**ON ARMSTRONG’S DIFFICULTIES WITH ADEQUATE TRUTHMAKING RESTRICTIONS**

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Brannon McDaniel

University of Richmond

bmcdanie@richmond.edu

**Abstract**

D.M. Armstrong rejects various ontologies that posit truths without truthmakers. But, lest proponents of such questionable ontologies postulate suspicious truthmakers in a bid to regain ontological respectability, Armstrong requires a plausible restriction on truthmaking that eliminates such ontologies. I discuss three different candidate restrictions: categorical, natural, and intrinsic difference-making. While the categorical and natural restrictions eliminate the questionable ontologies, they also eliminate Armstrong’s own ontology. The intrinsic difference-making restriction, on the other hand, fails to eliminate any of them. Thus Armstrong (so far) lacks a principled reason for rejecting such ontologies.

Keywords: Armstrong; metaphysics; truthmaking

1. **TRUTHMAKING INTRODUCED**

Let the *truthmaking thesis* be:

(TM) For every true proposition, there is something that makes that proposition true.

D.M Armstrong (2004: 5) accepts (what I am calling) TM, and also endorses *truthmaker necessitarianism*, which says that a truthmaker necessitates (i.e., is sufficient for) that which it makes true (2004: 5-7). That is, according to necessitarianism, if something is a truthmaker for some proposition, then it is impossible for that thing to exist and for the proposition in question to be false.

Consider a true proposition of contingent predication, such as *that* *Suzy is wearing green socks*. Something more than an ordinary object – i.e., something more than Suzy herself – is required to serve as a truthmaker for this proposition. Thus Armstrong writes:

Truthmakers must necessitate, and the mere entities or their mereological sum by hypothesis cannot necessitate the linkages required. So there must exist states of affairs to be the truthmakers, to get us beyond the ‘loose and separate’ entities…States of affairs must be introduced *as additions to the ontology*. (2004: 48-49; emphasis in original)

Suzy’s mere existence does not necessitate the truth of the proposition *that* *Suzy is wearing green socks*, for Suzy could have instead worn red socks, or no socks at all. In such scenarios, whether wearing red socks, or barefoot, Suzy clearly does not necessitate, and so is not a truthmaker for, the proposition *that* *Suzy is wearing green socks*. Rather, necessitarianism requires states of affairs – i.e., non-mereological complexes constituted by objects and properties – and not mere objects, to serve as truthmakers for such propositions. Thus Armstrong holds that truthmaking is a cross-categorial relation between propositions, on the one hand, and states of affairs on the other (Armstrong 2004: 5-6).

1. **INTERLUDE: TRUTHMAKING AND THE CATCHING OF CHEATERS**

According to Theodore Sider (2001: 40-41), proponents of various views are regarded as *cheaters* insofar as they refuse to accept an ontology that is robust enough to account for various claims they regard as true. To illustrate, *presentists* deny the existence of wholly non-present objects, and yet they accept that there are true claims about such objects (Prior 1970).  *Molinists* accept the truth of counterfactual claims of free action, but insist that there are no actual grounds for such claims (Plantinga 1974: 174-180). *Phenomenalists* accept the truth of counterfactual perceptual claims, but insist that there are no non-perceptual grounds for these claims: so-called ordinary objects are “permanent possibilities of sensation” **(**Ayer 1946; Mill 1865, esp. Appendix to Chs. XI and XII**)**. *Ryleans* accept the truth of dispositional conditionalclaims, but insist that they lack non-dispositional grounds (Ryle 1949: 43).

