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Against Laws of Nature as Truthmakers for Presentists*

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ABSTRACT: This paper addresses the so-called 'truthmaker problem' or 'grounding problem' for presentism. In section 1, I set the stage by introducing presentism and the truthmaker problem. In section 2, I consider a proposed solution to it, which I call the 'laws of nature proposal' (LNP), recently defended by Markosian (2013). I argue that LNP fails as a solution to the truthmaker problem because it does not meet a constraint that is generally taken as constitutive of it: that the entities doing truthmaker work should be *categorical*. Then, in section 3, I discuss the prospects of abandoning this 'categoricity constraint'. The conclusion of this discussion is that the presentist should be allowed to such a move. This, however, is not completely good news for the friends of LNP, since the abandonment of the 'categoricity constraint' opens the door to simpler solutions, like what is often called 'Lucretianism'.

KEYWORDS: Laws of nature - presentism - truthmaking.

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1. Presentism and the truthmaker problem

Presentism is the view that only the present is real. Or, in other words, that only the present exists: there are no merely future objects and no merely past objects. That is to say, the world does not contain past dinosaurs or future outposts in Mars—things that would exist only in the past, or only in the future. Presentism contrasts with a variety of non-presentist views according to which at least some of these entities do exist and are as real as present things.

Presentists face the so called 'grounding problem' or 'truthmaker problem'. This problem may be pinned down as the apparent conflict between presentism and two other, plausible views: the view that truth supervenes on being (that is, the view that if p is true, it would be necessary that the world be different from how it is in order for p not to be true), and the view that some statements seemingly about the past (and about the future, but let us focus on the past) are true. It is clear what this apparent conflict is. Let us take

(D) Dinosaurs once roamed the Earth

as an example of a true statement seemingly about the past. If presentism is true, it looks as if the truth of D fails to supervene on how the world is. The world of the presentist does not stretch beyond the present, and contains nothing but present things. And nothing in this world *necessitates* the truth of D. If it were false that there were dinosaurs, everything today could look very much the same.¹ In other words, if presentism is true, it seems that there is a possible world *w* that is indiscernible from the actual world except for the fact that D is not true at *w*. So it seems that the three views (presentism, supervenience of truth on being, and that D is true) are incompatible.

As it is common in this sort of predicaments, one can either take the apparent conflict at face value and avoid contradiction by dropping one of the views in conflict (a move that is in general accompanied by an explanation of why

¹ We would not have fossils of dinosaurs (given that by 'fossil' we mean something actually caused by a distant past being), but we could have qualitative replicas of fossils of dinosaurs. Such a world would still look like the actual world. D is a standard example in the contemporary discussion of presentism and truthmaking, but if this feature of the example is distractive, it could be replaced by a sentence about any extinct natural kind that did not leave any fossils.

the rejected view *seemed* true at the beginning), or explore the idea that appearances are deceiving and that the three views are not really in conflict. One can also try to combine these two approaches. This is the path followed by the 'laws of nature proposal' (LNP), which we will examine in Section 2. As we will see, LNP has a 'conciliatory' and a 'rejectionist' side. But before moving on to LNP, I would like make a few remarks about the truthmaker problem for presentism.

First, I would like to say something about the choice of formulating the problem in terms of the principle that truth supervenes on being. This principle is usually taken as the least controversial of a series of principles about truthmaking. On the opposite end, we find the principle that every true proposition has a truthmaker, an entity that makes the proposition true. This principle is stronger because, unlike the supervenience principle by itself, it requires the existence of a particular entity (usually thought to be a fact, a state of affairs, or a trope) that acts as a truthmaker of the relevant true proposition. However, following Sider's (2001, 35) influential discussion, I am using the supervenience principle for the formulation of the truthmaker problem for presentism.² My main reason for doing this is that, as emphasized by Sider, given certain assumptions about what is admissible as a supervenience base (which I discuss next), the supervenience principle is already sufficient to generate the truthmaker problem for presentism. Thus, given that there seems to be no need to appeal to the stronger truthmaker principle, it is a good policy to use the weaker one. That way the problem turns out to be of interest also for those who believe in truthmaking without truthmakers (that is to say, people who accept the supervenience but not the truthmaker principle).³ As I said, this is my own reason for formulating the problem in terms of supervenience. But it should also be noticed that even those authors who initially frame the discussion in terms of the truthmaker principle (like Cameron 2010) quickly end up discussing the same issue as those who instead use the supervenience principle: namely, the issue of what properties are admissible in an appropriate supervenience base. I think the reason for this has to do with the relatively extended assumption that a state of affairs is nothing over and above a particular instantiating a property (see for instance Armstrong 1997). Thus, for instance, the state of affairs of the

