

# Truthmaking is Explanation by Things

Philipp Blum\*

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## Abstract

Recent controversies about the applicability of truthmaker arguments in different areas of metaphysics suffer from an inadequate understanding of the connection between truthmaking and explanation. In this paper, I highlight two such connections: understanding truth as a derelativisation of a metaphysically prior relation of truthmaking allows for an explanatory theory of truth itself, first, and also helps to explain why certain truthbearers are true: they are true because of their truthmakers.

We use the words we have to make statements. In some cases at least, we want these statements to make assertions about the world. But we do not just want to speak *about* the world – we also want our statements to be true and to be true *because* the world is as it is. The truthmaking intuition that I shall explore in this paper may be taken to consist roughly of the following two tenets:

1. Truth is relational: being true is being *made* true by something.
2. Truth is grounded: true truthbearers are true *because* the world is how it is; truth is never brute.

These two tenets are interrelated: the relationality of truth means that the grounds must enter into true ascriptions of truth; the groundedness means that the other relatum of such ascriptions must be of an ontological, rather than say of an epistemological or representational nature.<sup>1</sup>

Historically, the truthmaker principle has often be used polemically. In this ‘cheater-catching’ role, strong arms have wielded it against the unreduced counterfactuals postulated by behaviourists (Armstrong 1968), phenomenologists (Armstrong 1993), dispositionalists and presentists

It has recently been argued that cheating is not prohibited by the strongest acceptable truthmaker theory (Kierland and Monton 2007, Tallant 2009a and 2010). Why should we not just deny that truth must be grounded, rather than burdening ourselves with the difficult tasks of providing present and actual truthmakers for tensed and modal truths? To resist the temptation to cheat, we have to re-assure ourselves of our motivations to believe in truthmakers in the first place. In this paper, I attempt to stiffen genuine realists’ spine by providing an argument for truthmaker realism.

We should accept the demand for truthmakers, I will argue, because understanding truth as a derelativisation of a metaphysically prior relation of truthmaking allows us to explain *why* “[n]o sentence is true but reality makes it so” (Quine 1970: 10). This *sui generis* type of explanation has been overlooked (Daly 2005; Liggins 2005), when enemies and false friends of truthmaking argued that weaker truthmaking principles than maximalism (every truth made true) may satisfy our demands for explanation and that the truthmaker principle should be weakened to some general supervenience claim, providing ‘truthmaking without truthmakers’.<sup>2</sup> True supervenience theses are in need of explanation and only a cross-categorical relation of robust truthmaking, I will argue, can explain *why* there is a strong modal correlation between what is true and what there is.

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\*University of Geneva, Switzerland, philipp.keller@unige.ch. Work on this paper has been supported by the Coordinación de Humanidades of the Universidad Nacional Autónoma de México (UNAM) and by the Swiss National Science Foundation (10011-126656).

<sup>1</sup>These tenets do not concern the truth-*predicate* or the *property* (thick or thin) of truth. For all that will be said in this section, the question how ‘deflationist’ an account of the truth-*predicate* can be given may be considered be open.

<sup>2</sup>Cf. Kühne (2003: 148–174); the idea has been ‘rediscovered’ by Melia (2005), Hornsby (2005) and Schnieder (2006).

The principal motivation of truthmaker theorists, I submit, is the following: truth has to be grounded in reality – which means that it has to be explained by *things*. Therefore, truthmaking – explanation by things – has to be distinguished from explanations why some sentences (including sentences ascribing the truth-predicate) are true.

Such a theory of truthmaking as explanation by things is explanatory in two ways: it is an explanatory theory of *truth*, and it explains how truths are grounded in reality. Truthmaker theory (TTT) is a version of the correspondence theory of truth and deserves to constitute the core of any realist metaphysics.<sup>3</sup>

It is a mistake to think that TTT needs to be motivated by recourse to the thesis that for every true sentence there must be some explanation of why it is true. Opponents of TTT are right in saying that explanations not citing truthmakers may do this job. Consider the explanatory ties between the following four sentences:<sup>4</sup>

- (1) Sam is a dog.
- (2) “Sam is a dog” is true.
- (3) “Sam is a dog” is made true by Sam.
- (4) “Sam is a dog” has a truthmaker.

I agree, with Aristotle and both outright opponents and (even somewhat sympathetic) critics of TTT that (2) because (1). I also agree with some critics of TTT that (1) is, so to say, ‘ok as it stands’.