At the outset, I make three points about cheater-catching, and the role it will play in my argument. First, though Armstrong does not use the term ‘cheater’, this expression has had some currency in the literature, and so I will continue to use it. Second, as I will now show, I am not foisting the term upon Armstrong, who is explicit (2004: 1-3) that one of his primary motivations for accepting necessitarianism is its utility in catching (what I am calling) cheaters.[[1]](#endnote-1) Third, Armstrong’s motivations notwithstanding, my interest in cheater-catching is merely instrumental. That is, the language of ‘cheaters’ and ‘cheater-catching’ is useful primarily as a way to articulate what, according to Armstrong’s lights, is wrong with presentism, Molinism, phenomenalism, and Ryleanism. To preview: whether or not Armstrong’s theory of truthmaking is itself able to catch cheaters, the main problem for Armstrong is that his theory commits him to an ontology that is no less problematic than those of the cheaters.

First, however, let us see what reasons Armstrong adduces for thinking an adequate account of truthmaking can rule out cheating ontologies. We begin with presentism:

Here are three positions. First: only the present exists. This view now bears the name Presentism. Second: all that exists is the past, up to the present moment. We might call this Pastism…Third: past, present and future all exist. This is the Omnitemporal view. Once we accept the demand for truthmakers, then, I suggest, there is a strong *prima facie* case for accepting the Omnitemporal view. (2004: 145)

Similarly, in objecting to the phenomenalist who posits truths without truthmakers, Armstrong concludes:

I do not want to claim that these arguments are *absolutely conclusive* against phenomenalism. I deny that there are such arguments in metaphysics, and arguments using truthmakers are no exception….But I claim that truthmaker arguments are very powerful, that, in Mill’s phrase, they are considerations capable of influencing the intellect. (2004: 2; emphasis in original)

Finally, there is Armstrong’s criticism of the Rylean: “But the truthmaker insight, as I take it to be, prevents the metaphysician from letting dispositions ‘hang on air’ as they do in Ryle’s philosophy of mind. That is the ultimate sin in metaphysics, or at any rate, in a realist metaphysics” (2004: 3).

Though I know of no place where Armstrong explicitly objects to Molinism on truthmaking grounds, I think it is clear that, given his explicit objections to presentism, phenomenalism, and Ryleanism, he would be opposed to Molinism for similar reasons. That is, given that presentists, Molinists, phenomenalists, and Ryleansall accept truths without truthmakers, Armstrong should regard them similarly as cheaters, and so should hold that an adequate theory of truthmaking rules them out as viable ontologies. Thus we have a preliminary truthmaking ban on cheating.

Cheaters, however, may (too easily) prosper bysimply postulating anything at all to necessitate the truth of their respective problematic claims, as doing so thereby avoids the preliminary truthmaking ban. For example, consider the presentist and her account of the following:

(1) Dinosaurs roamed the earth.

In attempting to provide a truthmaker for (1), some presentists accept *Lucretianism*. The Lucretian holds that the world is the totality of things existing at the present time, and this totality instantiates *Lucretian* (i.e., irreducibly past-tensed) *properties* (Bigelow 1996). For an example of such a property, consider *was dinosaurian* (i.e., the world was once inhabited by dinosaurs). According to the Lucretian, the state of affairs of *the world’s having been dinosaurian* is the truthmaker for (1).[[2]](#endnote-2)

Similarly, Molinists can hold that counterfactuals of free action are made true by states of affairs that have essential properties as constituents; phenomenalists can hold that counterfactual perceptual claims are made true by states of affairs that have relations between perceivers and observable (but unobserved) sense dataas constituents; finally, Ryleans can hold an analogous view concerning dispositional claims that are made true by states of affairs that have irreducibly dispositional properties as constituents. Compounding epithets, let purported cheaters be *evasive* if, in attempting to avoid the preliminary truthmaking ban on cheating, they postulate the sorts of dubious truthmakers invoked by the Lucretian, Molinist, phenomenalist, and Rylean here described.[[3]](#endnote-3)

