Truthmaking cannot be done afar

Asher Jiang[1,2] ⓘ

Abstract

As concerns the explication of the intuitive notion of truthmaking, Barry Smith has an insight that deserves more attention. Basically, in his view, an object x makes a proposition <p> true iff (i) x necessitates <p> and (ii) <p> is representationally closely tied with x. To be more specific, he suggests that (ii) is fulfilled only if x is among <p>'s ontological commitments. I appreciate his basic insight but reject his specific suggestion. I argue that we can make a more attractive proposal from his basic insight if we take into consideration that the close tie can also be realized by <p>'s being *about* x.

1 Introduction

According to a popular view, to say that the truth of a proposition depends on reality is to say that there is an object that makes the proposition true.[1] If we embrace this view, a crucial task for us is to explicate the intuitive notion of truthmaking. Barry Smith offers the following explication: An object x makes a proposition <p> true iff (i) x necessitates <p> (x necessitates <p> ↔$_{Def}$ it is impossible for x to exist while <p> is not true) and (ii) x is a part of <p>'s ontological commitments (viz. a part of <p>'s projection) (Smith, 1999, 282ff, 2002, p. 231). Two things must be kept apart, namely Smith's basic insight that underlies his explication and the explication itself. The basic insight is intuitive. Metaphorically speaking, the insight amounts to the view that a truthmaking relation is always based upon a *mutual* affection. On the one side, the truthmaker candidate must favor the proposition: The former must be metaphysically sufficient for the truth

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[1] For a discussion on this topic, see Hornsby (2005), Liggins (2012), Perrine (2015), Rodriguez-Pereyra (2005) and Schnieder (2006b).

✉ Asher Jiang
    Asher_Jiang@msn.com

1   Department of Philosophy, Tsinghua University, Beijing, People's Republic of China

2   Center for the Humanities, Room 208, Shuang Qing Road 30, Beijing 100084, People's Republic of China

of the latter (or necessitate the latter); on the other side, the proposition must also favor the truthmaker candidate: It must acknowledge the truthmaker candidate as something it is representationally dealing with. Smith emphatically highlights the second factor. According to him, apart from necessitation, it is also very important that a truthmaker x for <p> must be something <p> is *closely tied with due to <p>'s representational content*. This insight is wrapped in the slogan '[T]ruthmaking cannot be done afar' (Smith, 1999, p. 279). Smith's explication is a specific elaboration of his basic insight. It suggests that the representational tie connecting <p> with x obtains *only if* <p> is ontologically committed to x. The explication itself is problematic. One of the problems is that it disqualifies true propositions without ontological commitments (like <Witches do not exist>) as truthmaker-owners simply *because* they lack ontological commitments. This is undesirable because the intuitive notion of truthmaking that Smith is trying to explicate does not behave like this: There is an intense dispute about whether true propositions like <Witches do not exist> have truthmakers (Armstrong, 2004, 53ff; Dodd, 2007, pp. 387–388; Molnar, 2000, pp. 75–80; Mumford, 2007, p. 46). Normally, participants of the debate (who are applying the intuitive notion of truthmaking) do not think that the nay-sayers *automatically* win *because* these propositions lack ontological commitment.

This paper aims to make a more attractive proposal from Smith's basic insight by repairing the defects of his specific elaboration of this insight. Smith is right in thinking that, apart from necessitation, a truthmaker x for <p> must also be something <p> is (representationally) closely tied with. But he is wrong in assuming that being ontologically committed to x is the only way <p> can be closely tied with x. I suggest that <p> can *also* be closely tied with x by being *about* x. Note that 'is ontologically committed to' and 'is about' are not co-extensive. <Every swan can fly> is about swans, but not ontologically committed to them. It can be true even when there is no swan. Also, suppose Anna is a human being. The proposition <Anna is singing> is ontologically committed to human cells. It cannot be true unless human cells exist. But it is clearly not about human cells.[2] An additional task of this paper is to argue for the advantages of my proposal over a popular explication of truthmaking according to which x makes <p> true iff <p> is true in virtue of x (Armstrong, 2004, p. 5; Rodriguez-Pereyra, 2005, p. 26; Schnieder, 2006b, 30ff).

The paper develops as follows: In Sect. 2, I will show that Smith's projection-based explication is too restrictive. In Sect. 3, I will argue against the 'in virtue of'-explication. It is both too loose and too restrictive. In Sect. 4, I will present my elaboration of Smith's basic insight. Section 5 anticipates some objections against my proposal.

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[2] Sometimes, Smith himself claims that the condition (ii) ('x is a part of <p>'s ontological commitments') in his official explication captures the idea that a truthmaker x for a proposition <p> must be something <p> is *about* (Smith, 1999, p. 279, 2002, p. 231). His claim is puzzling. Obviously, (ii) cannot capture this idea: Ontological commitment and aboutness are totally different relations. I consider his claim as an indication of two things. First, he is aware of the importance of the concept 'about' in the explication of truthmaking. Secondly, he has a confused conception of aboutness and of the way the concept 'about' should contribute to the explication of truthmaking. This paper can also be understood as an attempt to replace his confused conception with a clear one.

