

Dubious by nature¹

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There is a charge sometimes made in metaphysics that particular commitments are ‘hypothetical’, ‘dubious’ or ‘suspicious’. There have been two analyses given of what this consists in—due to Crisp (2007) and Cameron (2011). The aim of this paper is to reject both analyses and thereby show that there is no obvious way to press the objection against said commitments that they are ‘dubious’ and objectionable. Later in the paper I consider another account of what it might be to be ‘dubious’, and argue that this too fails. I use Bigelow’s (1996) Lucretian properties as a vehicle for the discussions of dubiousness that follow. As a consequence, the paper ends up offering a partial defense of Lucretianism.

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1. Introducing Dubiousness

Some ontological commitments are described as ‘dubious’. To get a sense of what is meant by the term ‘dubious’, I want to first introduce an instance of an allegedly dubious property. This, in turn, requires us to consider a brief overview of the truthmaker objection to presentism.

Presentism is the thesis that:

(PR) Only present objects exist²

Let us make the perfectly sensible supposition:

(TRUTH) There are true propositions about the past

Finally, and for the sake of argument, let us adopt truthmaker maximalism:

(TM) Every true proposition has an existing entity as its truthmaker³

There is plainly a tension between these principles. Given TRUTH and TM there must exist truthmakers for true propositions about the past. If PR is true,

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then the truthmakers for truths about the past must be presently existing entities. However, there are no *obvious* present entities that look to be suitable truthmakers for true talk about the past. This suggests we must give up on one (or more) of the three principles.

This suggestion can be repudiated if we are prepared to endorse particular sorts of presently existing properties: for instance, the (so-called) ‘Lucretian’ properties, posited by Bigelow.⁴ According to the Lucretian, what makes propositions about the past true are presently existing properties that are instantiated by the world—properties of the form ‘having included so-and-so’. Thus, what makes true < there were dinosaurs > is that the world instantiates the property *having included dinosaurs*.

(One worry worth mentioning simply to set it aside, is that the Lucretian move is a bad move methodologically. The methodology seems to be: find an ungrounded truth, posit a new truthmaker. But, simply finding that we lack truthmakers on a given picture of reality does not (or *should not*) license a move to positing some new entity. Such moves are simply methodologically suspect. As I say, I don’t want to deal with this accusation here. My concern in this paper is with the charge that there is something suspect about the natures of some of the properties posited.)

The objection made by Sider (and others) is that these Lucretian properties are “dubious”, “hypothetical” and “suspicious”.⁵ The claim is that a proper ontology ought to invoke only a particular kind of entity. A proper ontology ought to include, ‘[o]nly categorical, or occurrent, properties and relations. Categorical properties involve what objects are actually like, whereas hypothetical properties ‘point beyond’ their instances’. (Sider 2001, 41)

In the process of explicating what is objectionable about the Lucretian properties, Sider likens Lucretian properties to various other posits, all of which are also said to be dubious. The complete list is:

- (i) Lucretian properties
- (ii) Ungrounded dispositions
- (iii) Ungrounded counterfactual properties
- (iv) Laws of nature that are universally possessed properties (being such that all Fs must be Gs)
- (v) Primitive spatial operators, analogous to tense operators
- (vi) Primitive personal operators, analogous to tense operators

There is something appealing about the idea that each of the *properties* on this list (each of (i)–(iv)) have something in common; that each of them ‘point beyond’, in Sider’s (2001, 41) words. There is, intuitively, some kind of difference between the ‘dubious’ properties and the ordinary sorts of property with which we are more familiar: being red, being round—and so on. Because of this, my opponent claims, we should reject the dubious properties.

As intuitive as this is, it’s far from a compelling argument. There are two obvious problems. First, it’s hard to see what, *exactly*, these supposedly dubious

posits have in common. What feature *is it* that the properties on the list share? This talk of ‘pointing beyond’ is all very well, but it hardly amounts to an analysis.

Second, even if we can identify a feature shared by each of (i)–(iv) why is it *objectionable*? Merely locating some feature, *f*, shared by each of (i)–(iv) and describing each of (i)–(iv) as ‘dubious’ in virtue of ‘being *f*’ seems little better than name-calling. So, let us suppose that there is some feature that unifies the dubious properties: we must then explain why we should try to avoid positing them.

It is less obvious—to me, at any rate—that (v) and (vi) belong on a list of suspect entities. Both (v) and (vi) are operators. It is hard to see how a semantic operator can be troublesome in *precisely* the same way as a *property*. With that in mind, this paper will not comment further on primitive operators of any sort, and will focus on the properties listed in (i)–(iv).⁶

Each of the terms (‘hypothetical’, ‘dubious’ and ‘suspicious’) that Sider introduces are then used by later authors to describe Lucretian properties and the other properties on the list. The result is that we have a single concept and three different terms used to refer to it. In this paper I slide between the terms, treating them as synonyms, picking the one most appropriate to context.⁷ This is an unfortunate state of affairs, but I prefer to use philosophers’ terms as they use them, rather than substituting other terms.

The view that there is nothing shared by each of (i)–(iv) in virtue of which they are objectionable is not new, having been (briefly) defended by Kierland and Monton (2007). However, the argument supplied by Kierland and Monton does not deal with the positions taken by either Crisp (2007) or Cameron (2011) (or the analysis considered in section 4). In this paper, I take these positions in turn and also consider another, reasonably intuitive, account of what the ‘dubiousness’ objection might consist in. For the most part I shall focus on Lucretianism. If I can demonstrate that Lucretianism does not satisfy either of the proscribed definitions of what it is to be dubious, then this gives us a counter-example to the claim that the analyses given by Crisp and Cameron specify some feature shared by each of (i)–(iv) and in virtue of which these properties ought to be rejected.⁸