1. **ARMSTRONG AND THE CATEGORICAL RESTRICTION**

**III.A. HYPOTHETICAL AND CATEGORICAL PROPERTIES**

What does Armstrong find objectionable about evasive ontologies? It seems clear that he will reject their proposed truthmakers. But is there a principled reason for his rejection? If so, he requires a restriction on what properties and relations are allowed to play a role in truthmaking.Perhaps the most prominent candidate restriction is due to Sider, who makes the following observation:

What seems common to all the cheats is that irreducibly *hypothetical* properties are postulated, whereas a proper ontology should invoke only *categorical*, or occurrent, properties and relations. Categorical properties involve what objects are actually like, whereas hypothetical properties ‘point beyond’ their instances. The presentist’s primitive tensed properties…would be hypothetical. (2001: 41)

By hypothesis, the cheaters cheat insofar as they countenance ungrounded (i.e., irreducibly primitive) hypothetical properties or relations.[[4]](#endnote-4) To illustrate,return to our Lucretian presentist, who accepts the truth of the following claim:

(1) Dinosaurs roamed the earth.

The Lucretian flouts the categorical restriction: the proposed truthmaker for (1) (i.e., the state of affairs of *the world’s having been dinosaurian*) has a Lucretian property as a constituent that points beyond its instances to nonexistent wholly past objects.

Similar assessments apply to the other evasive truthmaker theorists on our list. The Molinist holds that there are true counterfactual claims about which actions merely possible individuals would freely perform in various circumstances. Let Curly be such a merely possible individual, let *C* be the relevant circumstances, and let *A* be some action:

(2) If Curly were in *C*, then he would freely perform *A*.

On Alvin Plantinga’s particular version of Molinism (1974: 174-180), individual essences (i.e., irreducible, non-qualitative properties) exist whether or not they are instantiated (1974: 70-72), and so the essences of merely possible individuals also exist. Curly’s essence, *E*, is thus the constituent of truthmakers for (2). But it is here that the evasive Molinist runs afoul of the categorical restriction: essences such as *E* point beyond their instances to the nonexistent merely possible.[[5]](#endnote-5)

According to the evasive phenomenalist, the immediate objects of perception are all and only sense data, and so, for a particular sense datum, such as redness, to exist is just for it to be possible that redness is being perceived. That is, for a subject *S*, circumstances *C*, and red sense datum *R*:

(3) If *S* were in *C*, then *S* would perceive *R*.

Let a sense datum be *merely observable* if it is both observable, and not actually observed. Suppose that *R* is merely observable; if so, the *perceiving* relation that holds between *S* and *R* is a constituent of truthmakers for counterfactual claims of perceptual experience, such as (3). But this commits one to the hypothetical *perceiving* relation, which points beyond its observed instances to the merely observable.

Finally, the evasive Rylean accepts irreducibly dispositional properties, such as *being soluble*, as constituents of truthmakers for the dispositional claims in question. For example, suppose that a sugar cube, *S*, has a certain disposition, *D*, to dissolve when in circumstances *C*, and that the following claim is true:

(4) If *S* were in *C*, then *S* would *D*.

(4), we are supposing, is made true by the sugar cube’s instantiation of the ungroundeddispositional property *being soluble* (McKitrick 2003: 362). Let the *causal basis* for a disposition be, roughly, a distinct microstructural property that causes (or would cause) the manifestation of the disposition in question (Prior, Pargetter, and Jackson 1982: 251). It is constitutive of evasive Ryleanism as I am understanding it here that dispositions are ungrounded insofar as they lack such causal bases. Thus suchRyleans hold that dispositions are *bare* (McKitrick 2003). But in positing bare dispositions as constituents of truthmakers for claims such as (4), the evasiveRylean accepts hypothetical properties: bare dispositions point beyond their instances to nonexistent non-dispositional causal bases.

Given the distinction between hypothetical and categorical properties, Armstrong rejects evasive ontologies because they traffic in hypothetical properties. Nevertheless, I will now argue that Armstrong fares no better, for he too accepts hypothetical properties.