2 The projection-based explication

As Schnieder has shown, Smith's original projection-based explication suffers under technical defects. In what follows, I will rely upon a refined and clarified version of Smith's original proposal (offered by Schnieder) which is free of these defects (Schnieder, 2006a). According to Schnieder's refined proposal, necessitation is a necessary, but not sufficient condition for truthmaking. Trivially, Socrates necessitates the necessary truth <(The number) 1 exists>. But Socrates does not count as a truthmaker for <1 exists>. A proposition <p>'s necessitator must fulfill a further condition in order to be a truthmaker for <p>: It must be representationally closely tied with <p>. Schnieder then concretises this additional condition to the extent that a genuine truthmaker for <p> must be a part of <p>'s ontological commitments:

(E-ONT)   x makes <p> true iff (i) x necessitates <p> and (ii) x is among <p>'s ontological commitments [cf. Schnieder (2006a, p. 70)]

For <p> to be ontologically committed to x, it does not have to be the case that <p> is false in every possible world in which x does not exist (Otherwise, the Oval Office would fail to be a part of the proposition <Offices exist>'s ontological commitments. For there is a possible world in which the Oval Office does not exist, while the proposition is true due to the existence of another office. This would lead to the undesirable outcome that the Oval Office does not make <Offices exist> true). Instead of that, one should merely demand that x exemplifies a property F which must be exemplified if <p> is true [cf. Schnieder (2006a, p. 69)]:

(Def$_1$)   x is among <p>'s ontological commitments $\leftrightarrow_{Def}$ $\exists_F$ (Fx & $\square$ (p $\rightarrow$ $\exists_y$ (Fy)))

But (Def$_1$) is too loose: Since the property of self-identity must be exemplified if <1 exists> is true, every self-identical object must be a part of <1 exists>'s ontological commitments. This is absurd and leads to the counterintuitive result that Socrates (which is self-identical) makes <1 exists> true. A restriction is needed. Call a property F which must be exemplified if <p> is true a '<p>-property'. In other words, F is a <p>-property iff it satisfies the second conjunct '$\square$ (p $\rightarrow$ $\exists_y$ (Fy))' in the definiens of (Def$_1$). A <p>-property F$_1$ is more specific than another property F$_2$ iff, necessarily, everything which exemplifies F$_1$ also exemplifies F$_2$, but not vice versa. A <p>-property is one of the most specific <p>-properties iff there is no other <p>-property that is more specific than it. Call the set of the most specific <p>-properties 'S$_{<p>}$'. All members of S$_{<p>}$ are <p>-properties, but not vice versa. Both the property of being 1 and the property of self-identity are <1 exists>-properties, but only the former is a member of S$_{<1 \text{ exists}>}$. Here we have a correction of (Def$_1$) [cf. Schnieder (2006a, p. 70)]:

(Def$_2$)   x is among <p>'s ontological commitments $\leftrightarrow_{Def}$ $\exists F$ (Fx & F $\in$ S$_{<p>}$)

In order to be among <p>'s ontological commitments, x must exemplify some most specific <p>-properties. Although both 1 and Socrates exemplify some <1 exists>-properties, only 1 is among <1 exists>'s ontological commitments because only 1 exemplifies some most specific <1 exists>-properties. Although both 1 and Socrates necessitate <1 exists>, only 1 makes <1 exists> true.

Schnieder himself is pessimistic about (E-ONT). In his view, even after so many technical refinements, (E-ONT) is still inadequate. It is still too loose. Given (E-ONT) and (Def₂), a necessarily true proposition like <1 exists> must be ontologically committed to every necessarily existent object y and made true by y (The reason is simple: Since y exists necessarily, it is *impossible* for <1 exists> to be true while the property of being y is not exemplified. Thus, the property of being y is one of the <1 exists>-properties. Moreover, it is also one of the most specific <1 exists>-properties). But this is absurd. Obviously, <1 exists> is not made true by the empty set even when the empty set necessarily exists (Schnieder, 2006a, pp. 71–72).

In principle, I share Schnieder's pessimism regarding (E-ONT). But, before giving up (E-ONT), let us try to repair it one more time. We can try to avoid the undesirable outcomes by modifying (Def₂). It is reasonable to hold the view that <p> is ontologically committed to x only when x plays a substantial role for the truth of <p>. (Def₂) attempts to capture this crucial aspect in purely modal terms, which is hopeless.[3] I suggest the replacement of (Def₂) with (Def₃):

(Def₃)   x is among <p>'s ontological commitments ↔$_{Def}$ ∃F (Fx & F ∈ S$_{<p>}$)
            and <p> is true in virtue of x

The conjunct after 'and' ensures that many necessarily existent objects (like the empty set) would not count as truthmakers for <1 exists>. <1 exists> is not true *in virtue of* them.

Nevertheless, due to some reasons not mentioned by Schnieder himself, his pessimistic conclusion concerning (E-ONT) is unavoidable in the end. As an explication of truthmaking, (E-ONT) remains inadequate even after the replacement of (Def₂) by (Def₃). It is overly restrictive. General negative existential propositions like <Witches do not exist> lack ontological commitment.[4] (E-ONT) disqualifies these propositions as truthmaker-owners *already* because they lack ontological commitments. This is not a desirable result. There is an intense dispute about whether true propositions of this kind have truthmakers. Participants of the debate do not seem to believe that the nay-sayers win *merely because* these propositions lack ontological commitment (Armstrong, 2004, 53ff; Dodd, 2007, pp. 387–388; Molnar, 2000, pp. 75–80; Mumford, 2007, p. 46). This clearly indicates that the intuitive notion of truthmaking philosophers have in mind does not require that a truthmaker for a proposition must be among

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[3] We have learned similar lessons from the explication of other metaphysical notions like 'essence', 'ontological dependence' and 'truthmaking' itself. None of these notions can be properly explicated via purely modal terms [cf. Fine (1994, 1995) and Schnieder (2004, pp. 295–298)].

[4] I am not claiming that all negative propositions lack ontological commitment. Some negative propositions like <Mount Everest is *not* 9000 m high> do have ontological commitment. The negative proposition about Mount Everest is, for example, ontologically committed to Mount Everest. But *negative existential* propositions lack ontological commitment: They do not imply the existence of anything.

the proposition's ontological commitments. In other words, the worry is that (E-ONT) fails to properly capture the intuitive notion of truthmaking. Also, consider the claim 'The fusion of the Oval Office and everything else in the solar system makes <The Oval Office exists> true'. Many philosophers believe that the claim is true (Armstrong, 2004, pp. 19–21; Mulligan et al., 1984, p. 315; Read, 2000, p. 71). The fusion contains many parts which are irrelevant to the truth of the proposition. But this does not seem to disqualify the fusion as a truthmaker for the proposition. I think this intuition is constitutive for our notion of truthmaking. But (E-ONT) violates this intuition: In the light of (Def$_3$), <The Oval Office exists> is not ontologically committed to the fusion. The fusion does not even satisfy the first conjunct in the definiens of (Def$_3$).