Before we move to the substance of the paper, some notes about the strategy. First, in what follows, I will argue that there are some properties that we might posit that satisfy the proposed analyses of what is to point beyond, but that *do not* point beyond; and that some of the proposed analyses fail to generate the result that Lucretian properties point beyond. In arguing in this way I am assuming that there is nothing conceptually incoherent about the idea of a Lucretian property—that Lucretian properties are not themselves contradictory properties. Were opponents of Lucretian properties of a mind that Lucretian properties are *contradictory*, then I assume that they would say so—rather than making the opaque and far weaker assertion that these properties are ‘suspicious’. Moreover, none of the analyses offered in the literature do anything to try to show that

there's anything contradictory about Lucretian properties. We are simply invited to think that properties that point beyond violate a constraint on what kinds of entity can be included in a 'safe and sane ontology'.⁹

Second, I am not assuming that all of the various properties that I consider are metaphysically possible. I am assuming that when considering the charge of dubiousness, we are at the point of theory-choice. It is epistemically possible that Lucretianism is true; epistemically possible that it is false. After all, the view appears internally coherent. Are there, then, good constraints on a 'safe and sane' ontology that rule some posits 'dubious'? According to some, there are, and the Lucretian properties fall foul of these and so should be rejected. To test these constraints (to see whether they are good constraints), we should apply them to a range of test cases. We should see whether or not these constraints deliver results that accord with our intuitions about what it is to 'point beyond' in a range of cases. Thus, although I will ask the reader to consider cases of the form 'suppose that such and such a property were actual . . .', I do not require these counterfactuals to be analysed in terms of what is metaphysically possible. Rather, my aim is simply to see whether or not the proposed analyses correctly classify a range of *putative* properties. And whilst the properties I consider are very strange—in some cases, at least—it does not seem incoherent to think that there are such properties. In that case, we should consider whether or not they pass the constraints on a safe and sane ontology and so ask whether or not they point beyond.

2. Crisp on the hypothetical and categorical

The first analysis of what it is to be hypothetical is due to Crisp (2007).¹⁰ To set-up Crisp's account of the distinction between the hypothetical and the categorical, we require an understanding of Crisp's terminology. Following Bealer, Crisp (2007, 94) abbreviates the singular term 'the proposition that S' with '[S]' and allows that we may refer 'to the property of being an x such that x is F with the singular term '[F_x]''. Crisp treats 'is possible', 'is necessary' and 'is past' as predicates and suggests that these predicates denote properties. The result is that '◇[S]' is to be read as saying that 'the proposition [S] has the property of being possible'. Similarly, 'WAS[S]' is to be read as saying that 'the proposition [S] has the property of being past'. We may then analyze properties like the Lucretian properties in terms of properties of propositions.

With this terminology in mind, Crisp (2007, 95) states what he takes to be the distinction between hypothetical and categorical properties.

F is a hypothetical property =_{df.} for some properties *G* and *H* (such that *H* is not equivalent to the property *being true*), $F = [H[Gx]]_x$.

Finally, allow that any non-hypothetical property is categorical.

To illustrate how this is intended to work, consider the property of being *formerly short*. Intuitively, this looks like the type of property that should be hypothetical. The property *being formerly short* seems like the kind of property

that points beyond its instances. Does Crisp's analysis get the right result? Can we represent the property of being *formerly short*, in the way specified above? According to Crisp (2007, 95), we can. Allow that 'WAS' denotes the property *is past*. Further, suppose that, 'S' stands for the predicate 'is short'. The analysis of being *formerly short* is: $[WAS[Sx]]_x$. This means that the property *being formerly short* is hypothetical because we can—and have—represented it using an instance of $F = [H[Gx]]_x$.

In contrast, the property 'being short', which intuitively is *not* hypothetical, cannot be represented in this fashion. As Crisp notes (2007, 95), for no properties G and H is it the case that *being short* is identical with the property $[H[Gx]]_x$. This is the desired result. The property *being formerly short* is hypothetical; the property *being short* is not.

2.1. Against Crisp

Crisp's strategy fails. It leads to the misclassification of certain paradigmatically categorical properties as hypothetical. To see how Crisp's strategy fails, consider two putative counterexamples here: the first is an instance of a logical property, the second a somewhat arcane non-logical property.

2.1.1. Logical Properties

Consider the proposition $\langle q \rangle$. There is, trivially, a property of *being a proposition*; this property is instantiated by $\langle q \rangle$. There is also, trivially, a property *being self-identical*. Finally, and given the instantiation of these properties, we may also say that there is a property of *being a self-identical proposition*. Let us represent this last property—*being a self-identical proposition*—with F . Let us represent the property *being a proposition* with G and the property *being self-identical* with H . In that case, we can analyze F —the property of *being a self-identical proposition*. Formally: $F = [H[Gx]]_x$.

Whilst I concede that the property *being a self-identical proposition* is a strange property to treat as the subject of our discussion, it is not incoherent to think that there is such a property.¹¹ Equally, it is clear that, intuitively, the property *being self-identical to the proposition that $\langle q \rangle$* is not a property that 'points beyond'. (Nor, crucially for our purposes given Crisp's analysis, is the property *being self-identical* the property of *being true*. It is consistent to think that $\langle q \rangle$ is false but that nonetheless it instantiates the property *being a self-identical proposition*.) We have an instance of a property that intuitively does not 'point beyond', but that satisfies Crisp's analysis of what it is to be hypothetical. Crisp's analysis fails.

An opponent might wish to object that Crisp's analysis should not be taken to extend to merely logical properties and that because of this the proposed counterexample is of no value. Certainly, in setting up his case, Crisp does not discuss logical properties. That being the case, it would be reasonable to treat this

as a restricted analysis of what it is to be hypothetical that extends only as far as non-logical properties.

I don't think that we should endorse this move, however. First, there is no obvious reason to restrict the account of hypotheticality in this way. We have been given no reason to think that logical properties are suitably different from non-logical properties such that this account of hypotheticality might not apply equally well to the logical properties. Crudely: there is a difference between logical and non-logical properties, but why think that this difference is salient to the question of hypotheticality? There is a difference between mass properties and shape properties but both—or so we may suppose—may be classified as intrinsic. The difference between mass and shape is not salient to their intrinsicity. Absent any reason to think that logical properties are different in a way that is *salient* to hypotheticality, it seems reasonable to allow them as counterexamples.