 $^{^2}$ I thereby follow what I take to be a fairly standard procedure in the discussion of the problem. See for instance Caplan & Sanson (2011).

³ For more references about *truthmaking without truthmakers*, see Rychter (2014).

world having once contained dinosaurs (and alleged truthmaker for D) is nothing over and above the world instantiating the property of having once contained dinosaurs. Given this assumption, even if we were interested in finding out what truthmakers (states of affairs) the world contains, the central issue turns out to be what properties it really instantiates. Once we are clear on what properties the world really has, the truthmakers come as a "free lunch".

Second, it is worth keeping in mind that both the truthmaker principle and the supervenience principle are initially motivated by an intuitive idea that we can gloss in any of the following formulations: that truth is *grounded* in reality, that truths are true *in virtue of* reality, that truths are true *because* of how the world is, etc. Both the truthmaker principle (as usually understood) and the principle that truth supervenes on being fall short of capturing this intuitive idea. This is because both principles are allegedly reducible to modal notions and, in general, modal notions are too coarse-grained to capture the notions expressed by the italicized expressions above. Thus, even if the supervenience principle is the one invoked in the formulation of the problem, it would be disappointing if a solution to the problem were not also an explanation of how propositions such as D can be *grounded* in reality in the sense of the intuitive idea just mentioned.

Third, I claimed above that the supervenience principle, although weaker than the intuitive idea that motivates it, is enough to generate the truthmaker problem for presentism. But this is so just in case we are somewhat selective as to what could constitute the supervenience base for the truth of D and the like. Not any feature of the world can be allowed into this supervenience base. In particular, it is generally assumed by proponents of the truthmaker problem that the presentist cannot attempt to solve the problem by appealing to the property (presently exemplified by so many things) of being such that dinosaurs once roamed the earth. Properties like this are ruled out at the outset because they are, as proponents of the problem say, 'past-directed', they 'point beyond their instances', and are 'hypothetical' rather than 'categorical'.^{4,5} It is

⁴ Notice that, for the same reasons, the property of containing fossils of dinosaurs is ruled out. That property is 'past-directed' in the sense under discussion. Of course, we could admit in our supervenience base the property of containing qualitative replicas of fossils of dinosaurs, but the truth of D would fail to supervene on such a base.

⁵ Following Sider (2001), I use the locutions 'hypothetical property' and 'property that points beyond their instances' to the same purpose.

in my opinion far from clear what these complaints amount to. (I'll come back to this in section 3). But in any case, it is clear that the formulation of the truthmaker problem should be understood as including this kind of constraint on any putative supervenience base. Otherwise, the problem is too easily solved. Let me put it in other words: whoever takes the truthmaker problem seriously (be it a presentist who thinks it can be solved, or a non-presentist who thinks that the problem is fatal for presentism) is driven by the *aspiration to find a categorical supervenience base* for truths like D, a set of properties that do not 'point beyond their instances'. Whether or not this aspiration is a reasonable one for a presentist (and thus whether or not she must take the truthmaker problem seriously) is something I will discuss in Section 3.