But Schnieder's pessimism reaches further. He also doubts the fruitfulness of Smith's basic idea that truthmaking should be explicated in terms of necessitation plus the requirement that a truthmaker for <p> must be something <p> is closely tied with (Schnieder, 2006a, p. 72). At this point, I disagree. We should keep Smith's basic insight and continue to explore its potential. (E-ONT) is too restrictive because it is based upon an overly narrow understanding of how propositions can be representationally closely tied with objects. We can repair this defect by admitting that being ontologically committed to x is not *the only way* <p> can be closely tied with x. <p> can *also* be closely tied with x by being *about* x.

Before I proceed along this line, let me anticipate a concern. Since (Def$_3$) makes use of the concept 'in virtue of', one might think that the entire approach up till now is unnecessarily sophisticated. For, seemingly, we could simply adopt the following explication of truthmaking:

(E-VIR)   x makes <p> true iff <p> is true in virtue of x

In the next section, I argue that (E-VIR) is inadequate.

3 The 'in virtue of'-explication

There is no consensus concerning what the connection denoted by 'in virtue of' is. Some philosophers consider it as a relation of non-causal explanation (Fine, 2012, pp. 37–38; Schnieder, 2011, p. 446). Others deny that the connection itself is explanatory: It is rather a non-causal determination that underlies correct explanations (Audi, 2012, pp. 685–688; Rodriguez-Pereyra, 2005, pp. 26–28). There is no need for me to decide between these two positions. I share Rodriguez-Pereyra's view that we often agree upon the usage of 'in virtue of' regardless of what we think about the exact nature of the connection denoted by it (Rodriguez-Pereyra, 2006, p. 960).

(E-VIR) performs elegantly in many cases. Obviously, it backs some of the relevant intuitions: Socrates does not make <1 exists> true and not every necessarily existent object makes <1 exists> true. The outcomes are correct and no sophisticated technical construction is needed. Moreover, (E-VIR) does not automatically disqualify propositions without ontological commitment as truthmaker-owners. For even a true proposition without ontological commitment can be true in virtue of something. So far, so good. The first problem appears when we consider the intuitively true claim

that the fusion of the Oval Office and everything else in the solar system makes <The Oval Office exists> true. Just like (E-ONT), (E-VIR) violates this intuition. (E-VIR) violates this intuition due to the following reason: As Rodriguez-Pereyra points out, 'in virtue of' is relevance-sensitive. <The Oval Office exists> is not true *in virtue of* that *entire* fusion because many parts of the fusion are irrelevant to the truth of the proposition [Rodriguez-Pereyra (2006, pp. 970, 972), cf. Audi (2012, p. 699)]. Thus, (E-VIR) is too restrictive. It excludes genuine truthmakers. (E-VIR) is also faced with another problem. Consider the following two theses:

(1)   The totally unaccompanied (An object x is totally unaccompanied iff everything is either identical with x or a constituent of x. When I am talking about constituents, I also have non-mereological constituents in mind.) and non-witch-containing universe *as such* makes <Witches do not exist> true

(2*)   The Oval Office *as* unaccompanied by witches makes <Witches do not exist> true ('the Oval Office as unaccompanied by witches' is an abbreviation of 'the Oval Office as unaccompanied by witches inside and outside the Oval Office')

Each of these two truthmaker candidates necessitates the target proposition. It is impossible for the totally unaccompanied and non-witch-containing universe *as such* (or the Oval Office *as* unaccompanied by witches) to exist while <Witches do not exist> is untrue. Nevertheless, intuitively, only (1) is a genuine case of truthmaking, and (2*) is false. An adequate explication of truthmaking must account for these intuitions. Lewis is the first one who has noticed this kind of explicatory challenge (Lewis, 2003, pp. 29–33; Rosen & Lewis, 2003, p. 39). However, as Jago has convincingly shown, Lewis himself has failed to successfully meet the challenge (Jago, 2013, p. 467). I will not go deeper into Lewis' solution. Our concern here is whether (E-VIR) respects our intuitions. Let me clarify one point before we proceed: Nothing I am going to say in below depends on the assumption that the phrase 'The totally unaccompanied and non-witch-containing universe as such' denotes an object that *differs* from the universe that is in fact totally unaccompanied and non-witch-containing. Nor do I assume that 'The Oval Office as unaccompanied by witches' denotes an object that *differs* from the Oval Office that is in fact unaccompanied by witches (Lewis himself famously considers these two assumptions as false, more on this in Sect. 5).

Back to our main question: Does (E-VIR) respect the above intuitions? Apparently, it guarantees the truth of (1). (1) is true in the light of (E-VIR) because it is natural to say that <Witches do not exist> is true in virtue of the totally unaccompanied and non-witch containing universe as such. Can (E-VIR) explain the intuition that (2*) is false? At first glance, the answer seems to be affirmative: Indeed, it *sounds weird* that <Witches do not exist> is true in virtue of the Oval Office as unaccompanied by witches. Thus, seemingly, this particular 'in virtue of'-claim is false and (E-VIR) is rendering (2*) false—just as required. But we must be careful in identifying the source of the weirdness. The weirdness is at least partly generated by the fact that we do not have good *pragmatic* reason to mention the Oval Office in an account for the truth

of <Witches do not exist>. My worry is that this pragmatic awkwardness does not necessarily render the 'in virtue of'-claim false. For what 'in virtue of' denotes is an objective connection that has nothing to do with pragmatic interests.[5] There remains a danger that, notwithstanding the pragmatic awkwardness, <Witches do not exist> is *nevertheless* true in virtue of the Oval Office as unaccompanied by witches. In what follows, I will argue that this danger is a real threat and that we have good reason to believe that (E-VIR) fails to deliver the intuitively correct output regarding (2*).