Second—though connected—there seem to be cases of logical properties that *should* be treated as hypothetical. Laws of nature that are universally possessed properties seem to 'point beyond'. There are, of course, logical laws. Were these universally instantiated properties, then these too would seem to 'point beyond'.

Consider, by way of example, a property of the relation of equality: the property of symmetry, such that, for any a and b , $a = b$ iff $b = a$. This property is a law-like property: it is a law of logic, if you will, that $a = b$ iff $b = a$. It would be highly inappropriate to think of this as a law that is a universally possessed property. That is, we should not say that the logical law that $a = b$ iff $b = a$ is a matter of every entity instantiating a property of the form, *it must be the case that $a = b$ iff $b = a$* . Laws of nature that are universally possessed properties of the form *being such that all Fs must be Gs* point beyond; so too do laws of logic that are universally possessed properties of the form *it must be the case that $a = b$ iff $b = a$* .

Of course, if there are cases where it seems that logical properties *would be* hypothetical, *were they instantiated*, then it seems that we have good reason to think that any analysis of what it is to be hypothetical *ought* to extend to logical properties. And, in that case, we *should not* restrict Crisp's analysis to the merely non-logical properties. That renders the suggested counterexample salient once again.

2.1.2. *Non-logical properties*

Let us turn to the second counter-example. I consider this further counterexample because I suspect a critic may be able to exploit the fact that the properties I've discussed are (trivial) logical properties. Whilst I don't see quite how the argument will go, I nonetheless retain the concern that this will prove a fertile ground for a determined opponent.

Numbers, *if* they exist, exist outside space and time—they are abstract objects. Numbers are also *acausal*; we may say that they have the property of

being acausal. Some numbers have the property of *being prime*. 3, for instance, has this property. Allow that the property *being prime* is represented by G and that the property *being acausal* is represented by H : the property of *being acausally prime* can then be analyzed as $[H[Gx]]_x$. In just the same way that we analysed *being formerly short* as a case where the property WAS applied to a proposition; in this case, we can analyse *being acausally prime* as a case where the property of *being acausal* applies to a proposition, $[Gx]_x$.

But, once again, the property of *being acausally prime* does not seem to be a property that points beyond. It seems to be nothing more than the property of being a prime number that does not cause anything. This property is *strange*. It is also a merely abundant property—or so I assume. But there is nothing incoherent about it. So then: there is—or seems to be—an intuitive notion of what it is to ‘point beyond’. Crisp’s analysis wrongly predicts that *being acausally prime* ‘points beyond’. Crisp’s analysis therefore fails to track the notion of ‘pointing beyond’ and so Crisp’s analysis fails.

There is an obvious (though unpersuasive) line of response: properties of the sort that I mention, don’t exist. Take the property of *being acausally prime*. We have any number of reasons to think that this is not a property. For one thing, we may well dislike a commitment to the existence of numbers; for another, we might not think that *being acausal* is a genuine property. So, because we do not think that the property of *being acausally prime* is actually a property *at all*, it does not matter whether the property satisfies our analysis of what it is to be suspicious: the property is non-actual and so not a candidate for concern.

As I say, this line of response is not persuasive. The strategy outlined in the introduction of the paper explains why. The opponent of the supposedly hypothetical properties does not think that the hypothetical properties are actual. Rather, their contention is that at the point of theory choice we rule out particular properties because they are not elements of a ‘safe and sane’ ontology. And, although we may not think that there is a property of *being acausally prime*, there is nothing (obviously) internally inconsistent about a theory that posits such a property. If we are to reject such properties, then we must do so via argument and do so at the point of theory choice. One suggestion would be that we rule-out these properties by showing that we should not think that such properties belong in a safe and sane ontology. And, as such, alongside applying other considerations, we should see whether or not the properties point beyond. So far as I can tell we are perfectly within our rights to consider whether or not such properties as *being acausally prime* point beyond, regardless of whether or not we conclude that they are actual. We must, after all, decide whether or not to include such properties in our ontology and we may only do so if they are elements of a safe and sane ontology.

Intuitively, of course, such properties do not point beyond—though are very odd and should probably be rejected for other reasons. But, of course, all of this means that Crisp’s account of what it is to point beyond is one that fails to capture the notion that we’re after. The simple point is this: we have an intuitive conception of what it is to

‘point beyond’, a conception that Crisp has tried to analyze. I claim that Crisp has failed because there are putative properties that are not ones that ‘point beyond’, but that are putative properties that satisfy the analysis.

3. Cameron on Dubiousness

Cameron talks of properties being dubious, rather than hypothetical or suspicious, so we shall now switch terms. Following Cameron (2011, 58) let us also switch examples. Let us, ‘talk about the property being such as to have been a child as had by me to ground the truth of \langle Ross was a child \rangle ’. We switch in order to obviate the charge, made by Merricks (2007, 135), that Lucretian properties are doubly suspicious because they require ‘the world’ as a bearer.

Cameron (2011, 60) suggests the Lucretian property of *having been a child* is dubious because, ‘it points beyond its instances in the sense that a thing’s presently having that property tells us nothing about the present intrinsic nature of the thing’. The property *having been a child* doesn’t make a difference to how the person instantiating the property *is now*; it makes a difference to how they *were*. This type of property is not something that the presentist should allow, according to Cameron, for the way that an object is *now* is the way that it is *simpliciter*. Given presentism, if a property does not make a difference to how its bearer is now, then it does not make a difference to that thing *at all*.

Cameron (2011, 62) formalizes this thought and endorses *Intrinsic Determination*:

ID: For all objects x and properties F and times t , if x instantiates F at t , then x has the intrinsic nature at t that it has partly in virtue of instantiating F at t .