Finally, I want to distinguish the truthmaker problem from another, related problem that is often discussed under the label of 'the problem of singular propositions' (see Markosian 2004). If presentism is true, there are no merely past individuals and so no merely past individuals are available as objects of reference or as members of domains of quantification. Thus, given that 'Socrates' purports to refer to a past individual, we fail to express a singular proposition by 'Socrates was a philosopher'. The problem of singular propositions is not that, allegedly, the presentist cannot explain what grounds the truth of the proposition expressed by this statement. It is rather that it cannot explain how the sentence is *meaningful* under the standard assumption that such a sentence expresses a singular proposition. Or in other words, the problem consists in explaining what proposition the sentence expresses and how it does it, given that it cannot express the singular proposition that it is generally thought to express. I think it is worth considering briefly how these two problems relate to each other. One may think that the problem of singular propositions concerns meaningfulness in addition to truth only because it is a more specific problem concerning one particular type of truths, but that the general worry underlying both problems is the same, and that the truthmaker problem is the more general and encompassing formulation of it. (This would explain why the truthmaker problem attracted so much more recent attention than the problem of singular propositions did). The problem, it is tempting to say, is just one: that the presentist's ontology is too sparse, and that it does not contain the materials necessary to ground the truth, and in some cases also the meaningfulness, of the the things we say seemingly about the past. But for reasons that I discuss in Section 3, I think this line of reasoning is misleading, and that we should keep the two problems apart. In order to do so, it will be useful, when discussing the truthmaker problem, to focus on sentences like D, which do not express or presuppose any singular proposition seemingly about a past object. In fact, perhaps D is not the best example, since it may be thought to involve reference to an extinct natural kind. I'll keep using it nevertheless, but its job could also be done by something like 'There were round objects' (which does not seem to express or presuppose any singular proposition about the past) or 'Obama was a child' (which expresses a singular proposition but not about any past object).

2. The laws-of-nature proposal

Let us now turn to LNP, a proposal for solving the truthmaker objection that has recently been defended by Ned Markosian (see Markosian 2013). LNP's basic idea is roughly this: contrary to what we were assuming, many truths seemingly about the past, perhaps D itself, are necessitated by the presentist's temporally narrow world. This world is narrow, but it contains a system of laws of nature. This system of laws is either completely deterministic or somewhat indeterministic. If it is completely deterministic, then it determines, together with everything else in the (present) state of the world, how the world was and will be. (According to LNP, a system of completely deterministic laws of nature fix reality in both directions: just as there is only one possible future given how the present is, so is there only one possible past).⁶

⁶ That is to say, according to LNP, laws of nature are *bi-directionally* deterministic (to the extent that they are deterministic at all). Markosian (1995, 100) makes this assumption explicit and offers references for further discussion of it. A nice statement of the assumption of bi-directionality is offered by Lewis (1979, 460), who also makes it when discussing determinism: 'A deterministic system of laws is one such that, whenever two possible worlds both obey the laws perfectly, then either they are exactly alike throughout all of time, or else they are not exactly alike throughout any stretch of time. They are alike always or never. They do not diverge, matching perfectly in their initial segments but not thereafter; neither do they converge'. That deterministic laws determine also the past (given the present state of the world) may sound surprising because in the philosophical discussion of determinism it is future determination that is most often invoked. Nevertheless, as noticed by Hoefer (2016, sec. 2.3), 'for a wide class of physical theories (i.e., proposed sets of laws of nature), if they can be viewed as deterministic at all, they can be viewed as bi-directionally deterministic.'

So contrary to what we assumed before, there is no possible world w that is indiscernible from the actual world except for the fact that D is not true in w. In envisaging such a world, we were forgetting about the completely deterministic system of laws of nature. (Notice that somehow or other that system is a feature of the actual world, and so any world that is indiscernible form the actual world is indiscernible with respect to it). If the laws of nature are somewhat indeterministic, on the other hand, less things about the past and about the future are determined by how the world is. But according to LNP, it is ok for the presentist to deny the truth of everything that is not so determined. In particular, it is ok to say that D is not true, if it really turns out that the (present) state world is compatible with the falsity of D-i.e. if it is nomologically possible, given the (present) state of the world, that D is not true. This is why I said before that LNP's approach to the truthmaker problem had two sides. LNP says: if the laws of nature are deterministic, then presentism, supervenience, and D are all true, contrary to appearances. If the laws are indeterministic, on the other hand, then D and other statements about the past that we take to be true are in fact not true.