The locution '<p> is true in virtue of x' contained in (E-VIR) can mean two things: It means either that (a) <p> is true *in virtue of x's existence* or that (b) <p> is true *in virtue of how x is*.[6] Surely, it can also mean both (a) and (b). The point is that proponents of (E-VIR) cannot accept *only one* of these two clarifications of what the locution means without jeopardizing (E-VIR)'s adequacy. Suppose they only accept (a) and always mean 'in virtue of x's existence' by 'in virtue of x'. This would force them to conclude that the totally unaccompanied and non-witch-containing universe as such (as a truthmaker candidate) does not make the proposition <Witches do not exist> true, which is counterintuitive. To be sure, this proposition is true in virtue of the candidate. It is true in virtue of *how* this candidate *is*. The following answer to the question 'In virtue of what is <Witches do not exist> true?' is acceptable: 'In virtue of the universe's being totally unaccompanied and its being non-witch-containing'. But the proposition is not true in virtue of the *existence* of the candidate. This negative existential proposition is not about what exists. It is about what does not exist. It is not true in virtue of the *existence* of anything. Although the candidate must exist in order to be a candidate, its existential aspect is not responsible for the truth of this proposition.[7] Nor is it a good idea to accept only (b). Consider <Something exists>. This proposition is true in virtue of Socrates. But what matters for its truth is merely that something exists, regardless of how this thing is. The proposition is true in virtue of Socrates' *existence*, not in virtue of *how* Socrates *is*. Proponents of (E-VIR) would counterintuitively disqualify Socrates as a truthmaker for <Something exists> if they only accept (b). In view of this, the best choice for the proponents of (E-VIR) is to combine (a) and (b) and to clarify their conception as follows:

(E-VIR⁺)   x makes <p> true iff <p> is true in virtue of x (viz. <p> is true in virtue of x's existence *or* in virtue of how x is)

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[5] This can also be acknowledged by those who consider the connection denoted by 'in virtue of' as an explanatory relation. Whether an explanatory relation obtains can be an objective matter as well (Schnieder, 2006b, p. 32).

[6] As a matter of fact, some proponents of (E-VIR) are content with the unclarified term 'in virtue of x' (Rodriguez-Pereyra, 2005; Schnieder, 2006b). Others seem to prefer (a) (Griffith, 2014, p. 196; Jago, 2013, p. 460). The clarification (b) has been scarcely mentioned in the literature.

[7] My point here must be clearly distinguished from Parsons' view that the truth-value of some propositions does not supervene on what exist, but on how things are. Parsons has in mind examples like this: The truth-value of <The flower α is red> does not supervene on whether α (which is de facto red) exists. For it is possible for α to exist and fail to be red. Rather, it supervenes on how α is [Parsons (1999, pp. 329–330), cf. Dodd (2002, p. 74)]. This view is not what I am currently arguing for. Indeed, the truth-value of <Witches do not exist> *does* supervene on whether the truthmaker candidate in question exists: It is impossible for the totally unaccompanied and non-witch-containing universe as such to exist while <Witches do not exist> is not true. My point is that, nonetheless, the proposition is not true *in virtue of* the existence of this candidate.

Now, I think the intuitively false claim (2*) is true in the light of (E-VIR$^+$), which means that (E-VIR$^+$) is not only too strict (with regard to the case concerning the fusion of the Oval Office and everything else in the solar system), but also fails to exclude pseudo-truthmakers. For (2*) to be true in the light of (E-VIR$^+$), <Witches do not exist> needs not be true in virtue of the *existence* of the Oval Office as unaccompanied by witches. It is *sufficient* that the proposition is true in virtue of *how* this truthmaker candidate *is*. I believe that this sufficient condition is fulfilled. There are three potential objections against my view, none of them is convincing.

First, one might argue that <Witches do not exist> is not true in virtue of how the Oval Office as unaccompanied by witches is because a certain arbitrariness of choice is in play: *Anything* as unaccompanied by witches is related to this proposition in the same way as the Oval Office as unaccompanied by witches does. But this argument is not convincing even when we acknowledge the arbitrariness. The arbitrariness per se does not threaten the correctness of 'in virtue of'-claims. Everything is related to the proposition <Something exists> in the same way as Socrates does. Nevertheless, the proposition is true (disjunctively) in virtue of Socrates (Fine, 2012, p. 47). Indeed, proponents of (E-VIR$^+$) cannot deny this. Otherwise, they would have to acknowledge that Socrates does not make <Something exists> true, which is highly counterintuitive.

Secondly, one might appeal to the relevance-sensitivity of the concept 'in virtue of' and try to question the truthmaking candidate's relevance. But this would not work either. How the Oval Office as unaccompanied by witches is *does* matter for the truth of <Witches do not exist>. Recall that 'the Oval Office as unaccompanied by witches' is an abbreviation of 'the Oval Office as unaccompanied by internal and external witches'. The Oval Office's being unaccompanied by internal witches does contribute to the truth of <Witches do not exist>. For the truth of the proposition demands the absence of witches inside the Oval Office. The Oval Office's being unaccompanied by external witches is relevant to the truth of the proposition too. For the proposition would be false unless the Oval Office exhibits this extrinsic property. Indeed, what I just said strongly *supports* the view that <Witches do not exist> *is* true in virtue of how the Oval Office as unaccompanied by witches is.

Thirdly, one might argue that (E-VIR$^+$) is adequate only when the meaning of 'in virtue of how x is' is properly restricted and that, given the restriction, <Witches do not exist> is not anymore true in virtue of how the Oval Office as unaccompanied by witches is. Here is the argument: A truthmaker x for a proposition <p> must ensure <p>'s truth exclusively with the help of its own *intrinsic* properties [cf. Parsons (2005, pp. 165–167)]. In view of this, the locution 'in virtue of how x is' in (E-VIR$^+$) must be understood as merely meaning 'in virtue of how x intrinsically is'. In other words, in examining whether an object x fulfills the condition '<p> is true in virtue of how x is' mentioned in (E-VIR$^+$), the only thing that we are allowed to consider is how x *intrinsically* is. Now, <Witches do not exist> is not true in virtue of how the Oval Office as unaccompanied by witches *intrinsically* is. Without the *extrinsic* property of being unaccompanied by external witches, the Office's being unaccompanied by internal witches is not metaphysically sufficient for the truth of the target proposition. Thus, given the restriction, the proposition is not true in virtue of how this truthmaker candidate is and (2*) is false—just as required. But this objection must be refused too.