If a property does not satisfy ID, then it is dubious and ought not to be admitted into a sensible ontology. If a property does satisfy ID, then it is not dubious and may be acceptable—pending other considerations. The property of *having been a child* does not make a contribution to the present intrinsic nature that a person has. It is no part of my *present* intrinsic nature to *have been a child*. Rather, the property of *having been a child* makes a difference to how *I was*. Lucretian properties fall foul of ID. They should be rejected. This is Cameron’s view.

Charitably, Cameron’s view should not be read as giving a *general* account of dubiousness since presently instantiated ungrounded dispositions presumably *would* make a difference to the present intrinsic natures of their bearers, *were* they to exist. (Let us say that a disposition, D , is ungrounded just in case it cannot be reductively analyzed in terms of a non-dispositional base.¹² A disposition, then, is a property that is a power to bring about some new state. I take it that a power may make a difference to the intrinsic nature of its bearer. This is especially vivid if one endorses pan-dispositionalism according to which *all* properties are dispositional (see, for instance, Bostock (2008)). In such a case, ungrounded dispositions would, I assume,

make a difference to the intrinsic natures of their bearers; the property of mass being an obvious candidate power that would make a difference to the intrinsic nature of its bearer but that is ‘dubious’ according to Sider’s original classification. This gives us a perfectly good reason to reject Cameron’s account of what it is to be dubious.)

Nonetheless, I persevere here because I think that, even in the temporal case, it’s interesting and important to note that Cameron’s analysis fails to articulate what is supposed to be wrong with *Lucretian* properties.

3.1. *Against Cameron*

So far as I can see, Lucretian properties *do* make a difference to the present intrinsic natures of their bearers. The notion of an intrinsic nature is not well-defined in the wider literature. Unlike the concept of an intrinsic property, that has been heavily scrutinized, we do not have even a working definition of what an intrinsic nature *is*. And Cameron does not offer an analysis of what an intrinsic nature of an object is.

This needn’t be a problem. It’s quite sufficient for an understanding of a view that we have it suitably clarified. But, to the extent that I understand the notion of an intrinsic nature, Lucretian properties *do* make a difference to the present intrinsic nature of their bearers and that means that Cameron has not offered us a reason to reject Lucretianism. In what follows, I explain why I think that we should endorse this line of reasoning.

Cameron engages in a number of attempts to explicate the concept of an intrinsic nature. I shall take each of Cameron’s explications in turn and show that, on each, Lucretian properties make a difference to the present intrinsic nature of their bearers. I conclude that Cameron’s line fails.

Here is Cameron’s (2011, 59) first pass at describing an intrinsic nature:

Properties should tell us about how the things that instantiate them are. But unless we’re going to admit the existence of a property for every predicate (in which case we shouldn’t be objecting to the existence of any property and, provided we’re prepared to admit a state of affairs of a being F whenever any thing has any property F, satisfying Truthmaker becomes very easy indeed) we need to place some restrictions on the ways objects are that instantiation of properties should tell us about. One natural restriction is to the intrinsic ways objects are. We’ll admit the property being charged but not the property being a metre from the tallest Scotsman. Why? Because instantiation of the latter property by an object – while it certainly tells us something about how the object is – does not tell us anything about how it intrinsically is: an object’s having that property tells us nothing about how the object is in and of itself, it only tells us about how the object is in virtue of how its surroundings are.

As Cameron has it, a dubious property—such as *being a metre from the tallest Scotsman*—only tells us about how an object is in virtue of how its surroundings are. In the case of the property *being a metre from the tallest Scotsman*, the putative property *does* ‘tell us how the object is in virtue of how its surroundings are’. These ‘surroundings’ are existing objects. One part of the surroundings is

the tallest Scotsman, another part of the surroundings is the spatial relation ‘... being one metre from ...’.

The most obvious way in which to identify ‘surroundings’ in the Lucretian case would be *the way that the world was*: we would say that which Lucretian properties are instantiated *now* depends upon how the world *was*. But there is an obvious problem. Simply, ‘the way that the world was’ is not an existent—not, at least, if presentism is true. And if ‘the way that the world was’ is not an existent, then we ought not to say that ‘the way that the world was’ constitutes any part of the ‘surroundings’ of an object instantiating a Lucretian property. The ‘non-existent fat man in the door-way’ is no part of my surroundings and, since past objects do not exist, we should not think that they are, either. It is not the case, therefore, that Lucretian properties only make a difference to their bearers in virtue of how their surroundings are.

What we have with Lucretianism, then, is a scenario where it’s not the case that a putative property of an object makes a difference to its bearer *only in virtue of its surroundings*. But it certainly is the case that the property makes a difference to the nature of its bearer; an object instantiating the property *having been a boy* is non-identical to one (otherwise the same) that does not instantiate that property. The only kinds of natures to which a property can make a difference are intrinsic natures and non-intrinsic natures—at least, Cameron has told us of no other sorts of nature. Since the Lucretian properties do make a difference to the nature of their bearers, but do not make a difference to their non-intrinsic natures, they must make a difference to the intrinsic natures of their bearers.

3.2. Response: ‘Surroundings’

When Cameron speaks of ‘surroundings’ he doesn’t just mean existing things. What Cameron means is that which Lucretian properties are now instantiated depends upon which things existed. What we should care about is the fact that: if there *were* dinosaurs, then the world now instantiates the property *having included dinosaurs*. And, if that’s right, then there’s an important sense in which the Lucretian property *having included dinosaurs* exists in virtue of the world *having been* a particular way. In that case, the property *having included dinosaurs* can’t make a difference to the present *intrinsic* nature of the world.

This response is objectionable. The argument is of the form:

ARG: if a property, p, exists *in virtue* of some entity, q, that is distinct from p, then p cannot make a difference to the present intrinsic nature of its bearer, O.

The idea here is that since the Lucretian property that now exists only exists because of the way that the world was, so the Lucretian property cannot make a difference to the present intrinsic nature of its bearer.