I have several worries about LNP, the discussion of which will help me to present what I think presentists should make of the truthmaker problem. As we have seen, LNP crucially appeals to the laws of nature: truths about the past and about the future are true in virtue the world's (presently) being governed by certain laws of nature (together with any other states of affairs). My first worry is this: to the extent that laws of nature are suited to do this work, they will also fail to satisfy the categoricity constraint mentioned above. Nomic properties, the properties in virtue of which laws of nature apply, will not satisfy the aspiration (that animates proponents of the truthmaker problem) of finding a categorical supervenience base. Laws of nature are paradigmatically hypothetical: they tell us how the world *would* be if such and such conditions *obtained*.

You may want to say: 'laws of nature may well be categorical entities after all. If the Humean view about laws of nature is correct, laws of nature are nothing but (or are determined by) regularities among particular events, and these in turn may be reduced to the instantiation of categorical properties'. I agree, but I also think that this Humean view is not available for presentists. The view is available to non-presentists that embrace past and future events, but it looks as if the presentist's repertoire of events is too sparse to determine many laws of nature. In particular, I can't see how present events, i.e. all the events that exist according to the presentist, could determine diachronic laws of the sort 'if you shake a bunch of Fs at t₁, you will get a G by t₂. (You may want to protest here and say: 'but that we will get a G by t₂ is a present event!' Fair enough, but laws of nature determined by this sort of future-directed events cannot be used in a solution to the truthmaker problem. Remember the constraint that only 'categorical' properties be allowed in the supervenience base.) That present events cannot determine diachronic laws is especially problematic, because it is precisely this kind of laws that may be thought to ground truths seemingly about the past and the future. So it seems that LNP is incompatible with the Humean conception of laws, and that it requires a different conception. This is already very significant because, it seems to me, the Humean picture about laws and the aspiration to solve the truthmaker problem (which, remember, includes finding a categorical supervenience base for truths seemingly about the past) are very close relatives, two projects arising from a single source: the picture of reality as 'vast mosaic of local matters of particular fact, just one little thing and then another', with no necessary connections between them, no pointing to each other. So it seems odd that in order to solve the truthmaker problem the friend of LNP should give away the Humean conception of laws and go shopping for a different conception. But this is in fact what Markosian (2013) suggest we do, mentioning the 'Armstrong-Dretske-Tooley' account of laws as a promising alternative. Let us see how things stand if we follow this path.

On the Armstrong-Dretske-Tooley account ('ADT account' for short), laws of nature are relations between universals and so, given this account, LNP amounts to the idea that D is grounded in a relation between universals (or in more than one). But what are these universals? Universals are sometimes thought of as abstract entities, but I think that the friend of LNP who adopts the ADT account should rather follow Armstrong in thinking of universals as constituents of the concrete, material world. It would be odd if at this point the friend of LNP said that it is the relations between a bunch of abstracta, rather than a feature of the concrete material world, what grounds or makes true that dinosaurs once roamed the Earth. (In fact, I think that it is in general the friend of ADT, and not only the friend of LNP who subscribes ADT, who should think of universals as constituents of the material world: I find very implausible the idea that lawlike connections in the concrete, material world hold *because* a bunch of abstracta bear a particular relation.)