For the restricted (E-VIR$^+$) would also falsify the intuitively true claim (1). Without the extrinsic property of being totally unaccompanied, the universe's being intrinsically non-witch-containing is not metaphysically sufficient for the truth of <Witches do not exist> [cf. Griffith (2012, 2015, p. 318), Parsons (2006, pp. 595–596)]. The proposition in question is not true in virtue of how the totally unaccompanied and non-witch-containing universe as such (*intrinsically*) is. Given the restriction, (1) would be false and (E-VIR$^+$) would be inadequate anyway.

More importantly, the above restriction is ill-motivated. A truthmaker x for a proposition <p> *needs not* ensure <p>'s truth exclusively with the help of its own intrinsic properties. Indeed, many truthmakers are truthmakers exactly *because* they exhibit certain extrinsic properties. The totally unaccompanied and non-witch-containing universe as such makes <Witches do not exist> true exactly because it has the extrinsic property of being totally unaccompanied. There are also examples of this kind that have nothing to do with the truthmaking of negative existential propositions. Consider a sphere of gold, δ. δ as a sphere of gold makes true <There is a sphere of gold>. The former makes the latter true because the former is a sphere of gold. But if Sider is right, then being a sphere of gold is an extrinsic property: x is a sphere of gold only if x is not seamlessly embedded in a bigger cube of gold (Sider, 2001). Perhaps the property of being a sphere of gold is not purely extrinsic to the extent that objects sharing this property must also be intrinsically similar to each other: They must all be gold. But there are more radical cases. The Oval Office as an office makes <Offices exist> true. The former makes the latter true because the former is an office. Again, being an office is an extrinsic, functional property: Whether something is an office depends on the functional roles it plays in the cultural community. Beyond that, being an office is purely extrinsic. Objects sharing this property need not exhibit any intrinsic similarity with each other.

4 A new elaboration of Smith's basic insight

In the previous section, we have examined two cases (the fusion-case and the claim (2*)) in which '<p> is made true by x' is not co-extensive with '<p> is true in virtue of x'. (E-VIR$^+$) is both too strict and too loose. We must not overestimate the role of the concept 'in virtue of'. As we have seen in (Def$_3$), it can be used to exclude pseudo-truthmakers. But the truthmaking relation cannot be explicated in terms of this concept alone. It is now time to go back to Smith's basic insight. As an attempt to flesh out this basic insight, (E-ONT) suffers under the shortcoming that it considers a proposition <p>'s being ontologically committed to an object x as the only way in which <p> can be closely tied with x. This approach is too narrow. I suggest that we should treat <p> as being closely tied with x iff <p> is ontologically committed to x *or* about x:

(E-MIX)   x makes <p> true iff (i) x necessitates <p> and (ii) *either* x is among
            <p>'s ontological commitments (in the sense of (Def$_3$)), *or* <p> is
            about x

The aboutness-relation I have in mind is an extensional relation between a proposition and an existent object.[8] I will rely upon our intuition concerning the usage of 'about' in this extensional sense and offer no explication of this concept. However, there is a specific form of aboutness, namely the explicit aboutness (aboutness$_{ex}$), that requires an explanation. A proposition <p> is about$_{ex}$ an object x iff <p> contains concepts which specifically represent x.[9] For example, <Socrates exists> is about$_{ex}$ Socrates. A proposition <p> is about everything it is about$_{ex}$, but not vice versa. According to Lewis, if <p> is about x, then it is also about any y that has x as its constituent (Lewis, 1988, p. 164). This view is plausible. It is quite natural to say that if <Socrates exists> is about Socrates, then it is also about the universe of which Socrates is a constituent. But <Socrates exists> is clearly not about$_{ex}$ the universe. It does not contain a concept that specifically represents the universe. In this particular case, <Socrates exists> is about the universe in virtue of its being about$_{ex}$ a constituent of the universe.

Since my concept of aboutness is extensional, '<p> is about x and x = y' entails '<p> is about y' [cf. Goodman (1961, p. 10)]. The extensionality also applies to aboutness$_{ex}$. If <Socrates exists> is about$_{ex}$ Socrates and Socrates is identical with Plato's only teacher, then the proposition is also about$_{ex}$ Plato's only teacher. This fits nicely with the extensionality of the truthmaking relation itself. Truthmaking is an objective metaphysical relation. Whether x makes <p> true does not depend on how we conceptualize x. If Socrates is a truthmaker for <Socrates exists> and Socrates is identical with Plato's only teacher, then Plato's only teacher is a truthmaker for <Socrates exists> as well.

(E-MIX) delivers correct results in all crucial cases we have discussed up till now. According to (E-MIX), <1 exist> is made true neither by Socrates nor by the empty set even though both truthmaker candidates necessitate the proposition. This is because <1 exist> is neither ontologically committed to nor about these candidates.

(E-MIX) is immune against the problems (E-ONT) and (E-VIR$^+$) are facing. (E-MIX) respects our intuition that the fusion of the Oval Office and everything else in the solar system makes <The Oval Office exists> true. The proposition is about$_{ex}$ the Oval Office and ipso facto about the fusion of which the Oval Office is a constituent. At least when mereological essentialism is true, the truthmaker candidate also necessitates the proposition. Unlike (E-VIR$^+$), (E-MIX) fits nicely with our intuition that truthmaking is not relevance-sensitive in the following sense: A truthmaker for <p> is allowed to include objects which are irrelevant to the truth of <p>. (E-MIX) also accounts for the intuitive difference between (1) and (2*). Recall (1) and (2*):

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[8] According to another intensional notion of aboutness, <Pegasus does not exist> is about Pegasus even though Pegasus does not exist [cf. Goodman (1961, pp. 18–22), Merricks (2007, pp. 32–33)]. I will sideline this intensional reading.

