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## DEFLATING THE SUCCESS-TRUTH CONNECTION

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**ABSTRACT:** According to a prominent objection, deflationist theories of truth can't account for the explanatory connection between true belief and successful action [Putnam 1978]. Canonical responses to the objection show how to reformulate truth-involving explanations of particular successful actions to omit any mention of truth [Horwich 1998]. According to recent critics, though, the canonical strategy misses the point. The deflated paraphrases lack the generality or explanatory robustness of the original explanatory appeals to truth [Kitcher 2002; Lynch 2009; Gamester 2018]. This article diagnoses the canonical response's failure and shows how deflationists can make sense of appeals to truth in explaining practical success, in all their generality and robustness, without construing *truth* as a substantial property.

Keywords: *deflationism, truth, explanation, success, propositional quantification*

### 1. Introduction

The following are explanations in good order:

[WATER] Jack successfully fetched a pail of water because his belief that there

was a pail of water on the hill was true.

[CAR] Jill got the price she wanted for her car because her belief that Hank was willing to pay her that much was true.

Such explanations pose an apparent problem for deflationism about truth. They seem to treat *truth* as a property capable of bearing explanatory weight. Deflationists contend, though, that 'true' is a device for disquotation and generalization, not for designating an explanatorily potent property. So, deflationism seems unable to accommodate explanations such as [WATER] and [CAR] (see [Putnam 1978]). Call that the Success Objection to deflationism.

The typical deflationist response is to interpret the troublesome explanations by way of the disquoting and generalizing functions of 'true'. So construed, [WATER] and [CAR] are shorthand for longer explanations that do not mention *truth*:

[WATER\*] Jack succeeded in fetching a pail of water because (a) he believed there was a pail of water on the hill, and (b) there was a pail of water on the hill.

[CAR\*] Jill got the price she wanted for her car because (a) she believed Hank was willing to pay her that much, and (b) Hank was willing to pay her that much.

Paul Horwich [1998] has worked out this manoeuvre in detail, but some critics of deflationism remain unsatisfied. They insist explanations such as [WATER] and [CAR] have content beyond what their truth-free glosses capture, and they've made

progress in articulating what that additional content is. As Philip Kitcher [2002], Michael Lynch [2009], and Will Gamester [2018] have each argued, explanations of successful action by way of true belief are robust in ways their truth-free glosses are not. The anti-deflationists consider that a point in favour of the idea that *truth* is explanatorily potent, and thus more substantial than deflationism allows.

This article gives a deflationary account of explanatory uses of ‘true’ that is richer than the Horwich-style approach and makes sense of the difference in robustness between explanations such as [WATER] and [WATER\*].

Here’s a sketch of the account. The claim that someone’s belief is true could have either a ‘content sense’ or a ‘vehicle sense’. In the content sense, it says that a certain proposition is both true and believed by someone. In the vehicle sense, it says that someone’s belief-state has the property of *having true contents*. Deflationists have mainly focused on *content-truth*,<sup>1</sup> and modern versions of the Success Objection presuppose deflationists must treat explanatory appeals to *vehicle-truth* and *content-truth* alike. Deflationists can and should treat the two kinds of explanation differently. *Vehicle-truth* explanations involve a different kind of generality from *content-truth* explanations. By construing ‘true’ as a device for simulating primitive propositional quantification, deflationists can make that generality explicit. They can consistently reject *content-truth* as an explanatorily potent property while allowing for robust explanations of practical success due to the *vehicle-truth* of beliefs.

## 2. Deflationism

‘Classical’ or ‘inflationary’ theories of truth identify a proposition’s truth with its possessing a certain property, such as *corresponding to a fact* or *cohering with an ideal*

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<sup>1</sup> Stephen Leeds [1995] may be an exception. He argues that practical success is unsurprising when agents have true background beliefs because the epistemic relations among their beliefs recapitulate explanatory relations among their contents.