Whether or not (1) is itself in need of an explanation or of a sufficient reason – of a causal or some other kind – is not a question of concern to TTT, while it may of course be an interesting question for other types of metaphysical theories.<sup>5</sup> Because I think that TTT is an explanatory theory of truth, I also agree with its critics that (3) because (2) and hence that (3) because (1). Because (4) is obviously true because of (3),<sup>6</sup> (1) is explanatorily and thus metaphysically prior to all of (2), (3) and (4). So far so good: at least within TTT, “there is no explaining the truth of propositions” (MacBride 2005: 134) like (1).

Opponents of truthmaker theory forget, however, about two other ways in which TTT is explanatory. It is, first, an explanatory theory of *truth*, an account of what truth is, and, second, it’s central explanandum, the truthmaking relation, is *itself* a species of the explanation relation, i.e. explanation by things.

TTT is an explanatory theory of truth in virtue of the claim that truth is a derelativisation of a metaphysically prior cross-categorical relation of truthmaking: being true is nothing but being made true by something.<sup>7</sup> TTT explains the nature of truth in virtue of being a *formal* theory of the truthmaking relation, not by its material part that specifies what the truthmakers are.<sup>8</sup> Opponents of TTT have to tell us what truth is.

Truthmaking without truthmakers will not achieve this task: while to say that some truthbearer *x* is true iff *p*, for some sentence “*p*”, may be an statement of a criterion of material adequacy for definitions of the truth-predicate for some language (Tarski 1935) or the schema for the axioms of a theory about what we are competent of if we grasp the concept of truth (Horwich 1990), it is not a theory of the *property* of truth. Even though this has been argued already extensively in the case of Tarski (cf. e.g. Field 1972) and is explicitly acknowledged by minimalists, lessons learned are quickly forgotten. I will therefore illustrate the point with respect to the recent discussion of how presentists could forgo the requirement to produce truthmakers for

<sup>3</sup>More on ‘realism’ below.

<sup>4</sup>On some theories of truthmaking, the truth of (3) depends on whether Sam is essentially a dog. I am concerned in the following with the question *whether* there are truthmakers, leaving aside the conceptually posterior question *what* entities these truthmakers are plausibly taken to be. Even arch-enemies of the weakest, supervenience-only forms of truthmaking, such as Julian Dodd (2002: 72) and Joseph Melia (2005: 69), admit that singular existentials and essential predications have truthmakers (cf. also Lewis 1992: 216).

<sup>5</sup>Fetridge’s truthmaker principle (“For every sentence which is true there must be some explanation of why it is true”, 1990: 42) is to be rejected, or, at least, does not help motivate truthmaking theory. While I agree with critics of TTT – with Daly (2005: 100) that “invoking truthmakers for truths does not thereby explain those truths”, with Liggins (2008: 179, 186) that “for every truth, there is something in virtue of which it is true” does not motivate TTT because the relevant explanations do not have to be in terms of something’s existing, but could be in terms of something’s being such-and-such (cf. also Liggins 2005) –, I think they are mistaken in taking their sound points to count against TTT.

<sup>6</sup>I suppose this is readily conceded by all sides (already Descartes remarked that existential generalisations are true because of their instances). TTT explains why this is so; opponents of TTT owe us an explanation.

<sup>7</sup>TTT may well be a theory of truth without essentially involving the truth-predicate, except to facilitate generality of exposition (cf. Fox (1987: 189), Bigelow (1988: 127), Lewis (2001a: 248), Künne (2003: 164), Horwich (2008: 262)).

<sup>8</sup>We may thus agree with Horwich that “[w]e must first grasp what truth is, and only then can we go on to say which entities are needed to make true all the various kinds of proposition there are”, but do not have to conclude from this that “we see a truthmaker theory as not aiming to articulate a concept of truth” (2008: 261). Armstrong (2004a: 129) makes this point when he replies to an earlier version of Horwich’s paper (Horwich 2004), that the latter “passe outre la distinction que je trace dans mon article [2004c] entre une théorie générale de ce que signifie «rendre-vrai», et les hypothèses métaphysiques d’après lesquelles certaines entités sont des vérificateurs corrects pour certains vérités.”