To see what is wrong with ARG, consider the property of mass that I have. Had the Earth not existed, I would not have the mass that I do. *In a sense*, I only exist in virtue of the Earth doing so and only instantiate the mass that I do in

virtue of the Earth providing all of the resources that I needed to develop into my current state. According to ARG, that should make my property of mass such that it cannot make a difference to my present intrinsic nature: my property of mass only exists in virtue of the Earth existing and generating those life-sustaining conditions. But this is a bad result for ARG. My mass *does* make a difference to my present intrinsic nature. In general terms, then, it is false to say that if a property *p* is instantiated in virtue of some entity, *q*, that is distinct from *p*, then *p* cannot make a difference to the intrinsic nature of its bearer, *O*.

(Consider, similarly, another case. An individual instantiating the property of *having long hair* might have that property only in virtue of instantiating the property of *having hair*. The latter seems a distinct property from the former though is ontologically dependent upon it. But both make a difference to the intrinsic nature of their bearer.)

A further response might distinguish two differing uses of ‘in virtue of’. There is ontological dependence: the Lucretian properties *depend* for their existence on particular past states of affairs. In contrast, it is also true to say that I have my current mass *in virtue of* the state of the Earth. This latter use of ‘in virtue of’ does not express a relation of ontological dependence; most likely it expresses a relation of causal dependence. The lesson is this: in cases where we use ‘in virtue of’ to mean ontological dependence, ARG is reasonable—in other cases, it is not.

This response tries to defend ARG by noting that ARG is not problematic in cases of ontological dependence. Ontological ‘in virtue of’ cases are cases where we should endorse ARG; causal cases of ‘in virtue of’ are not. This might give Cameron some means with which to respond.

This response is unhelpful to Cameron for ontological dependence cannot be what is at issue in our discussion of Lucretianism. It’s not true that the present instantiation of a Lucretian property depends *ontologically* on past objects—past objects do not exist and ontological dependence is a relation that connects existing objects. Thus, this offers Cameron no way to defend himself.

3.3. *Intrinsic natures temporally and atemporally*

Here’s another of Cameron’s (2011, 59) attempts to clarify ‘intrinsic nature’:

I’m assuming it makes sense to talk of the intrinsic nature of an object at a time as opposed to the intrinsic nature of an object atemporally speaking. An object’s instantiating being such as to have been a child at a time *t* does indeed tell us something about the intrinsic nature of that object if by its intrinsic nature we mean its atemporal intrinsic nature; but, I want to say, its instantiating that property now doesn’t tell us about how it intrinsically is now. I need there to be a sensible distinction, then, between the intrinsic nature of a thing at a time, and its intrinsic nature across time. This should be no obstacle for the presentist; for a presentist the notion definitely makes sense: the intrinsic nature of an object at a time just is what its intrinsic nature per se is at that time. When *t* is present, the intrinsic nature of a thing at *t* is just its intrinsic nature.

Consider a particular time t . At time t , object O 's *present* intrinsic nature is just identical to the intrinsic nature that O has at t . However, at some later time, t^* , we can still speak of O 's 'intrinsic nature at t '. As Cameron (2011, 59) has it: 'When t is not present, the intrinsic nature of a thing at t is just the intrinsic nature it had/will have when t was/comes to be present'. Because Cameron *had* the property of being a boy, it's now a part of Cameron's *atemporal* intrinsic nature to *have been a boy*. Thus, the Lucretian property *having been a boy*, as it's now instantiated by Cameron, makes a difference to Cameron's *atemporal* intrinsic nature.

But as well as making a difference to *atemporal* intrinsic natures, Lucretian properties *also* make a difference to *present* intrinsic natures. Suppose that Cameron instantiates the property *having been a boy*. We're agreed that this makes a difference to Cameron's *atemporal* nature. But this property *having been a boy* also makes Cameron, now, rather different than had he *not* instantiated this property: Cameron is now such as to *have been a boy*. That is a *present* difference that the property makes. Cameron's *present* nature would not be the same were he to not instantiate the property for Cameron would, presently, *not* be such as to have been a boy. That being the case I see no way that this distinction between *atemporal* intrinsic nature and present intrinsic nature helps us to describe an objection to Lucretianism.

3.4. *Presentism and nature simpliciter*

Here's Cameron (2011, 60) on 'intrinsic nature' once more.

Properties should make a difference to how their bearers are intrinsically: instantiating a property should make a difference to the intrinsic nature *simpliciter* of the bearer at the time of instantiation. Since, for the presentist, my intrinsic nature *simpliciter* is my present intrinsic nature, properties should make a difference to the present intrinsic nature of their bearers. Lucretian properties don't, so we shouldn't believe in them.

The Lucretian can endorse this characterization of an intrinsic nature and in so doing block any putative objection. The bearer of a Lucretian property would have a different present intrinsic nature were it to not instantiate that property. An object that is such to *have been a boy* is *presently* such as to *have been a boy*, for *having been a boy* is a property that it presently instantiates. In more detail: suppose that presentism is true and focus upon two objects, O and O^* . Suppose that O and O^* have all of the same properties aside from the fact that O instantiates the property *having been a boy* whilst O^* does not. Since presentism is true, the present natures of these two objects exhaust their natures *simpliciter*. O and O^* are not qualitatively identical. O and O^* instantiate different properties and, because of that, have different natures. Because the present intrinsic nature of an object exhausts its nature *simpliciter*, and the Lucretian property does not make a difference to O merely in virtue of O 's surroundings, it seems right to say that the property *having been a boy* makes a difference to the present intrinsic nature of O .

So far as I can tell, then, Lucretian properties *do* make a difference to the present intrinsic nature of their bearers. Thus, if opponents of Lucretianism wish to press this point, they ought to provide an independently plausible analysis of what a present intrinsic nature *is* and demonstrate that Lucretian properties do not make a difference to *it*.