**III.B. ARMSTRONG AND CATEGORICAL PROPERTIES**

In brief, my argument is that Armstrong’s theory of truthmaking is committed to a primitive necessitation relation, which, for example, is no more categorical than the suspicious properties posited by evasive Lucretians, Molinists, phenomenalists, and Ryleans: such properties and relationspoint beyond their instances, and so are hypothetical.

Before continuing, a brief clarificatory point is in order. One of the most common complaints against TM is that there are no wholly adequate truthmakers for such negative existential claims such as *that there are no unicorns* (Lewis 1992: 216ff; Merricks 2007: chap. 3; and Sider 2001: 36). Armstrong himself (1997: 200-201; 2004: 58-59) postulates the *totality state of affairs* to serve as the truthmaker for all such negative existentials.To forestall misunderstanding, I am *not* arguing, as some have done (cf. Merricks 2007: chap. 3), that such controversial truthmakers for negative existentials are themselves no more categorical than whatever seemingly *ad hoc* entities the cheaters postulate to serve as truthmakers. My objection against Armstrong’s theory of truthmaking has nothing to do with negative existentials. Rather, as we will see, my objection is to the mundane truthmakers for propositions of contingent predication, such as *that Suzy is wearing green socks*.

To begin, Armstrong (2004: 5-6) explicitly holds that necessitation is not reducible to entailment. First, though entailment holds only between propositions, we have already seen that necessitation holds between states of affairs and propositions (§I). Second, as Armstrong emphasizes, there are cases where necessitation holds, but the relevant entailment relations do not:

The truthmaking relation seems to hold in cases where entailment is completely lacking. Suppose that it is true that there exists a certain quantity of water in a certain place at a certain time. Will not a sufficiently dense conglomeration of H2O molecules in that space at that time be a truthmaker for this truth? It seems to me that we ought to accept such truthmakers. But if we replace this truth, as we can do easily enough, with a truth of existence, this truth does not *entail* the first truth. For entailment we need an additional premise: that a quantity of water is a certain sort of conglomeration of H2O molecules. But how is a truthmaker for this additional premise to be spelled out in terms of entailments? So I say that the conglomeration of H2O molecules at a certain place and time (the truthmaker) necessitates that <there is water at that place and time> (the truth), but this is not entailment. (2004: 6; emphasis in original)

But if necessitation is not reducible to entailment, it is not clear that there are other candidate notions to which it can be reduced (and Armstrong provides no further alternatives). Thus, Armstrong seems to regard necessitation as primitive. Discussing Armstrong’s rejection of necessitation as entailment, Fraser MacBride (2014: §1.2) draws a similar conclusion: “Accordingly Armstrong made a bold maneuver. He posited a metaphysically primitive relation of necessitation (i.e., one not itself defined in terms of possible worlds…)”.

It might seem that this primitive necessitation relation is categorical. First, Armstrong is clear that the necessitation relation is *internal* insofar as it is in the nature of the relata to necessitate the relation between them; it follows that the relation itself is no ontological addition (2004: 9). That is, and letting *T* be a truthmaking state of affairs for the proposition *P*, it follows from the existence of *T* and *P* that they stand in the necessitation relation, which is, ontologically, nothing over and above *T* and *P* themselves. Second, Armstrong is also explicit that the truthmakers for internal relations are just the terms of the relation (2004: 92). Given that *T* necessitates *P*, the truthmakers for this relation are just *T* and *P* themselves. Third, assuming *T* and *P* are both categorical, Armstrong has an account of why the necessitation relation linking *T* and *P* is itself categorical.