past-tensed truths, urged upon them by many.<sup>9</sup>

It has been recently argued, by Gallois (2004: 649), Kierland & Monton (2007: 490), Tallant (2009a: 423) and Sanson & Caplan (2010: 38), that presentists may legitimately dodge the truthmaker requirement by weakening the truthmaking principle to supervenience of truth not on how things are, but rather on how they are, were or will be.<sup>10</sup> Legitimate doubts have been raised about whether such a restriction of the requirement (and the corresponding enlargement of the supervenience base) could be justified on general, non ad-hoc grounds.<sup>11</sup> Even if it could, however, it would radically distort TTT: the restricted principle would explain the (present) truth of some past- or future-tensed sentence by *another* sentence, which does its (present) explaining only if it is (presently) true. No explanation by things is provided: the bulge in the carpet is just moved to another sentence.<sup>12</sup>

Not just the explanandum, however, but also the explanans is of the wrong kind. What the past events made true and what the future events will make true are not, after all, sentences like “Caesar crossed the rubicon” or “There will be a fox in the garden”, but rather sentences like “Caesar crosses the rubicon” and “There is a fox in the garden”. To make the past- and future-tensed sentences true, we need to incorporate the pastness and futurity into the truthmaker – exactly what the weakening of the truthmaking principle was supposed to avoid.<sup>13</sup> Because truth has to be grounded, the present truth of the past-tensed sentence is in need of a present ground – the past ground of its present-tensed cousin will not do; not just because it is past, but because it is not a ground of *this* truth.

As far as I see, cheaters have three options at this point: they can give up on their cheating, postulating present truthmakers for past truths;<sup>14</sup> they can claim that the truth in need of a truthmakers is *both* expressed by the present-tensed and by the past-tensed sentence,<sup>15</sup> or they could postulate a special, transtemporal truthmaking relation between past events and present truths.<sup>16</sup> None of these is appealing.

We may, of course, opt out of truthmaking theory altogether,<sup>17</sup> but to weaken TTT in this way is to lose “the distinction between those who want to abide by a genuine truthmaker requirement and those who think truthmaking unimportant” (Heathwood 2007: 141). Other presentists have accepted the demand for truthmakers and tried their best to meet it, postulating haecceities (Adams 1986), fundamental and past-

<sup>9</sup>A canonical statement of this line of criticism is to be found in e.g. Armstrong (2004b: 145–150).

<sup>10</sup>Such ‘wide-base truthmaking’ (Caplan & Sanson 2011: 198) is attributed by Armstrong (2004b: 147) to John Heil. Cf. also Westphal (2006: 4), though he is not a presentist.

<sup>11</sup>Keller (2004: 92) and Cameron (2008b: 412) express doubts about this. Krämer (2010: 292) raises problems about the correct formulation of such a restriction.

<sup>12</sup>Jonathan Tallant, for example, has proposed the following ‘cheating’ truthmaker principle: “...a proposition is true if and only if, either: (a) there exists an entity that makes that proposition true; or, (b) there does not exist an entity and that makes the proposition true; or, (c) there could have existed an entity that would make the proposition true; or, (d) there has existed an entity that makes the proposition true...” (2009a: 426) This does not offer an analysis of truth (and hence I do not see why Tallant (2009a: 429) thinks his ‘cheating’ truthmaking principle “make[s] the concept of truth more complicated”); it does not account for the truth of a proposition in terms of *things* that make – or made, or could make – it true. This explanatory inadequacy as a theory of *truth* is even more obvious in the case of Tallant’s later replacement principle – “For every proposition, that proposition is true iff it accurately characterizes its subject matter” (Tallant 2010: 503): while it may be “extremely elegant” (2010: 503), it is also extremely uninformative; it corresponds more or less to the “correspondence platitude” of Crispin Wright (1992: 27) (cf. Dodd 2002: 75). (It also distorts TTT in other ways, as someone holding that mental predications are made true by brain states does not normally think they are *about* brain states).

<sup>13</sup>The point is simple and has been made by Keller already in 2004 (with respect to the closely related problem of how presentists account for singular propositions about past things): “It’s not enough to say that the proposition’s constituents *did* exist and *did* stand in a certain relation, because that would only show that the proposition *did* exist. *The Tower was on the Thames* is true *now*.” (2004: 93).