[9] Since my notion of aboutness is extensional, the notion of representation I am making use of must be extensional as well. The representation-relation I have in mind, too, is an extensional relation between a concept and an *existent* object. At the same time, I admit that, in other contexts, 'representation' may also have an intensional reading according to which we can correctly say that the concept of Pegasus represents Pegasus (even though Pegasus does not exist).

(1)   The totally unaccompanied and non-witch-containing universe *as such*
            makes <Witches do not exist> true

(2*)   The Oval Office *as* unaccompanied by (internal and external) witches
            makes <Witches do not exist> true

In the light of (E-MIX), (2*) is false. <Witches do not exist> lacks ontological commitments and is ipso facto not ontologically committed to the Oval Office as unaccompanied by witches. Nor is the proposition about this truthmaker candidate. In contrast, (1) is true. The totally unaccompanied and non-witch-containing universe as such necessitates <Witches do not exist>. Of course, the proposition is not about$_{ex}$ this necessitator. It lacks the required conceptual resources. Nevertheless, it is about the universe. Every proposition concerning what is actually the case is about the (actual) universe. Ipso facto, <Witches do not exist> is about the totally unaccompanied and non-witch-containing universe as such. The former is about the latter even though the former is not ontologically committed to the latter. (E-MIX) does not automatically disqualify propositions without ontological commitments as truthmaker-owners.[10]

Here we have a case in which the power of Smith's insight becomes apparent. According to Smith, a truthmaker x for a proposition <p> must be a portion of reality <p> is representationally closely tied with. I think the best explanation for our reluctance against (2*) is that this condition is integrated into our intuitive notion of truthmaking. The totally unaccompanied and non-witch-containing universe as such is closely tied with <Witches do not exist>, while the Oval Office as unaccompanied by witches is not: The proposition is about the first candidate, not about the second one. (E-VIR$^+$) fails to take account of this difference. The proposition's being true in virtue of the second candidate is not sufficient for its being made true by the latter. A genuine truthmaker must also be located within the representational scope of the proposition. Also, under the assumption that the grounding relation is expressed by 'in virtue of' (Audi, 2012), we have a good reason to deny that truthmaking is a kind of grounding.[11]

In Merricks' view, x makes <p> true *only* when <p> is about x (Merricks, 2007, 26ff). Similar to (E-ONT), this view is overly restrictive. It is at odd with our intuition that <Offices exist> and <Something exists> are made true by the Oval Office. These two propositions are not about$_{ex}$ the Oval Office because they do not contain concepts that specifically represent a particular office. Nor are they intuitively about the Oval Office. Anticipating this objection, Merricks indicates that there may be a *truthmaking-relevant* sense of aboutness in which these two propositions *are* about the Oval Office (Merricks, 2007, p. 33). But this move can hardly be satisfying. First, since those two

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[10] The truthmaking of (1) and (2*) themselves is an interesting issue. But I cannot discuss it without deviating too much from my main argumentative line. I hope a brief remark would be sufficient: Since (2*) is false, it has no truthmaker. (1) is about the universe and made true by the universe. Of course, (2*) is about$_{ex}$ a component of the universe, namely the Oval Office. Therefore, it is also about the universe. But this is surely compatible with the view that the false proposition (2*) is not *made true* by the universe. A false proposition can be about x without being made true by x. (1) and (2*) can differ in their truth values because they are predicating different things of the universe. (1) is predicating *the property of making <Witches do not exist> true* of the universe, while (2*) is (indirectly) predicating *the property of containing a part that makes <Witches do not exist> true* of the universe.

[11] For some already available reasons for this denial, see Griffith (2014).

propositions are *intuitively* not about the Oval Office, the alleged truthmaking-relevant notion of aboutness significantly departs from our intuitive notion of aboutness. Merricks' explication of truthmaking would become confusing if it turns out that what he means by 'about' is not what we normally mean by this word. Secondly, it is unclear if the notion of truthmaking-relevant aboutness really differs from the notion of truthmaking itself. Isn't <Something exists> *truthmaking-relevantly* about the Oval Office simply to the extent that the former is *made true* by the latter? If it is the case, then truthmaking cannot be *explicated* in terms of this notion of aboutness.

I think Merricks should better give up the struggle he is engaged in. Here is my diagnosis of the situation: Two things must be kept apart, namely Merricks' basic insight that underlies his proposal and the proposal itself. The basic insight is correct: A truthmaker x for a proposition <p> must be something <p> is representationally closely tied with. But his specific proposal (as s elaboration of the basic insight) is too restrictive to the extent that he fails to recognize that <p> can be closely tied with x *also* when x is among <p>'s ontological commitments. (E-MIX) repairs this defect in a similar way in which it repairs (E-ONT)'s defect. According to (E-MIX), the Oval Office makes <Offices exist> true. At any rate, the Oval Office necessitates the proposition and is among the proposition's ontological commitments in the sense of (Def$_3$): The property of being an office is one of the most specific <Offices exist>-properties, and the Oval Office exemplifies this property. Moreover, the proposition is true in virtue of the Oval Office. (E-MIX) also accounts for the intuition that the Oval Office makes <Something exists> true: The Oval Office necessitates the proposition and is among the proposition's ontological commitments in the sense of (Def$_3$).