But, as I will now explain, this defense of Armstrong fails, because his primitive necessitation relation is not categorical. First, Armstrong holds that an internal relation between entities is always a matter of an identity (whether full or partial) between the entities in question (1997: chap. 10; 2004: 103). In particular, then, as the necessitation relation is internal, the relation holding between *T* and *P* must be a relation of full or partial identity. But insofar as the necessitation relation is cross-categorial (2004: 5-6), it follows that *T* and *P* are members of distinct ontological categories; if so, it follows that they are not fully identical. So *T* and *P* must be partially identical. If so, then *T* and *P* are also partially diverse. Let *PI* be the (perhaps non-mereological) part of *P* that is identical with a part of *T*, and let *PD* be the remaining part of *P* that is distinct from *T*.We can now ask: What is the categorical truthmaker for the necessitation relation linking *T* and *PD*? By hypothesis, we have a categorical truthmaker for the necessitation relation linking *T* and *PI*, which is just *T* = *PI*. But it is plain that *T* = *PI* is not thereby a categorical truthmaker for the necessitation relation linking *T* and *PD*. Second, *T­* and *PD* themselves are not *categorical* truthmakers for the necessitation relation that links them: as *T* is distinct from *PD*, what we require is an *explanation* for why *T* nevertheless necessitates *PD*. To hold that *T* and *PD* are the truthmakers for this relation is to leave the necessary connection between *T* and *PD* unexplained, and therefore hypothetical. Thus, if neither *T* = *PI*, nor *PD* are categorical truthmakers for the necessitation relation linking *T* and *PD*, then, contrary to the previously considered defense of Armstrong, *T* and *P* themselves are not categorical truthmakers for the necessitation relation that links them. It follows that the necessitation relation is not categorical.

In sum, although Armstrong rejects evasive ontologies because they traffic in hypothetical properties, he too is committed to such properties. Thus Armstrong cannot use the categorical restriction to motivate his rejection of evasive ontologies.

But perhaps there is a way for Armstrong to avoid my argument. That is, perhaps Armstrong can grant that while there is an internal relation that holds between *T* and *P*, there is no such relation that holds between *T* and *PD*. Nevertheless, we can still explain the necessary connection between *T* and *PD* as follows: *T* necessitates *P*, and *PD* is an essential part of *P*. If this is plausible, then there is a necessary connection between the two wholes – i.e., *T* and *P* – that is explained by an internal relation between them, and the necessary connection that holds between *T* and *PD* is a consequence of the internal relation between the wholes. Given that *T* cannot exist without *P*, it follows that *T* cannot exist without *PD*.

This response does not avoid my argument, because the assumption that *PD* is an essential part of *P* is unmotivated. First, this assumption entails that there is a necessary connection between *P* and *PD*. But, second, such a connection calls out for an explanation that seems not to be forthcoming: *PD* is notable for being distinct from *T*, but is an otherwise arbitrary part of *P*; in general, however, it is implausible that otherwise arbitrary parts of propositions are essential parts of those propositions, and, in the current context, the only reason for granting the objector’s assumption is that doing so avoids my argument. Thusmy conclusion stands: Armstrong’s necessitation relation is not categorical.[[6]](#endnote-6)

A final strategy is to reject the categorical restriction on truthmaking altogether. Two considerations motivate this idea. First, one might point out that it is somewhat unclear what the categorical-hypothetical distinction is supposed to be (Crisp 2007: 94-97; Sider 2001: 41). Second, insofar as this distinction is unclear, it is thereby unclear whether Armstrong’s necessitation relation is really hypothetical.

In response to the first consideration, the categorical restriction is perhaps the most prominent one in the literature. Insofar as one understands what the categorical-hypothetical distinction is, then I think it is clear that it provides a unified, plausible diagnosis of what is wrong with each of the evasive accounts of truthmaking discussed previously in this section. That is, the evasive truthmaker theorists posit similar sorts of properties as constituents of their respective truthmakers; by hypothesis, what these properties have in common is that they are hypothetical (Sider 2001: 40-41). As for the second consideration, if one grasps what these so-called hypothetical properties have in common, then I think it is clear that Armstrong’s necessitation relation is relevantly similar, and so is deserving of the ‘hypothetical’ label.