<sup>14</sup>Despite what they ‘officially’ say, this seems to be a popular strategy: “The now absent fox is what makes propositions about it, expressed by sentences in past tenses, true ones.” (Westphal 2006: 2) He does not tell us, however, what an absent fox is. Kierland and Monton postulate “the past”, “an aspect of reality [which] cannot be reduced to *things* or the *properties* they possess (i.e., how these things are)” (2007: 491), but which has a ‘shape’ that makes it true that Socrates existed (but not, for example, that Sherlock Holmes existed). When does the shape of the past make it true that Socrates existed? Now – but then it cannot be the shape of the *past*. (cf. Sanson & Caplan 2010: 31, fn. 10). Kierland & Monton (2007: 496–497) deny this, holding that the shape of the past (and the past) is a present aspect of reality, but this is something I just utterly fail to make sense of. Tallant (2009b: 409) postulates “ungrounded tensed facts residing at the present moment”, but does not really explain how there might be such things.

<sup>15</sup>This may be why most of them take the truthbearers in need of truthmakers to be propositions. If the truthbearers are not temporally individuated, however, it is hard to see why TTT needs a restriction at all: why is it not just sufficient that the truthmaker requirement was satisfied in the past?

<sup>16</sup>Perhaps such cheaters would take their inspiration from Dummett’s so-called “truth-value link”, which is prominently discussed in Westphal (2006), forgetting that it is just this – a truth-*value* link, not a truth-*making* link. Postulating a truthmaking relation holding between the past events and the present past-tense sentences about them, makes the presentists’ predicament worse, not better, for this is then just another cross-temporal relation they have to account for (cf. Armstrong 2004b: 147).

<sup>17</sup>One way to do this, it seems to me, is to give up on the cross-categoricity of the truthmaking relation, construing it e.g. as an asymmetric relation between *propositions* like entailment (McGrath 2003: 674).

or future-directed properties (Chisholm 1990; Bigelow 1996)<sup>18</sup>, maximally consistent sets of propositions as ersatzist past and future times (Bourne 2006), a combination of these (Crisp 2007), eternally existing fundamental particles (such as those discussed by Keller 2004) or God's memories (Rhoda 2009). Without either postulating such existing shadows cast by non-existing objects<sup>19</sup> or denying the truth of singular past-tense sentences (Sider 1999; Markosian 2004), presentism dodges the truthmaker requirement.

Cheating presentists often claim to take inspiration from Bigelow's and Lewis' "mere supervenience" truthmaking principle. If Bigelow and Lewis are allowed to have truthmaking without truthmakers, why could not the cheating presentists have the same? Both Lewis and Bigelow remark that the general supervenience principle, that truth supervenes on being, makes both truth- and falsemakers equally plausible:

The Truthmaker principle turns out to imply something about how possible worlds can and cannot differ. It says that every difference between worlds [...] is a *two-way* difference in population: each world has something that the other lacks. In other words, every difference between worlds requires a difference-maker. In fact, two difference makers: one in one world and the other in the other. (Lewis 2001b: 606)

If something is true, then it would not be possible for it to be false unless either certain things were to exist which don't, or else certain things had not existed which do. (Bigelow 1988: 132-133)

While it certainly makes it easier to deal with negative existentials, this retreat gives up the important link between truth and existence, lying at the bottom of the truthmaking intuition. It also distorts TTT in other ways, turning it into a claim about which *sentences* are fundamental.<sup>20</sup> Thirdly, it presupposes modal realism:

To try to analyse 'the absence of falsmakers' in terms of the unrealized possibility that the world might have been such that 'unicorns exist' is true seems ludicrous if it is *truthmakers* one is seeking. (Armstrong 2004b: 70)

The most important drawback of the weakening of TTT to a mere supervenience principle, however, is that the supervenience itself is left unexplained. And we know from other areas of philosophy that supervenience principles, if true, require explanation, ideally in terms of some robust relation that grounds the modal covariation.

Even if we accept that truthmaking is a relation, we may still ask how many truthmakers there are.

This explanatory rôle of TTT provides a strong argument for truthmaker maximalism. Non-maximalist truthmaker theorists are committed to the claim that there are (at least) two ways for something to be true, and face the difficult task to explain why these are two ways for something to be *true*. To do without truthmakers for negative (Simons 2005: 255), Parsons (2005: 168), analytic (Rodríguez Pereyra 2005: 21) or higher-order (Mumford 2005: 267) truths is to endorse an explanatory burden: how, may we legitimately ask such philosophers, do they account for the (at least apparent) fact that we are predicating the same property of them as of humdrum positive, synthetic, first-order truths like (1)? It is as if they were claiming that there are two ways of being a brother: one that involves another entity than you (your brother), and another one that does not.<sup>21</sup>

Understanding truthmaking as a species of explanation by things thus explains why TTT purports to be an explanatory theory of truth and also allows for an argument in favour of truthmaker maximalism. The explanatory potential of TTT goes even further than this: not only is it an explanatory theory of truth, but it also explains truths, though not in the way its critics take it to do.