Note that (E-MIX) is neutral towards the old controversy about whether negative facts can be truthmakers. *If* one can convincingly show that there are negative facts, then I would be happy to admit that <Witches do not exist> is (in an intuitive sense) about the negative fact that witches do not exist. Since the same proposition is also necessitated by the same negative fact, I would be happy to acknowledge that this proposition is made true by this negative fact. To be sure, <Witches do not exist> is not *ontologically committed* to this negative fact. Both the intuition and (Def$_3$) in Sect. 2 suggest that negative existential propositions lack ontological commitment: Propositions of this kind do not *imply* the existence of anything. But this fact does not prevent (E-MIX) from allowing a negative fact to be a truthmaker for <Witches do not exist>. For (E-MIX) does not say that a proposition must be ontologically committed to x in order to be made true by x.

5 Objections against my proposal

Objection I One might attack (E-MIX) by questioning my view that <Witches do not exist> is not about the Oval Office. The argument is as follows: <Witches do not exist> is equivalent to <Everything is a non-witch>. Equivalent propositions are about the same things. The second proposition is about everything, including the Oval Office. As a result, the first proposition, too, must be about the Oval Office. After all, the intuitively false claim (2*) is true in the light of (E-MIX). Several things can be said in reply to this objection. First, equivalent propositions are not always about the

same things. <(Socrates exists ∧ Socrates does not exist) ∨ Plato exists> is equivalent to <Plato exists>, but only the first proposition is about Socrates. More importantly, <Everything is a non-witch> is neither about everything nor about the Oval Office. We owe Goodman the insight that, just like choice, aboutness is selective. It is a conceptual truth that if <p> is about something, then there is something <p> is not about. One cannot choose everything; a proposition cannot be about everything (Goodman, 1961, p. 5). Now, it is unreasonable to assume that <Everything is a non-witch> is about the Oval Office without admitting that it is also about everything else. For every thinkable reason why the proposition is about the Oval Office is also a reason why it is about everything else. The Oval Office is a thing and a non-witch, but so is everything else. Since the proposition is not about everything, it cannot be about the Oval Office either. To be sure, the proposition is about something, namely the universe. This is because, intuitively, every proposition concerning what is actually the case is about the (actual) universe. Note that we can consistently hold this view without admitting that the proposition is also about something else (or about everything). For the proposition is about the universe due to a *unique* reason. Nothing else than the universe is such that every proposition concerning what is actually the case is automatically about it. I am not denying that the truth of <Everything is a non-witch> requires everything's being a non-witch. The proposition is not about everything even though everything contributes to its truth. It is not mysterious at all that a proposition <p> may not be about something x even though x contributes to <p>'s truth. The fact that Anna is surrounded by the normal atmosphere does contribute to the truth of <Anna is singing> (as long as 'singing' is understood in its normal sense). Nevertheless, this proposition is not about that very fact.

Objection II Suppose the Oval Office as unaccompanied by witches does exist. According to (E-MIX), this object would make <The Oval Office is unaccompanied by witches> true because the latter is at least about the former. But this proposition made true entails <Witches do not exist>. As a result, the same object must also make <Witches do not exist> true, which is counterintuitive. I think we have a simple reply to this objection. The objection is based upon the so-called entailment principle according to which if x makes <p> true and <p> entails <q>, then x also makes <q> true. However, we have good reason to reject the entailment principle. Here is a well-known counter-example: A funeral at the time t makes true <There is a funeral at t>, which, in turn, entails <There is a death before t>. Yet, intuitively, it is not the funeral, but the death that makes the second proposition true (Rodriguez-Pereyra, 2006). To be sure, the intuitions used in this counter-example are approved by (E-MIX) as well: <There is a death before t> is ontologically committed to and about the death. However, the same proposition is neither ontologically committed to the funeral nor about the funeral.

Objection III The locutions 'the totally unaccompanied and non-witch-containing universe *as such*' and 'the actual universe that is totally unaccompanied and non-witch-containing' behave differently in modal contexts. The totally unaccompanied and non-witch-containing universe *as such* is necessarily non-witch-containing; the actual universe that is totally unaccompanied and non-witch-containing is not. According to Lewis, this phenomenon does not imply that the two locutions denote different objects. Indeed, both locutions denote the same object, namely our actual universe.

His view is that one and the same object x can be and not be necessarily F relative to different counterpart relations evoked by different locutions that denote x (Lewis, 2003, pp. 29–32; Rosen & Lewis, 2003, p. 39). I share Lewis' view that is based upon his reluctance against unnecessary multiplication of objects. But the problem is that Lewis' doctrine would render necessitation intensional. 'x necessitates <p> and x = y' would no longer imply 'y necessitates <p>'. Since (E-MIX) considers necessitation as a necessary condition for truthmaking, the extensionality of truthmaking is in danger. This is the third objection. In order to reconcile Lewis' view with the extensionality of truthmaking, I suggest a slight modification of (E-MIX):

(E-MIX$^+$)   x makes <p> true iff (i) x *is identical with something that* necessitates <p> and (ii) either <p> is ontologically committed to x (in the sense of (Def$_3$)), or <p> is about x

The modified version (E-MIX$^+$) ensures the extensionality of the truthmaking relation. Even within Lewis' metaphysical framework, whether the actual universe makes true <Witches do not exist> would not depend on how the universe is conceptualized. For, although the actual universe that is totally unaccompanied and non-witch-containing does not necessitate the proposition, it is identical with something (namely the totally unaccompanied and non-witch-containing universe as such) that is a necessitator.