Nevertheless, suppose that my responses on behalf of the intelligibility of the categorical restriction are (in whole, or in part) inadequate for whatever reason. Some restriction or other on truthmaking is still required (§III.A). In the next two sections, I will examine two attempts to understand the categorical-hypothetical distinction in more familiar terms.

1. **NATURALNESS?**

Thomas Crisp (2007) understands the categorical-hypothetical distinction in terms of *natural* properties and relations. As for what natural properties are, Armstrong himself holds that it is an *a posteriori* scientific enterprise to discover the nature of such properties: “What properties and relations there are in the world is to be decided by total science, that is, by the sum total of all enquiries into the nature of things” (1978: 8; 2004: 41-42).[[7]](#endnote-7)

Let us suppose that only natural properties and relations are allowed to play a role in truthmaking. Given Armstrong’s understanding of naturalness, I concede that all of the proposed truthmakers posited by the evasive theorists on our list instantiate properties or relations that qualify as non-natural, for it is implausible that these properties and relations are discoverable by any of the sciences.[[8]](#endnote-8) On the other hand, Armstrong’s necessitation relation fares no better, and for the same reasons. This is not to deny that scientific inquiry reveals modal properties and relations. Rather, my claim is that scientific inquiry does not reveal Armstrong’s cross-categorial necessitation relation. So, given a restriction to natural properties and relations, if evasive Lucretians, Molinists, phenomenalists, and Rylean are guilty of accepting non-natural properties or relations, then Armstrong is as well.

1. **INTRINSIC DIFFERENCE-MAKING?**

Ross Cameron (2011) thinks that a categorical property is one that makes an intrinsic difference to the object that instantiates it. More precisely, Cameron offers the following characterization of categorical properties:

*Intrinsic Determination*: 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* (2011: 61).

Cameron claims that the only properties and relations that are allowed to play a role in truthmaking are those that are consistent with *Intrinsic Determination* (2011: 61, n. 12). While this thesis is a prima facie plausible restriction to difference-making properties, it is not obvious that a generalization of this principle to difference-making *relations* enjoys a similar status.For example, consider the following attempt:

*Intrinsic Determination* *for* *Relations*: For all objects *x1*, *x2*, …, *n*-place relations *R*, and times *t*, if *x1*, *x2*, … stand in *R* at *t*, then *x1*, *x2*, … have the intrinsic nature at *t* that they do partly *in virtue of* standing in *R* at *t*.

If *Intrinsic Determination for Relations* were plausible, then it would follow that the only genuine relations are those where standing in them makes a difference to the intrinsic nature of the relata. But *Intrinsic Determination for Relations* is surely false: ordinary distance relations are genuine relations, but such relations violate *Intrinsic Determination for Relations*. If this thesis is false, however, it is difficult to see what can take its place, and Cameron provides no alternative.

The lack of a plausible generalization of *Intrinsic Determination* may seem to be a benefit for Armstrong: if there is no way to generalize this restriction on properties to a plausible restriction on relations, then there is no danger that Armstrong’s necessitation relation violates such a restriction. Nevertheless, if this lack of a restriction lets Armstrong off the hook, it does the same for the evasive phenomenalist who posits the *perceiving* relation as holding between a subject and a merely observable sense datum. So, at the very least, Armstrong cannot appeal to Cameron’s *Intrinsic Determination* in the hope of rejecting *all* of the evasive ontologies under consideration. Nevertheless, perhaps *Intrinsic Determination,* although originally only concerned with presentism, can be profitably appealed to by Armstrong as a principled way of rejecting not only presentism, but also Molinism, and Ryleanism. In what follows, I will argue that this more modest strategy fails as well.

Cameron arguesthat Lucretian properties such as *was dinosaurian* make no difference to the present intrinsic nature of the thing (i.e., the world) that instantiates them, and so that they are thus inconsistent with *Intrinsic Determination*. On behalf of the Lucretian, I will now argue that Cameron is mistaken.