<sup>18</sup>Such irreducibly tensed properties have recently been re-postulated under a different name and a slightly changed conception of them by Ross Cameron (2008a, 2011) as temporal distributional properties.

<sup>19</sup>This is how Lewis (2004: 8) glosses the interpretation of Meinong given by Terence Parsons (1974, 1980).

<sup>20</sup>This mistake is quite common, and shared by both enemies and false friends of truthmaker theory: "...claims about which kinds of entity (if any) serve as truthmakers boil down to theses about which existential theses are explanatorily fundamental." (Horwich 2008: 273) "But why think it is an advantage to suppose, at the start of metaphysical enquiry, that all categories of truth claim can be explained in terms of one single category, namely the category of positive, tenseless, existential assertion?" (Goff 2010: 49) "Truthmaker theory just is a theory about which truths are brute: it says that the only brute truths are truths concerning what there is—every other truth must hold in virtue of one or more of these brute truths." (Cameron 2008a: 293)

<sup>21</sup>Different options are available to such theorists, but none of them seems very promising. They might claim that "...is true" is ambiguous (but how are they to account for "(1) is true, and so is "There are no unicorns"" and the like?), that there are ways of being true and we apply the predicate 'analogously' to truths without truthmakers (cf. McDaniel 2009, 2010: for a related view about existence), or that both kinds of truth are determinates of a common determinable.

It is a mistake to think that the explanations of truths offered by truthmaker theory are claims to the effect that they have such-and-such truthmakers. Consider:

- (5) Sam is a dog because “Sam is a dog” is made true by Sam.
- (6) “Sam is a dog” is true because it is made true by Sam.
- (7) “Sam is a dog” is true because of Sam.

As opponents of truthmaker theory have pointed out and I have conceded above, both (5) and (6) are false. (7), however, is true and provides an explanation of why “Sam is a dog” is true.

Horwich (2008: 267) and Schnieder think that TTT is committed to (5). Liggins (2008: 190) thinks that truthmaker theorists who think that the truthmaking relation is explanatory are committed to (5) or (6)<sup>22</sup>

But in fact they are committed only to (7).

As has been argued above, (7) has to be understood as requiring the present (actual) existence of Sam for the present (actual) truth of the sentence ascribing doghood to it. We will now argue why it is because the sentence is *now* true (i.e.: is *now* made true) that there must be something *now* responsible for its truth. This is not because of any special principle that exhibits an anti-presentist (and anti-possibilist) bias, but because being true *is* (nothing but) being made true.

That truthmaking is a species of explanations by things has been seen more clearly by its enemies than by its defenders:

Nothing, no thing, makes sentences and theories true: not experience, not surface irritations, not the world, can make a sentence true. That experience takes a certain course, that our skin is warmed or punctured, that the universe is finite, these facts, if we like to talk that way, make sentences and theories true. But this point is put better without mention of facts. (Davidson 1974: 194)

This is a denial of the truthmaker requirement precisely because no *things* are provided as truthmakers – what is inserted into the right-hand argument place of “...is made true by ...” is the nominalisation of a sentence, not a singular term. Truthmaking is taken to be a species of the sentential “because” connective, not the prenective “because of”, standing between a sentence (made true) and a singular term (for the truthmaker).<sup>23</sup>

There are a number of criticisms against an identification of *being made true* with *being true because of*. One may doubt, first, that there is such a thing as explanation by things. A long-standing tradition, from Kant to Brandom and McDowell holds that explanations necessarily stay within the realm of reason. TTT is opposed to that tradition, and derives from this very opposition the right to claim to be a version of the correspondence theory of truth.

Explanation by things is a familiar feature of many types of explanation:

- rationalising: Sam left Maria because of Sally.
- evidential: They must be at home because of the light.
- causal: They had an accident because of the worn-off break.
- theoretical: Tritium is unstable because of its extra electron.
- essential: Tropes are non-transferrable because of their nature.
- mathematical: 2 is between 1 and 3 because of 1,2,3.
- metaphysical: “Humphrey possibly wins” is true because of his (winning) counterpart.