So universals must be thought of, as Armstrong did, as concrete constituents of the material world. But Armstrong is a non-presentist and so his universals have merely past and merely future instances (at which they are multiply located). Friends of LNP cannot follow Armstrong this far. If they adopt ADT, they must think of universals as presently existing constituents of the material world. But this has some unappealing consequences. First, it seems possible that some universals are *alien* to the present: that is to say, that the present fails to contain some universals that nevertheless had or will have instances. Suppose, for instance, that in the past the world contained G particles, a kind of fundamental particle that is now extinct. Since there are no such particles, being a G particle is not a universal and there are no laws about G particles. The consequence of this is clear: friends of LNP cannot ground any alleged truth about G particles or about anything involving G particles (if dinosaurs were in part constituted by G particles, the alleged truth of D cannot be grounded, for instance). So friends of LNP must either deny the possibility of universals alien to the present, or bite the bullet and deny the truth of many of the propositions about the past that we initially thought to be true. Second, and most importantly, the problem of diachronic laws that LNP faced on the assumption of the Humean theory, re-appears here on the assumption of ADT. Suppose that we say that N(F, G) is a law of nature relating universals F and G. Suppose further that this law together with the fact that a bunch of Fs are shaken at t₁ jointly determine that we will have a G at t₂. On these assumptions, N is at least necessarily co-extensional with a relation N* that is future directed: the relation of having instances that will exist right after/before instances of... And although we do not yet have a full explanation of what it is for a property or relation to be future-directed, it seems reasonable to suppose that being future-directed is a feature that is shared between necessarily equivalent properties and relations. But if so, the appeal to N violates the categoricity constraint and thus does not constitute a satisfactory solution to the truthmaker problem. This confirms what we should have been suspecting from the start: an appeal to an unexplained necessary connection between distinct existences can hardly be welcome by someone who is moved by the aspiration to ground all truths in a categoric supervenience base.

Before moving on, let me mention other additional worries about LNP. First, even if LNP succeeded in making laws of nature part of an appropriate supervenience base for the truth of D, and thus succeed as a solution to the truthmaker problem as stated above, it would not thereby succeed in finding an appropriate *ground* for D. It seems implausible to say that it is true that dinosaurs existed partly *because of* (or *in virtue of*) the fact that such and such laws of nature presently hold. Of course, that such and such laws of nature presently hold can be good evidence for *believing* that there were dinosaurs, but not what *makes it the case* that there were dinosaurs. (If anything, as Humeans have it, the other way around looks more plausible: such and such laws of nature presently hold partly because there were dinosaurs.) Second, the 'rejectionist' side of LNP leaves the view in need of some supplementation. In order to see this, suppose that the laws of nature are indeterministic enough so that D is not true. If we accept the principle of bivalence, we should also say that, in these circumstances, D is false. Now my question is: is D as bad as C?

(C) Centaurs once roamed the Earth.

If the laws of nature are sufficiently indeterministic (something that is the business of science to determine), the presentist who adopts LNP has to say that both D and C are false. Nevertheless, I think it is reasonable for the friend of LNP to distinguish between C and D, and to confer on D some kind of positive status that C lacks. Perhaps D is in some sense closer to truth than C. Or perhaps D somehow expresses a true proposition, when understood non-literally. In any case, I think it is important for the friend of LNP to have some story to tell about the positive status of D vis à vis C. Otherwise, I think the proponent of the truthmaker problem will be unsatisfied by LNP, since the proposed solution would amount to reject one of the three views that generated the problem (the view that D is true), without any explanation of why it seemed true in the first place.

3. Against the categoricity constraint

We have seen that the main obstacle that LNP stumbles upon is the categoricity constraint—a constraint that, as we have stressed, should be understood as constitutive of the truthmaker problem. In this section, I want to address whether this constraint is reasonable for a presentist and thus whether presentists should be worried about the truthmaker problem. My conclusion will be disappointingly negative: I think presentists have no good reason to accept the categoricity constraint, and no reason to be worried about the truthmaker problem. This, however, is not good news for friends of LNP, given that LNP is offered as *solution* to the truthmaker problem, i.e. as a view that strives to meet the demands imposed by the proponents of the problem. Once we drop the categoricity constraint, there are other, simpler and more natural views for the presentist to hold.

Let us start by considering the view that has been called Lucretianism. According to this view, the world presently exemplifies the property of having once contained dinosaurs. If we take this property as part of how the world is (i.e., as part of the relevant supervenience base for the principle that truth supervenes on being), there is no world that is indiscernible from ours with respect to being, and such that D is not true in it. It is precisely against proposals like this that the categoricity constraint is put forward. As proponents of the truthmaker problem say, Lucretian properties like having once contained dinosaurs are inadmissible because they are 'past-directed', they 'point beyond their instances', they 'float free from the world', and thus constitute a case of 'cheating'. As we noted earlier, it is difficult to find a clear, definite statement of the worry behind these complaints.⁷ Sider (2001) admits that the notion of the categoric is 'elusive', and Schaffer (2008) admits that current characterizations of the notion 'could use further work'. But despite the fact that we lack a clear formulation of the categorical constraint, we can get some grasp on it by considering particular examples of objectionable properties and the broader assumptions and theoretical context in which the truthmaker objection seems pressing.