The first step in my argument is to show that, by the Lucretian’s lights, *was dinosaurian* is intrinsic. Suppose objects are *wholly distinct* if they have no parts in common, and let an *intrinsic* property be one that describes how an object is in and of itself, and apart from how everything wholly distinct from it happens to be (cf. Lewis 1983: 197). Lucretianism entails that dinosaurs are not wholly distinct from the world: first, the world is the totality of things existing at the present time (§II); second, relations require the existence of their relata, and so, in particular, the *wholly distinct from* relation requires the existence of its relata (i.e., dinosaurs, on the one hand, and the world, on the other); third, as dinosaurs do not presently exist, it follows that they do not stand in the *wholly distinct from* relation to the world. Thus *was dinosaurian* describes how the world is in and of itself. It follows that this property is intrinsic.

It is not enough, however, to claim that *was dinosaurian* is intrinsic; such Lucretian properties must satisfy *Intrinsic Determination* as well. But, according to Cameron (2011: 61), the world’s instantiation of *was dinosaurian* only makes a difference to the world’s *past* intrinsic nature, and *not* to its present intrinsic nature. That is, while the world has its past intrinsic nature partly in virtue of its instantiation of *was dinosaurian*, the world has its present intrinsic nature in virtue of its instantiation of properties other than *was dinosaurian*. If so, Lucretian properties are inconsistent with *Intrinsic Determination*.

But here is why *was dinosaurian’s* being an intrinsic property matters: for any object *x*, any intrinsic property *F*, and any time *t*, the mere fact that *x* instantiates *F* at *t* makes a difference to the intrinsic nature of *x* at *t*. If so, the mere fact that the world instantiates the intrinsic property *was dinosaurian* makes a difference to the present intrinsic nature of the world. It follows that *Intrinsic Determination* poses no problem for the Lucretian.

My response invites the following rejoinder: surely the world instantiates *was dinosaurian* in virtue of the past existence of dinosaurs. To see this, note that if, contrary to actual fact, the world had *not* instantiated *was dinosaurian*, this would have been so in virtue of the fact that there were no past dinosaurs.

This rejoinder is misplaced. As with the *wholly distinct from* relation, the *in virtue of* relation requires the existence of its relata; as dinosaurs do not exist, it follows that the world does *not* instantiate *was dinosaurian* in virtue of the past existence of dinosaurs. Rather, the world’s instantiation of *was dinosaurian* is primitive. If so, then, in accord with *Intrinsic Determination*, the world presently has the intrinsic nature that it does partly in virtue of the primitive instantiation of *was dinosaurian*. Accepting that the world’s instantiation of *was dinosaurian* is primitive may be otherwise objectionable, but showing this requires something more than *Intrinsic Determination*, which does not conflict with Lucretianism.[[9]](#endnote-9)

As for Molinism, Curly instantiates *E* in every possible world in which he exists, and nothing else instantiates *E*. Furthermore, at any time *t* at which Curly exists, *E* describes how Curly himself is at *t*, and it is clear that Curly has the intrinsic nature that he does at *t* (at least partly) in virtue of instantiating *E* at *t*. *Intrinsic Determination* is satisfied.

Turning finally to Ryleanism, the intrinsic nature of the sugar cube at *t* includes its disposition to dissolve if placed in the appropriate circumstances. The sugar cube thus has its intrinsic nature at *t* (at least partly) in virtue of instantiating *being soluble* at *t*, which is consistent with *Intrinsic Determination*. Of course, given its bare status, *being soluble* has no distinct causal basis, and so it may seem objectionably mysterious; but such mystery does not impugn its case for satisfying *Intrinsic Determination*.