3.5. *Response: Intuitive conceptions and strategy*

A final response on behalf of Cameron: in each of the above I've argued that Lucretian properties would make a difference to the *nature* of a putative bearer. But that's trivial. After all, if I didn't NOW have the property of having been a child, I would NOW be different (since it wouldn't be the case that I had been a child). But all that follows from that is that the property makes a difference: which is of course trivial – every property F makes a difference of some kind, since if you lacked it you wouldn't be F. The question is whether it makes a difference to the present intrinsic nature. But this is a problem. In each of the above I've simply shown that the properties make a difference to the *nature* of the bearer, and then assumed that to be equivalent to the object's nature. Now maybe nature and present intrinsic nature are the same thing, in which case bad news for Cameron – but (i) I can't assume the equivalence and (ii) I haven't argued for it.

I think that the imagined objector is right, to a point. I *shouldn't* assume the equivalence and I certainly haven't argued for it. But the whole point of the preceding has been to demonstrate that *on the description given by Cameron*, of what a present intrinsic nature *is*, Lucretian properties make a difference *to that*. If there is some *other* way to cash out Cameron's view, then so be it; but we need to be told what a present intrinsic nature *is* such that Lucretian properties don't make a difference *to that*. At the moment, I don't see that we have that.

4. Properties and relational properties¹³

There is another way of approaching this issue. The properties that are supposed to point beyond are, intuitively, relational properties. The property *having been a boy* is, *intuitively*, one that requires not only Ross' present self to exist, but also that there exist a boy that is Ross' past self and some appropriate temporal relation that connects Ross' present self to his past self. According to the Lucretian, of course, the property *having been a boy* is not relational. According to the Lucretian, the property *having been a boy* does not involve the existence of any past boy or any temporal relation connecting that boy to Ross. Perhaps we can use this idea to get to the heart of what is wrong with properties that are dubious. To get this moving, consider an analogy.

Suppose that Elizabeth is a moon skeptic; she believes here-ism, the view that only objects that exist here, exist at all. Nonetheless, she thinks it's true that < the moon is currently 360,000 km from the earth > . As a proponent of the truthmaker principle, Elizabeth posits the following truthmaker: the earth's instantiating the *non-relational* property of *being 360,000 km from the moon*. This position, says our

critic, is absurd. It is clearly false. There is also a way to explain why the position is absurd. There is a strong intuition that the property of *being 360,000 km from the moon* is relational. But because Elizabeth is a moon skeptic, for she endorses hereism, she denies the existence of the moon and so is committed to the relational property *being 360,000 km from the moon* being non-relational.

And, says our critic, matters are the same in the Lucretian case (and cases involving all of the other supposedly dubious properties). Intuitively, the property of (for instance) *having included dinosaurs*, is a relational property; intuitively, *that* the world included dinosaurs is a matter of how the world *was*. Because the Lucretian denies the existence of that past state of the world, but still thinks that the world instantiates the property *having included dinosaurs*, they are guilty of positing a non-relational property to do the work of a relational property. By doing so, they are just as guilty as Elizabeth, our moon-skeptic.

Tentatively, then, let us consider the following analysis of what it is to be dubious.

DUB* A property is dubious iff it is intuitively relational but is treated/analyzed as a non-relational property

This not only diagnoses what it is to be dubious, it also permits us an explanation of why it is that we should avoid commitments to dubious properties. Positing a dubious property requires us to give up on our intuitions concerning a property: intuitively *having been a boy* is relational; the Lucretian says that it is not. This violation of our intuitions is odd; it is in need of a defense and justification. For all that has been said by the Lucretian, no good reason is forthcoming for thinking that we should accept this blow to our intuitive conception of what it is to *have been a boy*. We have our diagnosis, then, of what it is to be dubious and why we should want to avoid properties that satisfy DUB*.

4.1. *Response 1: Dubious but not intuitively relational*

Recall that an analysis of what it is to be dubious is supposed to capture what is objectionable with *each* of the dubious properties. Crucially, it doesn't strike me as at all intuitive that ungrounded dispositional properties are intuitively relational but analyzed as non-relational. As before, let us say that a disposition, D, is ungrounded just in case it cannot be reductively analyzed in terms of a non-dispositional base. More specifically, we might tentatively describe a disposition, borrowing from Mumford (2006, 483) 'To be a disposition is just to be directed towards some possible manifestation'.

To say that a particular property is *directed towards* some possible state does not *intuitively* (to me at any rate) seem to be the kind of property that is relational. The ungrounded disposition may be *directed towards* particular possible states. But being *directed towards* a particular state does not—to me, at least—seem to be a case of being related to some state; rather, it seems to be a case of nothing more than a non-relational property being *directed towards* some particular state. So described,

‘being directed towards’ is not, intuitively, a relational property; it is a simple sui generis type of property—*being directed towards*.¹⁴

If I’m right, the proposed analysis fails to get to the core of what is wrong with dubious properties in general (though see also §4.2). But I suspect that there is room for disagreement, here. I can imagine a determined opponent thinking that, intuitively, being *directed towards* is relational. In that case, both the Lucretian and the proponent of ungrounded dispositions has work to do. What should they say?

Both the Lucretian and the proponent of ungrounded dispositions should deny that we have intuitions to the effect that *the properties* are relational and, because of that, I think that we should deny that we have an instance of an intuitively relational property that is being treated as a non-relational property. To show this, I’ll once again focus attention on the Lucretian properties. I assume that similar remarks could be made in the dispositional case. Note that the Lucretian properties are stipulatively introduced—albeit drawing on work by Lucretius—by Bigelow (1996). Bigelow defines these properties as being ones that: are instantiated by the world; exist within a presentist metaphysic; ground truths about the past, despite the fact that the past does not exist. I think that I have a grip on what sort of a thing that such a property would be. It is non-relational.¹⁵ It is monadic. If we are allowed to indulge in a little metaphor, it is a property that has tense ‘built in to it’. I do not see how we can reasonably suppose to have an intuition about *this* property that *it* is relational. Given that the property is quite complex and not at all the kind of property that one would naturally conceive of or entertain thoughts about, it’s hard to see that we can have any pre-theoretical intuitions about it whatsoever—let alone an intuition to the effect that the property is relational. It’s equally hard to see that we can have a *post*-theoretic intuition about the Lucretian properties because they have been defined and introduced to us as non-relational in the way described above. If that’s right, then we cannot reasonably claim to have the *intuition* that the Lucretian properties are relational.