⁷ An exception is Cameron (2010) who analyzes categoricity in terms of present intrinsic nature. On this proposal, we can admit in the relevant supervenience base any property that contributes something to the present intrinsic nature of its exemplifier. The property of having contained dinosaurs is ruled out because it does not tell us anything about how the world presently *intrinsically* is. I do not intend to offer a full assessment of this proposal, but I would like to mention two initial worries. First, the notion of intrinsicness is not unproblematic and relying on it may not be the most fruitful strategy in this context. A popular way of understanding intrinsicness is in terms of perfect duplication. But how can we rule out the view that if something has the property of having once been F, so does any perfect duplicate of it. The problem, more generally, consists in securing a characterization of intrinsicness that rules out pastdirected properties. Second, I doubt this analysis of categoricity captures what Sider and others were after in their complaints about past-directed properties. What seems to bother these people about properties like having contained dinosaurs is the fact that these properties *point to the past*, not the fact that they do *not* point to the present. (See Caplan & Sanson 2011 for a similar diagnosis).

I admit that there is something suspicious about Lucretianism. If you ask yourself 'what feature of the world makes it true that once there were dinosaurs?', it indeed sounds as cheating to say that it is the fact that the world instantiates the Lucretian property of having once contained dinosaurs. But the presentist's story about truthmaking need not end at that point. Rather, I think the presentist should insist on the following 'core idea': what is true is true in virtue of how the world is, or in virtue of how the world was and will be. That there once were dinosaurs (D) is true in virtue of how the world was. If, when talking to the proponent of the truthmaker problem (who is armed with the supervenience principle), the presentist chooses to rephrase this by saying that D is true because the world instantiates the Lucretian property of having contained dinosaurs, that is fine. But it should be kept in mind that this is mere rephrasing. Saying that the world instantiates the Lucretian property is nothing but saying the world is such that there were dinosaurs – or simply that once there were dinosaurs.

Let us come back to what I think should be the presentist's core idea: truths are true in virtue of how the world is, *or in virtue of how the world was and will be*. This idea allows the presentist to happily join truthmaker theorists in their central motivation: *truth is grounded in reality*. Truth is grounded in reality, the presentist says, but not just in how reality *is*. It is also grounded in how reality *was* and *will* be.⁸ In other words, there is a way things were, and those propositions that correctly describe that way things were are true. Those that do not correctly describe the way things were are not true. There is no present feature of the world that makes D true because D is not about how the world *is*. D is about how the world *was*, and so is true in virtue of a feature that

⁸ You may think that it is illegitimate to move here from *truth is grounded in reality* to *truth is grounded in how reality is.* That is to say, you may think that these two slogans are best understood as representing two different views. The first slogan may be best understood as representing standard truthmaker theory, according to which each truth is true in virtue of the existence of a particular entity (so the first slogan would be equivalent to *truth is grounded in existence*). The second slogan may be best understood as representing the weaker (and to my mind much more plausible) view that truth supervenes on what things exist *and how they are.* Now, the "core idea" that I am here putting forward on the presentist's behalf depends on the assumption that it is the second doctrine, and not the first, the one that matters. I think this is correct, and that it would be bad news for the proponent of the truthmaker problem if the problem in the end presupposed the stronger doctrine.

the world *had* (and no longer does). Far from cheating, this all sounds to me like perfectly sane, honest common sense (I'll say more about honesty below).⁹ What are the consequences of this 'core idea' for the truthmaker problem? This is one way of thinking about it: the presentist's core idea amounts to keeping the supervenience principle while rejecting the categoricity constraint and thus admitting Lucretian properties. But this way of thinking about the presentist position is most appropriate for proponents of the truthmaker problem, not for presentists themselves. That is to say, it is the way in which presentists are forced to describe the position *when talking to proponents of the truthmaker problem*. It is not the way in which presentist makes this effort of communication when the presentist's discourse sounds as cheating.