*system of propositions*. That property constitutes the ‘nature’ of truth, and it is to be understood as a distinctive, nontrivial feature shared by all and only true propositions. The function of the predicate ‘true’ (or the concept TRUE) is thus to designate that distinctive, nontrivial common feature, the property *truth*.

Deflationary theories take the opposite position metaphysically and linguistically. Metaphysically, they deny there is a nontrivial, distinctive property shared by all and only true propositions. For <Dogs bark> and <Speed kills> both to be true, on such a view, is not for them to be alike in any nontrivial respect.<sup>2</sup> It’s just for dogs to bark and speed to kill. Linguistically, deflationists think ‘true’ is primarily a logical or metalinguistic predicate whose main function is not to describe the features of propositions or to attribute a property to them. On such a view, the point of asserting ‘<Dogs bark> and <Speed kills> are both true’ is to say that dogs bark and speed kills, not to point out a respect of similarity between the propositions.<sup>3</sup>

All forms of deflationism start from the idea that, at least for the paradigm cases, the claim that a proposition is true is in some sense equivalent to the proposition itself. Theories differ on the precise nature of the equivalence. Some say it is synonymy, while others say it is mutual *a priori* entailment or just our *a priori* acceptance of anything with the form ‘<*p*> is true iff *p*’.

Deflationists also differ on how to explain the function of ‘true’ in language. However they explain it, though, two aspects are central. One is its *disquotational*

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<sup>2</sup> The notation ‘<Dogs bark>’ abbreviates ‘The proposition ‘Dogs bark’ expresses in English’. As Button [2014] argues, the notation can’t produce names for all propositions. At most, it would cover all propositions expressible in English. Consequently, Horwich’s use of it to state schematic generalizations such as ‘<*p*> is true iff *p*’ is dubious. I use the notation merely for expository convenience. Section 4’s account of explanatory appeals to *vehicle-truth* doesn’t rely on it.

<sup>3</sup> Deflationism is sometimes identified with the view that ‘true’ has no explanatory use, or that no explanations essentially involve the concept TRUE. Such a characterization presupposes ‘true’ can’t be essential to an explanation without designating a substantial property. Sections 4 and 6 below challenge that presupposition.

function. Attaching the truth-predicate to the name of a proposition gives me an alternative way of asserting the same thing as the proposition named. I can assert that dogs bark either by saying 'Dogs bark' or '<Dogs bark> is true'.

The second central aspect is the truth-predicate's role in generalization and indirect assertion. We can say such things as 'Everything Alice said yesterday was true' or 'Every theorem of arithmetic is true'. Without a truth-predicate, expressing such generalizations would require alternative logical devices such as infinitary conjunction, substitutional quantification, or primitive propositional quantification. The truth-predicate lets us achieve the same effect with first-order, individual quantification over propositions (or sentences).

Paul Horwich's [1998] Minimalism straightforwardly exemplifies the deflationist approach. Horwich denies *truth* is a property with a nature to be explained via a theory of the form ' $x$  is true iff ...  $x$  ...'. On his view, the concept TRUE is the concept whose application is governed by our *a priori* acceptance of the (non-paradoxical) instances of the schema, '< $p$ > is true iff  $p$ '. The totality of those instances are the axioms of what Horwich calls 'the minimal theory of truth'. He claims the minimal theory suffices to fix the extension of 'true', and Minimalism is the view that no further account of the nature of truth is necessary.<sup>4</sup> According to Minimalists, the minimal theory, along with auxiliary information not concerning truth, explains everything we need to explain by appeal to truth.

