*o instantiates F-ness*]'. He officially opts for the former rather than the latter. But this difference won't make a difference in what follows.

¹⁶ I thank a referee for recommending that I address this view, and for very insightful comments leading to the discussion in this section.

grounds *o* instantiates *F*-ness, and *o* instantiates *F*-ness grounds *o* and *F*-ness instantiate Instantiation, and so on. The universal of Instantiation is instantiated, but everything ultimately grounds out in the non-instantiation fact *Fo*. As for the extra widgets argument, it claims that brute instantiationism requires primitive wayification by *instantiates*, since the view holds that instantiation is ultimately fundamental. But this means that instantiation is redundant metaphysical structure since we can just then take properties to primitively wayify by themselves. Derivative instantiationism, however, denies that *instantiates* involves primitive wayification because the instantiation of universals is grounded in how things are. So there is no fundamental wayification by *instantiates* from which to argue for fundamental wayification more generally.

Derivative instantiationism might also seem to have advantages over primitivism. I argued for combining primitivism with a sparse conception of properties, but derivative instantiation is compatible with either a sparse or an abundant view. This may be thought to be preferable on the basis of theoretical neutrality. Moreover, one might take the one over the many argument to suggest that there is indeed a universal of Instantiation, since it would account for the genuine similarity between arbitrary facts. If so, then derivative instantiationism is superior since it can accommodate the existence of Instantiation, whereas primitivism denies it.

However, these apparent advantages of derivative instantiationism over primitivism are only apparent, and variants of the arguments I used against brute instantiationism can be used against the derivative version of the view.

Let me first discuss the apparent advantages. Primitivism is the view that properties primitively wayify, and this is certainly compatible with an abundant conception of properties so long as they are taken to primitively wayify. My argument for sparseness that a primitivist should take on a sparse

conception of properties as an *additional* commitment. I tie properties to generic connections and similarity, and the mere existence of properties seems more explanatory with respect to these phenomena than a mysterious property of being a privileged property. But the basic mechanism of primitive wayification is consistent with abundant properties.

Does tying similarity to properties, though, suggest there is indeed a property of Instantiation, since it would underwrite similarity between facts? No. Not all worldly structure is objectual or predicational. Some of it, as I argued earlier, is syntactical in the sense that it mirrors the linguistic act of predication. Any two arbitrary facts are genuinely similar in having the same syntactic structure of predication. And they might be dissimilar, as well, in differing over some of their syntactic structure, such as in the adicity of their predications. On a sparse conception, properties are necessary and sufficient for underwriting similarity and dissimilarity between objects and perhaps also properties. But different worldly structure accounts for at least some of the similarity and dissimilarity between facts.

So derivative instantiationism doesn't have the purported benefits over primitivism. And while it avoids the particular arguments I raised against brute instantiationism, it faces challenges in their vicinity. Recall that derivative instantiationism holds that Fo grounds o *instantiates* F -ness. Now say that Fo is a fundamental fact. What, according to the derivative instantiationist, is the metaphysical structure of this fact? There are two ways to go. First, they could hold that its structure is as the austere nominalist says it is for all facts, namely that fundamentally speaking Fo just involves the object o and not any feature corresponding to ' F '. That feature only comes in derivatively as a universal of F -ness whose instantiation is grounded by Fo . At the fundamental level, though, higher-order quantification over predicational aspects of reality is either illegitimate or its domain is empty, so, really, there is no feature but just the object. Second, the derivative instantiationist could hold that the structure of Fo is as the primitivist says it

is for all facts, namely that there is a property F that exists in the higher-order sense that primitively wayifies o . The second-order existing property F would then be linked to the first-order existing universal F -ness. My sense is that Dixon construes derivative instantiationism in the austere way, since he ties property realism to the existence of first-order universals (2018: 50-51). Given this understanding, though, the approach faces problems analogous to those faced by full-blown austere nominalism.

Remember that the driving problem of this paper is how to understand features being brought together with what have them. When Sparky is negatively charged this somehow involves Sparky and *negatively charged* coming together to form that fact. But the austere nominalist denies that there is any such bringing together, because they deny that there is any feature to be brought together with Sparky in the first place. Thus, insofar as we want an account that accommodates features coming together with what have them, then we must reject austere nominalism. But the austere approach to derivative instantiationism takes the same view of facts at the fundamental level. If Fo is fundamental, then, according to the view, this cannot consist in the coming together of F and o , since there is no F . At best, the coming together would be that o *instantiates* F -ness. But this instantiation fact is derivative on Fo , so it can't account for the fundamental structure of Fo itself. Thus, if we want to accommodate the view that at the fundamental level there are facts consisting in the coming together of features with what have them, then we must deny the austere version of derivative instantiationism.