An opponent might respond that, *intuitively*, the predicate ‘having been a boy’ is a predicate that describes a feature of the world that is relational. The Lucretian properties are not relational and so we’re obliged to give up our intuition that the predicate ‘having been a boy’ describes a relational feature of the world. The objection is now that we have an intuition about the ‘adicity’ of what’s denoted by a particular term: intuitively, so we say, the predicate denotes a binary relational property; the Lucretian claims that the predicate denotes a monadic property.

To bring out why I think that this is a bad objection, I want to borrow from Jonathan Schaffer’s discussion of causation. Schaffer (2005) defends the view that causation is a quaternary, rather than a binary, relation. Much like the Lucretian, then, Schaffer might be accused of flouting the intuitive adicity of particular ascriptions of the English language. Intuitively, or so goes the claim, causal ascriptions are binary. We say things of the form ‘Elizabeth caused the bottle to smash’, which intuitively describes a relation of causation as standing between some action of Elizabeth’s and the bottle’s smashing. This is a binary

relation. Quaternary relations are not binary relations, so there is a cost to claiming that causal relations are quaternary. Here is what Schaffer (2005, 297) says in reply to this concern:

One might argue that binarity reflects the surface form of causal ascriptions . . . surface form is treacherous. Some surface forms compress more complex logical forms, and some logical forms reflect conceptual errors. One cannot read reality off surface form.

One might argue that binarity reflects the intuitive adicity of causal relations. But adicity is not so easily intuited. Our intuitive judgments merely provide evidence as to the acceptability of utterances . . . Anything more is theory.

The same point applies in the Lucretian case. Schaffer's imagined opponent insists that, intuitively, the predicate 'is the cause of' is an ascription that picks out a two-term relation in the world. My opponent in the Lucretian case seeks to say that, intuitively, the ascription *having been a boy* picks out a relational property—a two-term relation in the world. Like Schaffer, I deny that adicity is so obvious. Like Schaffer I think that we have an ascription—in this case, 'having been a boy'—and like Schaffer I think that the adicity of what it denotes is not readily intuited—it requires metaphysical theorizing to determine what sort of property/relation is denoted by the predicate. The Lucretian theorizes that this is a non-relational property. If my opponent wishes to object then some argument must be forthcoming that *shows* that what the ascription denotes needs to be relational for some theoretical purposes. As it stands, it will not do to simply insist that we can intuit that what the term 'having been a boy' describes is a relational property.

4.2. Response 2: Non-relational but not dubious

In section 4.1, I argued that the proposed analysis failed in the left-to-right, direction: the supposedly dubious properties don't satisfy the right-hand-side of the analysis because they are not 'intuitively relational'. Suppose that I'm wrong. Suppose that there is a way to articulate what is meant by 'intuitively relational' that allows the argument against Lucretianism. In what follows I present a case in which a property, combined with other ontological commitments, satisfies the analysis given of what it is to be dubious, but is not a property that 'points beyond'. The structure of the case is as follows. I show that, coupling distributional properties to Priority Monism (described by Schaffer (2010)), leads to an 'intuitively relational' property being analyzed as a non-relational property—but that this distributional property need not thereby 'point beyond'. Because of this, I conclude that the analysis of what it is to be dubious is one that fails.

Priority Monism is the view that only one object is fundamental: the world. Tables and chairs, cats and flares: these are parts of the world. They are derivative. Of course, the world is *heterogeneous*. That is, different parts have different qualities. The Priority Monist (Monist, hereafter, as I do not discuss any other form of Monism) must account for this. One of Jonathan Schaffer's

(2010, 59) preferred routes to accounting for this heterogeneity is the positing of distributional properties.

The most frequently used device used for introducing distributional properties is that of a domino. It is natural to think of a domino instantiating different color properties at different parts of its surface. It is by virtue of the domino instantiating these different properties at different places that we may truthfully say of the domino that, 'it is polka-dotted'. But rather than positing these distinct properties, each located at some different part of the domino, we can posit a single property *being-polka-dotted*, instantiated by the domino. *This* property—this single distributional property—accounts for how the domino is across its surface. In the same way, then, the Monist can posit a single distributional property to describe how the world *is* across its entirety.

With that in mind, consider the intuitively relational property *resting on top of*. As I say, intuitively, this property *is* relational. But we saw, above, that the nature of the world is fixed by the world instantiating a particular distributional property. In this case, the property *resting on top of* is not relational; at least, it can be given a reductive analysis by recourse to the distributional property that is instantiated by the world. For it to be true that 'the cup is resting on top of the desk', what we require is the existence of the world and its instantiating the *non-relational* distributional property: the single property that fixes the nature of the world throughout its entirety. Thus, what it is for the property *resting on top of* to be instantiated is for the world to instantiate a particular distributional property. Such a distributional property is ultimately *non-relational* because it requires *only* the existence of the world. Thus we find that an intuitively relational property can be given a non-relational, reductive analysis. Distributional properties of *this* sort do not 'point beyond' in any sense at all; they are not 'dubious'—in this sense, at least.¹⁶ As a consequence, DUB*, which rules this property dubious, is not a proper analysis of what it is to be dubious.