Objection IV In the above discussion, we have counted on different theories or intuitions to justify different claims concerning aboutness. <Socrates exists> is about the universe in virtue of its being about$_{ex}$ a constituent of the universe. <Witches do not exist> is about the universe too. But it is not about the universe in virtue of its being about$_{ex}$ a constituent of the universe. A systematic account for the usage of 'about' is missing. I accept this critique with some reservations: First, (E-VIR$^+$) is not better. Proponents of (E-VIR$^+$) have to rely upon their unsystematic intuitions concerning the usage of 'in virtue of' as well. Secondly, I consider the critique as a reminder that there are still works to be done. What makes the remaining works especially challenging is the fact that a big part of the current literature on aboutness would *not* be helpful with this regard. This is due to two reasons. First, my purpose is to elucidate truthmaking with the help of aboutness. But authors like Fine (2020) and Yablo (2014) are making the reversed move. They are trying to explicate the concept of aboutness (partly) by making use of the concept of truthmaker ('verifier'). I cannot integrate their ideas into my theory without circularity. Secondly, current theories of aboutness are normally not dealing with entities that can be truthmakers in an intuitive sense. In the current literature, a proposition's subject matter (or what a proposition is about) is usually identified with a set-theoretical construction like a set of possible worlds (Lewis, 1988; Yablo, 2014) or a set of concepts (Hawke, 2018; Parry, 1968). This move provides us with powerful semantic theories. But, in most cases, a subject matter of this kind can hardly be a truthmaker for a proposition. For, intuitively, propositions concerning the physical world are made true by parts of the physical world, not by sets of possible worlds (or sets of concepts). Given the current theories of aboutness, no intuitive truthmaker for a proposition <p> concerning the physical world can be something <p> is *about*. As a result, my approach (E-MIX$^+$) would collapse at the very beginning. For my view is that, sometimes, a proposition concerning the physical

world is made true by a physical object only because it is *about* this object. But, of course, we *do* have an intuitive concept of aboutness according to which propositions can be about individual physical object. This concept is what I need in my approach.

Objection V Seemingly, (E-MIX⁺) is a disjunctive analysis of truthmaking. There are two ways for entities to make propositions true, namely either via the relation of aboutness or via the relation of ontological commitment. Objection: Disjunctive analyses of philosophical concepts are awkward. I have two replies. First, the objection is based upon a misunderstanding. (E-MIX⁺) is not an *analysis* of the *concept* of truthmaking. (E-MIX⁺) is an extensional 'iff'-criterion. The term on the left side of 'iff' (i.e. 'x makes <p> true') is merely intended to be extensionally equivalent to the term on the right side of 'iff'. A necessitator x of <p> is a truthmaker for <p> either when <p> is ontologically committed to x *or* when <p> is about x. This does not mean that the *concept* of truthmaking is disjunctive or that there are *two senses* in which x can make <p> true. Nor does it mean that the concept of aboutness or the concept of ontological commitment are parts of the concept of truthmaking. The term 'truthmaking' has only one sense. This sense is probably unanalyzable.[12] Still, (E-MIX⁺) is an *explication* of truthmaking: It clarifies the extensional relation between the concept of truthmaking and other crucial concepts. Secondly, if (E-MIX⁺) is adequate, then, in a certain sense, the *extension* of the concept of truthmaking has a disjunctive structure even when the concept itself is not disjunctive. For there are *two different* sufficient conditions for a necessitator x of <p> to be a truthmaker for <p>. How disturbing is this kind of disjunctiveness? I think it is tolerable because the two disjuncts (i.e. the two sufficient conditions for x to be a truthmaker for <p>) are not theoretically disconnected from each other. Rather, they are two ways of fleshing out one and the same basic idea according to which a truthmaker for <p> is always something <p> is representationally dealing with. A proposition <p>'s being about x and the same <p>'s being ontologically committed to x are two different ways for <p> to be representationally dealing with x. In short, my explication of truthmaking is sufficiently unified. It is not brutally disjunctive.

Objection VI I have assumed that an x that contains many parts which are *irrelevant* to the truth of <p> can still be a truthmaker for <p>: Intuitively, the fusion of the Oval Office and everything else in the solar system does count as a truthmaker for <The Oval Office exists> even though the former contains redundant parts. On the one hand, many philosophers share my intuition. Armstrong famously holds the view that not every truthmaker is a *minimal* truthmaker. Basically, Mulligan, Simon, Smith and Read hold the same view (Armstrong, 2004, pp. 19–21; Mulligan et al., 1984, p. 315; Read, 2000, p. 71). On the other hand, however, Fine (2017) and Rodriguez-Pereyra (2006) disagree. Their intuition says that a truthmaker for <p> must be *the exact piece of reality* that is *responsible* for the truth of the proposition. Thus, the above-mentioned fusion is clearly not a truthmaker for <The Oval Office exists>. Now, the objection is as follows: The fact that our intuitions regarding truthmaking come apart shows that the explication of the concept of truthmaking lacks a stable intuitive basis. As a result, the

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[12] In contrast, 'x is a sibling of y' is a real disjunctive concept. It has a *disjunctive analysis*: That x is a sibling of y *means* that either x is a brother of y or x is a sister of y.

explication itself is not a worthwhile project. I have three replies. First, this is a general objection against all thinkable explications of truthmaking, not a specific objection against mine. Secondly, the objection is an overreaction. The alleged conflict between intuitions would be a problem if the intuitions were about *the same* concept. But these intuitions can be considered as corresponding to *different* concepts of truthmaking. What Armstrong and his followers have in mind is *the concept of truthmaking in general* according to which x makes <p> true as long as x can *bring about* the truth of <p>. The above-mentioned fusion surely brings about the truth of <The Oval Office exists> in a redundant way. In contrast, what Rodriguez-Pereyra and Fine have in mind is another concept of truthmaking, namely *the concept of exact truthmaking*. These two concepts and the corresponding intuitions can coexist. Thirdly, although (E-MIX$^+$) is designed as an explication of the concept of truthmaking in general,[13] I can easily accommodate the concept of exact truthmaking in my theory. Following Armstrong, I can easily explicate the second concept via the first one: x is an *exact* truthmaker for p iff x makes p true and x would cease to be a truthmaker for p if we remove one of x's parts. The words 'makes true' or 'truthmaker' on the right side of 'iff' are associated with the concept of truthmaking in general. Both concepts of truthmaking (and the corresponding intuitions) have a place in my theory.

Declarations

Conflict of interest I declare that there are no financial or non-financial interests that are directly or indirectly related to this manuscript submitted for publication.

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[13] (E-MIX$^+$) surely allows the above-mentioned fusion to be a truthmaker for <The Oval Office exists>.

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