### 3. The Success Objection

Horwich states the basic form of the Success Objection clearly in *Truth*:

Truth has certain characteristic effects and causes. For example, true beliefs

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<sup>4</sup> Button [2014] shows that the schema suffices, at best, only to fix the extension of 'true in English'. Section 3 raises a related problem for Horwich's reply to the Success Objection.

tend to facilitate the achievement of practical goals. General laws such as this call for explanation in terms of the nature of truth. [1998: 44]

He gives what has become a standard deflationary response. Its general shape is this: Suppose my kitchen has filled with smoke, and I want to get the smoke out. I believe opening the window will let out the smoke. So, I open the window, and my action succeeds; soon enough, the smoke has cleared. We might explain my success like this:

(1) I succeeded at getting the smoke out of the kitchen because my belief that opening the window would get the smoke out was true.

Given just the minimal theory, we can see that this explanation's use of 'true' is inessential. The explanation amounts to:

(2) I succeeded at getting the smoke out of the kitchen because (a) I believed that opening the window would get the smoke out, and (b) opening the window would get the smoke out.

If needed, we could add details that don't involve truth:

(3) I succeeded at getting the smoke out of the kitchen because (a1) I believed opening the window would get the smoke out, (a2) other things being equal, if I want to get the smoke out of the kitchen and believe opening the window will do so, I will open the window, and (b) opening the window would get the smoke out.

So, at least in the case of particular success due to a true belief about how to achieve a goal, there is no need to construe *truth* as more substantial than deflationists allow.

Sometimes we attribute our successes to beliefs that are not about means and ends. Suppose I want to give my son a puppy for his birthday, and I believe (truly) that my neighbour is giving away free puppies. So, I get a puppy from my neighbour to give my son. We might explain my success like this:

(4) I succeeded at getting my son a puppy because my belief that my neighbour was giving away free puppies was true.

The minimal theory suffices to reframe such explanations as explanations like the following, which does not mention truth:

(5) I succeeded at getting my son a puppy because (a) I believed my neighbour was giving away free puppies, and (b) my neighbour was giving away free puppies.

Like (2), (5) can be fleshed out with further details, but it still won't involve a substantial *truth*-property. My background belief that my neighbour was giving away puppies grounded my belief that I could get a puppy for my son by asking her for one. So, I asked. She *was* giving away puppies, so I *could* get one for my son by asking her. So, I successfully got my son a puppy.

We can deflate explanations of particular successes that mention truth. So, in claims such as 'True beliefs tend to facilitate successful actions', we can see 'true' as a device for generalizing over those particular, truth-free explanations. As deflationists such as Horwich see it, there remains no need to construe *truth* as a

substantial property or to see 'true' as serving the explanatory function of designating such a property.

But *why* do true beliefs tend to facilitate successful actions? There is a non-deflationary answer: *Truth* is a substantial property whose nature is such that actions caused by true beliefs tend to be successful. Deflationists can't give such an answer. Their standard answer construes 'True beliefs tend to facilitate successful action' as just a generalization that holds because its instances tend to hold. The instances hold trivially. They are explanations like (1) and (4), which rely on only the minimal theory of truth and background information that does not involve truth at all.

The claim that true beliefs tend to facilitate successful action can play an explanatory role much like a law. Suppose Widgetcorp stock prices dropped after the company reported a quarterly loss. We might explain the drop by citing the regularity that such reports tend to cause drops in stock prices: The price dropped because Widgetcorp reported a loss, and such reports tend to drive stock prices down. Similarly, we might explain my success at getting my son a puppy by citing the regularity that true beliefs tend to facilitate successful action: I succeeded at getting my son a puppy because I had true beliefs about how to do so, and true beliefs tend to facilitate successful action.

On the typical deflationary strategy, 'True beliefs tend to facilitate successful action' is a generalization whose instances don't mention truth. They are claims of the form, 'If you act on the belief that  $p$ , and  $p$ , then, other things being equal, your action will succeed'. A theme in recent versions of the Success Objection is that, so interpreted, the claim that true beliefs tend to facilitate successful action is insufficiently lawlike. Its usual deflationary reading turns good explanations into bad ones.