I concede that Monism is not a majority view. I concede that distributional properties are not a majority view. This doesn't matter. The charge we're exploring here is that any putative property that satisfies DUB* is to be rejected because *were it to exist it would 'point beyond'*. Here we have a metaphysics whereby a putative property satisfies DUB*, but that property is not one that points beyond. The whole point of this exercise is to articulate an analysis of *what it is* to point beyond. DUB* mistakenly returns the verdict that we should reject the union of Monism and distributional properties because the distributional properties would 'point beyond'. We should therefore reject DUB* and with it the claim that there is anything (non-trivial) that unites the allegedly dubious properties in virtue of which we ought to reject them.¹⁷

4.3. *Loose ends*

There remains a question: the moon-skeptic position seems absurd. The moon-skeptic position seems to closely mirror the Lucretian presentist position. It might

well be true, then, that DUB* does not capture what's wrong with Lucretianism. But if moon-skepticism is absurd, and Lucretianism closely mirrors moon-skepticism, then isn't Lucretianism absurd too, even if we cannot specify some feature in virtue of which this is the case?

No. I agree that moon-skepticism is absurd. But I think that moon-skepticism is absurd because what we might call 'here-ism' is absurd, where 'here-ism' is the component of moon-skepticism according to which only the 'here' exists; it is the spatial analogue of presentism. I confess, I don't have anything original to say about how I might justify the assertion that here-ism but not presentism is absurd. But where the idea of only present objects existing and time's passing seems reasonable—even intuitive¹⁸—the idea that, 'only the objects that exist here, exist' does not.¹⁹

What is required of me is an explanation of why moon-skepticism *appears absurd* where Lucretian presentism does not. I have provided just such a reason: intuitively, it seems that here-ism *itself* is absurd; matters seem otherwise with presentism. Thus we have our explanation. I therefore agree with the critic from §4, above, who we imagined claiming that moon-skepticism is absurd. But, unlike the critic considered there, I seek to explain the absurdity of the position via its commitment to here-ism, rather than its commitment to some particular property.

Notes

1. I'm very grateful to the Nottingham Postgraduate Seminar for letting me try-out an earlier version of this paper, to two referees for this journal for comments and criticisms and also to an anonymous referee for the *Australasian Journal of Philosophy* for comments on a previous draft. Finally, thanks to both David Ingram and Mark Jago for comments and criticisms.
2. See, *inter alia*, Markosian (2004).
3. See, *inter alia*, Armstrong (2004). It's worth noting, here, that the debate about 'dubiousness' is sometimes described in terms of the supervenience theory of truth, rather than truthmaker theory. I choose to talk in terms of truthmaker here for two reasons. First, a substantial part of the paper is concerned with Cameron's analysis of dubiousness and Cameron talks in terms of truthmaker theory. Second, I think that there's reason to think that supervenience fails. See Rodriguez-Pereyra (2005). It is, in any case, straightforward enough to see how the arguments would go were they to be parsed in terms of the supervenience thesis.
4. For the canonical presentation of Lucretianism, see Bigelow (1996).
5. See, *inter alia*, Sider (2001, 41), Merricks (2007, 135) and Cameron (2011).
6. That should make matters easier for my opponent. If we reduce the number of elements to which we must attribute a common feature, we reduce the number of dimensions of complexity to the task.
7. Merricks (2007, 135) refers to the properties as being 'suspicious'. I don't discuss Merricks' view here because, unlike Crisp and Cameron, Merricks does not propose an analysis of what it is for a property to be—in his terms—suspicious.
8. In some parts of the paper I explicitly mention the other properties: §3 and §4.1.

9. See, *inter alia*, Cameron (2011, 58).
10. It's worth noting that Crisp uses this to then argue that Lucretian properties are *unobjectionable* provided the property 'being short' is unobjectionable. As he concedes, however, it's unclear whether such a property *is* unobjectionable.
11. I take it to be relatively uncontroversial that, if propositions exist, then there is an abundant property of *being a proposition*, in much the same way that there is a merely abundant property, *being a person*. Talk of there being a property of self-identity is rife in the wider philosophical literature, so, though perhaps more controversial, it's not unreasonable to entertain the notion here. See, *inter alia*, Lowe (1998, 71), Plantinga (1979, 163), Van Inwagen (2001, 49).
12. See Mumford (2006, 477–79) for a more detailed discussion.
13. I'm very grateful to an anonymous referee for the *Australasian Journal of Philosophy* for the case and the suggested analysis of what it might be to be a dubious property. I consider this option here, despite it not appearing in the wider literature, because it seems to me to be a reasonably intuitive way of cashing out the concern, even if it ultimately fails.
14. I grant, of course, that the predicate 'being directed towards' appears suggestive of a relation, but, as we'll see in a moment, such appearances aren't all that useful in ontological deliberations. It is the *property* that concerns me and, as I say, I don't see that the property of being *directed towards* is intuitively relational.
15. At least, *some* of the Lucretian properties will be non-relational—cases like *having included dinosaurs*. There may be more complex cases that *are* relational—*having included people who were acquainted with one another*, for instance. I'll focus my attention, here, on the simple cases. This seems reasonable since the charge from my imagined opponent centred on the claim that properties like *having contained dinosaurs* are intuitively relational but are being treated as non-relational by the Lucretian.
16. Though in at least some contexts distributional properties do seem rather odd. See Cameron (2011) for what I take to be an odd deployment of distributional properties; Tallant and Ingram (2012) for an explanation of why these are odd.
17. There might, of course, still be reasons to reject Lucretian properties. For instance, perhaps Merricks (2007, 135) is right that these properties are to be rejected because they require instantiation by *the world*, where 'the world' is an objectionably mysterious object. Some claim that truths about the past don't need truthmakers and so urge that we simply have no need for Lucretian properties—for instance, Tallant (2009). I don't take a stand on any of these issues here.
18. See Zimmerman (2008) for discussion and defense of this claim.
19. Sider (2001, 46) describes here-now-ism as objectionably solipsistic, but describes presentism as quite intuitive (2001, 11). To develop his argument a little: if only a single point in space exists, then no people exist. For familiar Moorean reasons, we might then move from the certainty of the thought that 'I have a hand' to the conclusion that I exist and am a person and so the further conclusion that here-ism absurdly implies that I do not exist. We thereby explain the absurdity of here-ism very straightforwardly.

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