This takes me to note something peculiar about the dialectics in this area. There are two prima facie different ways of arguing against a philosophical position: one may attempt to show that the position harbors internal tensions or inconsistencies, or one may attempt to show that the position is inconsistent with a view that is uncontroversially true and widely accepted. Clearly, proponents of the truthmaker problem are not following the first strategy. They attempt to show that presentism is incompatible with widely accepted views. But they do not succeed in this. For although it seems uncontroversial that truth is grounded in reality (and as we have seen, the presentist agrees with this), it is not equally uncontroversial that truth supervenes on a base of *categorical* properties. In fact, as we already mentioned, the precise content of this constraint is not even spelled out. It may be thought that even if we lack a precise formulation of the categoricity constraint, there are nevertheless clear reasons that should lead us to accept something in the vicinity. But I can't see there are such pressures. The motivation for the categoricity constraint is, perhaps, as Carroll (1994, 5) puts it, 'simply the gut feeling' that non-categorical properties are somehow not fundamental. Or perhaps it is the epistemological worry (close to Hume's original one) that we cannot see the difference between a world that exemplifies the property of having once contained dinosaurs and one that does not. None of these strike me as powerful reasons to adopt roughly defined view like the categorical constraint. Of course, a philosopher may still be moved by

⁹ Here I am indebted to Rosekranz (2012), who makes similar remarks in defense of Ockhamism (the view that future contingents are true without there being anything past or present that makes them true) rather than presentism.

her gut feelings to adopt such a view as a working hypothesis and even as a central tenet of her metaphysics. But then she can't really use the principle as a premise of an argument against someone else. In conclusion: proponents of the truthmaker problem have succeeded in showing why *they* cannot be presentists, not in showing that *presentists* are wrong in holding their views.

A remaining worry: Sider (2001) emphasizes the fact that presentists who appeal to Lucretian properties would be in the same boat as other metaphysicians (those accepting brute dispositions, etc) that seem clear cheaters. I cannot engage in a comparison between presentism and these other views, or in a discussion of whether the alleged cheaters are really cheaters. But I want to finish by pointing to a dimension of *honesty* in presentism. I agree that it would be suspicious if the presentist, holding such an austere ontological position, could easily cook up a ground for the truth of *any* proposition that we ordinarily take to be true.¹⁰ That would be cheating. It would be like refusing to pay the price of ontological austerity. But the presentist is not in the position of offering grounds for any alleged truth we like. She cannot ground the truth of 'Socrates was a philosopher', for instance, given that Socrates does not presently exist. Here is where the distinction we made above between the truthmaker problem and the problem of singular propositions becomes relevant. If the presentist follows the Lucretian path, she can ground the truth of all general propositions seemingly about the past. Given that, as we are assuming, *dinosaurhood* is a presently existing property (and reducible to presently instantiated properties), the presentist has in his ontology the materials to ground the truth of D, or any other past-tensed purely general proposition. She has the materials to 'construct' the Lucretian property of having once contained dinosaurs. But given that Socrates is not in the presentist's ontology, she does not have the materials to construct the property of having once contained Socrates, and so she cannot ground the truth of Socrates was a philosopher in the same way as she grounds the truth of D. Thus the presentist does not cheat: she does pay a price for her ontological austerity.

¹⁰ I have in mind easy recipes of the following kind: 'it was the case that p because the world exemplified the property of being such that p', or 'because it contained the fact that p', etc.

4. Conclusion

The presentist should not follow the friend of LNP in trying to ground truths 'about' the past in the laws of nature. In Section 2, I argued that LNP is an unsuccessful attempt to meet the challenge set by proponents of the truth-maker problem. In Section 3, I have argued that presentist should not feel obliged to meet the challenge in the first place.

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