Consider this explanation of my success at getting my son a puppy:



(7) I wanted to get my son a puppy, and I believed my neighbour was giving away puppies. That belief was true. True beliefs tend to facilitate successful actions. So, I succeeded in getting my son a puppy.

On the standard deflationary approach, the claim that true beliefs tend to facilitate successful actions does little or no explanatory work. It is a generalization, from which (given the minimal theory and some psychological facts not involving truth) we might derive a claim such as this:

(8) If I want to get my son a puppy, and I believe my neighbour is giving away puppies, and my neighbour is giving away puppies, then, other things being equal, (a) I will ask my neighbour for a puppy to give my son, (b) my neighbour will give me a puppy, and (c) I'll give that puppy to my son.

Even if (8) is lawlike, and we can cite it in explaining my success, the truth-success generalization in (7) seems to play a different role. Compare these explanations:

(9) The ball accelerated by  $0.5 \text{ m/s}^2$  because  $F = ma$ , its mass was 4 g, and it was subjected to a force of 2 N.

(10) The ball accelerated by  $0.5 \text{ m/s}^2$  because balls with a mass of 4 g subjected to forces of 2 N accelerate by  $0.5 \text{ m/s}^2$ , the ball's mass was 4 g, and it was subjected to a force of 2 N.

Explanation (9) cites a lawlike generalization; explanation (10) cites one of its instances. Although (10) can be a correct explanation, it omits something important in (9). The point of citing ' $F = ma$ ' in (9) is not just to help us to derive the instance cited in (10). The law cited in (9) locates that instance as part of a more general pattern. Explanation (9) highlights that this 4 g ball affected by a 2 N force accelerated  $0.5 \text{ m/s}^2$  *for the same reason that* another, 8 g ball affected by that same 2 N force would have accelerated  $0.25 \text{ m/s}^2$ .

Now compare these explanations:

(4) I succeeded at getting my son a puppy because my belief that my neighbour was giving away free puppies was true.

(11) Bill succeeded at getting a beer because his belief that he could get a beer by nodding to the bartender was true.

These explanations appear to show that Bill and I succeeded for the same reason: We acted on true beliefs. But the deflationary glosses of (4) and (11) are:

(5) I succeeded at getting my son a puppy because (a) I believed my neighbour was giving away free puppies, and (b) my neighbour was giving away free puppies.

(12) Bill succeeded at getting a beer because (a) he believed he could get a beer by nodding to the bartender, and (b) he could get a beer by nodding at the bartender.

The two explanations cite none of the same reasons in explaining Bill's success and mine. They don't present us as succeeding for the same reason.

Proponents of the Success Objection claim that 'true' carries genuine explanatory weight in explanations such as (4), (11), and (7). They see successes due to the truth of disparate beliefs as instances of a common phenomenon. To make sense of such a phenomenon, they say, requires a more substantial view of truth than deflationists allow.

One proponent of the Success Objection is Philip Kitcher. He is impressed by the way true beliefs help us to succeed *systematically*. When we have a collection of related, true beliefs, they enable us to succeed not only in a particular circumstance, but in an array of related circumstances. For example, I have many of beliefs about my neighbour. She's giving away puppies. She works for Public Works Department. She prefers lemonade to soda. Those beliefs, if true, don't just help me to succeed at getting my son a puppy. They can also help me to get him a lemonade or a tour of a bulldozer sometime. To explain my tendency to succeed in actions that involve my neighbour, Kitcher thinks we need to point to more than we could get from a generalization of conjunctions of the form 'I believe  $\langle p \rangle$ , and  $p$ '. We need to point to the tendency of my beliefs about my neighbour to be true [Kitcher 2002].