Moreover, this austere version of derivative instantiationism has problems accounting for similarity and generic connections involving fundamentalia, where these are analogous to problems faced by full-blown austere nominalism in capturing these phenomena more generally. As for similarity, consider two fundamental objects o and u such that Fo and Fu are fundamental facts. Intuitively, we want to say o and u are similar in virtue of what they are fundamentally like – as Fs . But the austere approach

allows nothing at the fundamental level that accounts for the similarity between the two objects that isn't just the objects themselves. There is nothing at the fundamental level that corresponds to the fundamental predicate ' F ' that applies to both of them, since there is nothing that corresponds to predicates at the fundamental level at all. At best, o and u are similar because they are both involved in grounding the derivative facts in which each respectively instantiates the universal F -ness. But what makes them similar should be precisely what explains why they both lead to the instantiation of the *same* universal, as opposed to their being similar because they just so happen to produce the instantiation of the same universal.

Relatedly, this construal of derivative instantiationism can't accommodate the very generic connections suggested by the view. Why does Fo ground o instantiates F -ness, as opposed to o instantiates G -ness? Why do both Fo and Fu ground the instantiation of F -ness, instead of Fo grounds o instantiates F -ness while Fu grounds u instantiates G -ness? In order to answer such questions, the derivative instantiationist needs to hold that there are connections akin to: for any object x , if Fx , then Fx grounds x instantiates F -ness. But, really, the derivative instantiationist needs an even more general connection as well. For why does Fx ground x instantiates F -ness and also Gy ground y instantiates G -ness, as opposed to, say, just Fx leading to the instantiation of F -ness and Gy not grounding any instantiation at all? Therefore, the derivative instantiationist needs a generic connection along these lines: for any x and any X , if Xx , then Xx grounds x instantiates X -ness. Yet this latter sort of connection is banned on the austere construal, for there are no Xs at the fundamental level. And even the more specific connections about particular features like F are unexplanatory, since, strictly speaking, there is nothing at the fundamental level corresponding to the attributed features. Fx only involves the object x and at most a linguistic attribution of a predicate ' F '. There is nothing worldly explaining why Fx always leads to the instantiation

of *F*-ness, and, more generally, why certain fundamental predications are invariably linked to certain derivatively instantiated universals.

Hence, derivative instantiationism faces a type of walks like a duck argument. For the view to be workable it must be that fundamental facts are treated how the primitivist treats them. If fundamental facts like *Fo* involve second-order existing properties like *F* that primitively wayify entities like *o*, then there is an account of the fundamental bringing together of features with what have them that accommodates similarity at the fundamental level as well as the general grounding connections that explain why fundamental facts like *Fo* ground facts like *o* *instantiates F*-ness.

Yet this primitivist construal of the view runs right into a type of extra widgets argument. If properties primitively wayify by themselves, then instantiation needn't be posited at all – even non-fundamentally. Similarity can be underwritten by properties that primitively wayify, and, as I just argued above, such properties do a better job of accounting for similarity than derivatively instantiated universals. Generic connections, moreover, can involve such primitive wayifiers, and, as I even more recently argued, putative connections about the grounding of instantiation would even require them. More broadly, it's redundant to take objects to have two types of features: properties as higher-order existents and also first-order universals exactly mirroring those properties. Just one is needed to underwrite attributions of features. So we should uphold primitivism instead of derivative instantiationism.

6. Without Instantiation

Properties are genuinely real, but that doesn't mean that anything stands between them and the objects they wayify. The universalist posits instantiation in order to move from objects and universals to facts. But instantiation isn't needed for this. Facts just consist in primitive wayifying by properties themselves. The difference between Sparky and *negatively charged*, on the one hand, and *Negatively-Charged*(Sparky), on the other, is that the latter consists in *negatively charged* wayifying Sparky whereas the former is just the collection of the object and the property.

For a fundamental fact *Fo*, how is it that *Fo*? It's just fundamental. How is it that *Negatively-Charged*(Sparky)? It's brute. For a non-fundamental fact *Gu*, how is it that *Gu*? It's grounded in more fundamental wayifyings like *Fo*. The wayifying underwriting that the table is solid is accounted for in terms of more basic wayifyings like *Negatively-Charged*(Sparky). But the most basic wayifyings are not accounted for by anything at all. This is not to say there can't be other sorts of explanations, such as causal ones, for how Sparky comes to be negatively charged. It's rather that there is no deeper account of in what Sparky being negatively charged consists. It's just *Negatively-Charged*(Sparky). The most basic facts simply have the structure of *predication* predicatee.¹⁷

¹⁷ I thank Alex Roberts and especially Ted Sider for their feedback. I also thank my audience at the Rutgers Metaphysics Group for their comments. And thanks as well to the journal's anonymous referees for their—usually—thankless work.

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