*Intrinsic Determination* thus fails to provide Armstrong with a principled way of rejecting evasive ontologies.[[10]](#endnote-10)

1. **CONCLUSION**

Armstrong requires a plausible restriction on what properties and relations are allowed to play a role in truthmaking. I have discussed three different candidate restrictions: categorical, natural, and intrinsic difference-making. For all I have said here, there may yet be some other restrictions available to Armstrong that simultaneously eliminate evasive ontologies, while also preserving his own. But, if my arguments are compelling, the categorical, natural, and intrinsic difference-making restrictions are not among them.[[11]](#endnote-11)

**ENDNOTES**

1. I make no claim that the “whole point” of Armstrong’s theory of truthmaking is to catch cheaters ( MacBride 2014: §3.1). Rather, it is sufficient for my purposes that Armstrong himself regards cheater catching as *one* of the primary motivations for his theory. [↑](#endnote-ref-1)
2. The most prominent version of Lucretianism (i.e., Bigelow 1996) is an attempt to accommodate presentism with the *truth-supervenes-on-being* *principle*, which Bigelow (1996: 38) articulates as follows: “there could not be a difference in what is true, unless there were a difference in what exists”. Nevertheless, it is also easy to understand Lucretianism as an attempt to accommodate presentism with TM (as I have done above). [↑](#endnote-ref-2)
3. Among presentists, Molinists, phenomenalists, and Ryleans, only Lucretian presentists seem to have pursued (what I am calling) the evasive strategy in print. So I do not claim that there are actual Molinists, phenomenalists, or Ryleans who also pursue the evasive strategy (in particular, Ryle himself does *not* pursue this strategy). [↑](#endnote-ref-3)
4. In what follows, I always use ‘hypothetical’ as shorthand for ‘irreducibly primitive hypothetical’. [↑](#endnote-ref-4)
5. Plantinga himself does not accept the proposed truthmakers for counterfactuals of free action, but, as Merricks (2007: 147-148, n. 3) and Sider (2001: 40) both observe, Plantinga accepts individual essences, and thus, for one who is so inclined, these essences can be enlisted as (admittedly hypothetical) truthmakers for such counterfactual claims. [↑](#endnote-ref-5)
6. It might be thought that, as Armstrong has elsewhere espoused a fictionalist, combinatorial account of modality (1989; 1997), he can perhaps provide a categorical reduction of the necessitation relation. Though I lack the space to consider this response in any depth, it should suffice to note the wide agreement that fictionalist accounts in general, and Armstrong’s account in particular, are unable to plausibly reduce modality (Lewis 1992: 222; Rosen 1990: §8; Sider 2005: 691-692). [↑](#endnote-ref-6)
7. I do not distinguish between the phrase ‘sparse universals’, which Armstrong frequently uses, and ‘natural properties’. [↑](#endnote-ref-7)
8. Objection: surely Lucretian properties, such as *was dinosaurian*, and dispositional properties, such as *being soluble* are discoverable by the natural sciences. Response: while various natural sciences obviously tell us about dinosaurs and solubility, respectively, it is rather less plausible that these sciences tell us about the Lucretian’s *irreducibly past-tensed properties*, or the Rylean’s *ungrounded dispositional properties*. More specifically, scientific inquiry does not discover that the *world* *itself* has irreducibly past-tensed properties; and although scientific inquiry discovers dispositional properties by discovering the *causal bases* of these properties, it is constitutive of Ryleanism that these bases do not exist. [↑](#endnote-ref-8)
9. My argument for why Lucretianism accommodates *Intrinsic Determination* expands on (and, I believe, improves) the argument advanced in McDaniel 2014: 377.

   10 I am indebted to an anonymous referee for alerting me to several serious deficiencies in an earlier presentation of this section.

   11 Thanks to Geoff Goddu, Paul Nedelisky, and Donald Smith for valuable feedback on various versions of this paper. Thanks especially to two anonymous referees for this journal for their incisive, generous, and very patient critical remarks that have made this paper significantly better than it would have been otherwise.

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10. [↑](#endnote-ref-10)
11. [↑](#endnote-ref-11)