Michael Lynch's [2009] version of the objection stresses the *counterfactual* robustness of explanatory appeals to truth. Suppose Jack successfully fetched some water because his belief that there was water in the bucket was true. According to Lynch, accepting that explanation of Jack's success makes us apt to infer that Jack *would have succeeded* if things had been different but his belief were still true. For example, he would have succeeded if he'd instead had the true belief that there was water in the bottle to his left—even though, in the actual world, he didn't believe that and it wasn't true. A hallmark of lawlike generalizations is that they support

counterfactuals in this way. Given that deflationists can't treat 'True beliefs tend to promote successful actions' as a lawlike generalization, Lynch thinks the counterfactual robustness of explanatory appeals to truth is a strike against deflationism.

Most recently, Will Gamester [2018] has formulated a version of the Success Objection in terms of *coincidence*. It is no coincidence that Jack, acting on a true belief, successfully fetched some water, nor is it a coincidence that I, acting on a true belief, successfully got my son a puppy. Imagine some different cases, though. The bucket is empty, but a generous stranger is poised to give Jack all the water he wants — provided Jack tries to get water from the bucket. Or suppose my neighbour *isn't* giving away puppies, but (without my knowledge) that same stranger will give me a puppy if I ask my neighbour for one. The trouble, Gamester claims, is that deflationists can't distinguish the coincidental successes from non-coincidental ones. In both bucket cases, Jack believes he can succeed by going for the bucket, and he can succeed by going for the bucket. But in one case his success is a coincidence, and in the other it is explained by the truth of his belief. And in both puppy cases, I believe I can get a puppy by asking my neighbour, and I *can* get a puppy by asking my neighbour, but in one case my success is due to the truth of my belief, and in the other it's a coincidence. As Gamester sees it, the deflationary glosses of explanatory appeals to truth err in failing to express the *non-coincidental* nature of practical successes due to the truth of one's beliefs.

#### 4. The Solution

Deflationists deny that *truth* is an explanatorily robust property of the *fundamental truth-bearers*. (I follow the convention of assuming those are propositions.) As is well-known, 'belief' is ambiguous between referring to (types or tokens of) *states of*

*believing*, on the one hand, or referring to the propositions or contents believed, on the other [Sellars 1956]. When we attribute someone's success to the truth of one of her beliefs, then, we might be attributing her success either (a) to her belief-state's property of *having true contents*, or (b) to the truth of a proposition, which happens to be one she believes.

Consider explanation (4) again:

(4) I succeeded at getting my son a puppy because my belief that my neighbour was giving puppies away was true.

We can interpret (4) in two different ways:

(4C) I succeeded at getting my son a puppy because the proposition that my neighbour was giving puppies away was true, and I believed it.

(4V) I succeeded at getting my son a puppy because a certain belief-state of mine (*viz.*, my believing that my neighbour was giving puppies away) had true contents.

In (4V), mentioning my belief's content helps to specify *which* of my belief-states we are talking about, but its explanatorily significant property is *having true contents*. For  $x$  to have true contents is for there to be a proposition that is both true and the content of  $x$ . So, we can formulate (4V) more explicitly like this:

(4Ve) I succeeded at getting my son a puppy for his birthday because a certain belief-state of mine (*viz.*, my believing that my neighbour was

giving puppies away) was such that there is a proposition,  $p$ , such that (a)  $p$  was the content of that belief-state and (b)  $p$  was true.

Note that (4Ve), and so (4V), is general in a way (4C) is not. In (4C), my action's success is attributed to the truth of *a particular proposition*. In (4Ve), it is attributed to that fact that *there is* a true proposition that is the content of my belief. The proposition is named, for the purpose of identifying the relevant belief-state, but it is the state's having true contents, not my neighbour's giving away puppies, that does the explanatory work in (4V).

The Horwich-style response to the Success Objection treats all explanations of practical success due to true belief similarly to (4C). So, it's no surprise that it misses the generality of explanations that appeal to the *vehicle-truth* of beliefs. The missing generality is the element Kitcher, Lynch, and Gamester all point to. We need it if we are to account for the systematicity of our practical successes, the counterfactual import of explanatory appeals to truth, or the non-coincidentalness of successes due to the truth of our beliefs.