There is thus nothing special about explanation by things.

A further worry against the conception of truthmaking as explanation by things concerns the property identity itself. How is to be spelt out? Are we not able to have a full grasp of truth without ever having heard of truthmaking? Can we reductively explain (the nature of) truth in terms of a metaphysically prior relation of truthmaking? The advocate of TTT has a ready answer at hand: the property identity in question is not a conceptual analysis, nor a reductive explanation, but a necessary sharing of truthmakers. What makes it

<sup>22</sup>(6) is an instance of McFetridge’s principle mentioned above. Rodríguez Pereyra (2005) argues from (6) to the truthmaking principle.

<sup>23</sup>This is particularly clear in theories that analyse truthmaking as a type of grounding, rendering “*x* makes it true that *p*” as “*p*, because *x* exists” or, or alternatively, as “the truth of *p* is grounded in the existence of *x*” (cf. e.g. Correia 2005: §3.2 and Schnieder 2006).

true that some truthbearer's being true is nothing but it's being made true by some truthmaker is the very same thing that makes it true in the first place: the truthbearer and the truthmaker, bound together by the truthmaking relation.

Which things do the explaining? Many think that some thing  $a$  may only explain that  $Fa$  if  $F$  is an essential property of  $a$ . This is why Armstrong thinks that the truthmakers of contingent predications must be states of affairs, i.e. things that are such that they cannot exist without the proposition being true – as opposed to 'mere [mereological] sums'. What reason is given to say that  $aRb$  is not the sum of its constituents? It is an application of what one may call the "sufficiency argument":

"[That the fact and the sum are different] is well-nigh self-evident...For if the constituents exist, the set and the sum both 'automatically' exist; but the constituents can exist without the fact existing." (Vallicella 2002: 12)

This is an application of the truthmaker necessitarianism, the view that "[t]he determining of a truth by a truthmaker is an absolute necessitation" (Armstrong 2004b: 5). I want to reject this principle, because I want to reject the following "principle of necessarily sufficient reason":

**(Nec)** An explanation, even of a contingent fact, must necessitate what it explains.

If we accept explanation by things, as truthmaker theorists do, **(Nec)** becomes truthmaker necessitarianism: the view that truthmakers necessitate the truth of what they make true. An argument for the existence of states of affairs is then the consequence. States of affairs, however, are parts (or rather symptoms) of the problem, not parts of its solution. We get explanatory circularity in lieu of an explanatory regress: The difference between the 'mere sum' and the fact is explained by something, i.e. a state of affairs, that is 'non-mereologically composed' out of its constituents. But until we understand the difference between mereological and non-mereological composition, we do not understand the difference between the sum and the fact.

Contingent explanations are explanations that 'do their explaining' only under certain circumstances. Contra Armstrong,<sup>24</sup> this does not make them 'partial': they are full explanations, but contingently explanations (and also, perhaps, contingently full explanations).

Not just is truthmaker theory explanatory, but nothing else is.

Rather than trying to make our life easy, we should bravely face the explanatory demands imposed upon us by TTT. The hard work has only just begun.

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<sup>24</sup>Cf.: "If it is said that the truthmaker for a truth could have failed to make the truth true, then we will surely think that the alleged truthmaker was insufficient by itself and requires to be supplemented in some way. A contingently sufficient truthmaker will be true only in circumstances that obtain in this world. But then these circumstances, whatever they are, must be added to give the full truthmaker." (Armstrong 1997: 116)

"Why do we need to recognize states of affairs? [...] If  $a$  is  $F$ , then it is entailed that  $a$  exists and that the universal  $F$  exists. However,  $a$  could exist, and  $F$  could exist, and yet it fail to be the case that  $a$  is  $F$  ( $F$  is instantiated, but instantiated elsewhere only).  $a$ 's being  $F$  involves something more than  $a$  and  $F$ . It is no good simply adding the fundamental tie or nexus of instantiation to the sum of  $a$  and  $F$ . The existence of  $a$ , of instantiation, and of  $F$  does not amount to  $a$ 's being  $F$ . The something more must be  $a$ 's being  $F$  – and this is a state of affairs." (Armstrong 1989: 88)

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