To answer the success objection properly, then, deflationists need to show how to preserve the generality of explanations like (4V), without construing *truth* as an explanatorily significant property of propositions themselves. To capture the generality, it suffices for deflationists to account for the following as a lawlike generalization:

(G) True beliefs tend to promote successful actions.

I take (G) to mean that the following holds as a general, but not exceptionless, rule:

(G1) For all  $S, b$ : if  $S$  acts on  $b$ , and  $b$  is a true belief-state of  $S$ 's, then  $S$  accomplishes  $S$ 's goal in acting on  $b$ .<sup>5</sup>

On a typical (Horwich-style) deflationary approach, generalizations such as (G1) express the (infinite) conjunction (or collection) of the instances of a schema such as:

(S) For all  $S, b$ : if (a)  $S$  acts on  $b$ , and (b)  $b$  is a belief that  $\Phi$ , and (c)  $\Phi$ , then  $S$  accomplishes  $S$ 's goal in acting on  $b$ .

The typical approach won't deliver what is wanted. First, the conjunction of (S)'s instances is arguably *weaker* than (G1): (G1) entails the instances, but their conjunction (or the set of them all) does not entail (G1). Second, the strategy treats (G1) as if it were a conjunction of syntactically similar lawlike generalizations, but such conjunctions need not *themselves* be lawlike.<sup>6</sup> Deflationists need to account for (S)'s instances not just as a collection of lawlike generalizations, but as instances of a single phenomenon, unified under an even more general law. If they can do that, they make sense not only of (S)'s instances as individually lawlike generalizations, but of (G) as a lawlike generalization covering them.

The more general law deflationists need is ready to hand. Beliefs have contents; having a belief is always believing *something*, which we specify with a 'that'-clause.<sup>7</sup> Beliefs also influence behaviour systematically in ways that help to determine their contents. Part of what makes a state a belief *that snow is white* is that it disposes one

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<sup>5</sup> I am ignoring certain complications needed to make (G1) plausible, such as *ceteris paribus* clauses or the use of a generic, rather than universal, quantifier.

<sup>6</sup> This is related to the observation that the explanations of why each male member of a population is male and why each female member is female still fail to explain the population's ratio of males to females. See Wrenn [2011].

<sup>7</sup> Ramsey [2001] called this 'propositional reference', but that doesn't mean he thought 'that'-clauses were names of propositions, conceived as abstract individuals. Not all 'reference' is naming.

to act is if snow is white. Part of makes a state a belief *that grass is green* is that it disposes one to act as if grass is green. And so on.<sup>8</sup>

Belief-states with different contents are differentiated partly by how they influence one's behaviour. Additionally, *believing* a content influences behaviour differently from *desiring* it. Believing that the cat is on the mat disposes one to act as if the cat is on the mat. Desiring that the cat is on the mat disposes one to try move him or keep him there.

The following higher-order generalization is constitutive of belief:

(H) For any  $S, b, p$ : If  $b = S$ 's belief that  $p$ , then  $b$  disposes  $S$  to act as if  $p$ .

The generalization is 'higher-order' because it employs propositional quantification; ' $p$ ' is a bound variable occupying *sentence* place, rather than *name* place as in first-order logic.<sup>9</sup> This should not be surprising. (H) describes how beliefs influence behaviour as a function of their contents. We need a way of generalizing that allows for variability in 'that'-clauses and can capture the general relationship between *believing that  $p$*  and *acting as if  $p$* . To do that, we need a way to quantify into  $p$ 's position.<sup>10</sup>

(H) is a higher-order generalization whose instances are such lower-order

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<sup>8</sup> This is not to endorse behaviourism; believing that  $p$  is more than the disposition to act as though  $p$ . That doesn't mean what we believe makes no systematic difference to how we act, nor that such difference-making isn't essential to belief.

<sup>9</sup> The propositional quantifier in (H) is a primitive higher-order quantifier. The logic of such quantification is well-understood [Grover 1972; Azzouni 2001; Picollo and Schindler 2018]. Primitive propositional quantification differs from individual quantification over a universe of reified propositions and from substitutional quantification with a substitution class consisting of sentences (see [Williamson 1999; Williamson 2013; Cameron 2019]). I'm neutral as to whether the instances of propositional generalizations include propositional generalizations themselves. The formal details necessary for truth-predicates to simulate propositional generalization work out either way (see [Picollo and Schindler 2018]).

<sup>10</sup> As an anonymous referee has reminded me, 'For any  $S, b, p$ ' misleadingly suggests all three variables are bound by quantifiers of the same type. Where ' $\text{any}^*$ ' is a primitive propositional universal quantifier, 'For any  $S, b, p$ ' abbreviates 'For any  $S$ , any  $b$ , and  $\text{any}^* p$ ', except in (HT) below, which employs only first-order objectual quantifiers.



generalizations as:

If  $b =$  Jack's belief that there is water in the bucket, then  $b$  disposes Jack to act as if there is water in the bucket.

and

If  $b =$  my belief that my neighbour is giving away puppies, then  $b$  disposes me to act as if my neighbour is giving away puppies.

These lower-order generalizations are lawlike, and they are explained by the higher-order generalization (H) that covers them. There is a reason Jack's belief that there is water in the bucket disposes him to act as if there is water in the bucket: It is constitutive of belief that believing that  $p$  disposes one to act as if  $p$ . So, Jack's belief that there is water in the bucket disposes him to act as if there is water in the bucket. If the belief had had different contents, it would have disposed him to act differently.

To 'act as if  $p$ ' is to take actions whose success or failure hinges on whether  $p$ . It is to bet your success on  $p$ . To act as if snow is white is to do things that would succeed if (but only if) snow is white, and to act as if grass is green is to do things that would succeed if (but only if) grass is green. A belief-state 'disposes' one to act as if  $p$  in this sense: When one acts on that belief-state, one does things that would ordinarily succeed if  $p$  and one does not do things that would not ordinarily succeed if  $p$ .

We can derive (G) from (H). Given the definition of acting as if  $p$ , (H) implies:

(HA) For any  $S, b, p$ : If  $b = S$ 's belief that  $p$ , then (if  $S$  acts on  $b$ , then,

ordinarily,  $S$  accomplishes  $S$ 's goal in acting on  $b$ , if  $p$ )

which is equivalent to:

(HA) For any  $S, b, p$ : If  $b = S$ 's belief that  $p$ , then (if (a)  $S$  acts on  $b$ , and (b)  $p$ , then, ordinarily,  $S$  accomplishes  $S$ 's goal in acting on  $b$ ).

Given that one 'acts on' only one's own beliefs, we can restate (HA) as:

(HA\*) For any  $S, b, p$ : If (a)  $S$  acts on  $b$ , (b)  $b$  is a belief that  $p$ , and (c)  $p$ , then, ordinarily,  $S$  accomplishes  $S$ 's goal in acting on  $b$ .

(HA\*) is the propositionally quantified counterpart of schema (S) above. The difference is that, while (S) amounts to a mere abbreviation of its instances, (HA\*) is a higher-order, lawlike generalization. Unlike (S), (HA\*) is stronger than the collection of its instances, and it is capable of explaining them. As deflationists emphasize, 'true' has a generalizing function in (HA\*). While (HA\*) employs primitive propositional quantification, ordinary language lacks any such device. Instead, we simulate it with the truth-predicate and first-order quantifiers ranging over propositions construed as individuals.<sup>11</sup> Instead of (HA\*), we say:

(HT) For any  $S, b, p$ : If (a)  $S$  acts on  $b$ , (b)  $p$  is the proposition that is the content of  $b$ , and (c)  $p$  is true, then, ordinarily,  $S$  accomplishes  $S$ 's goal

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<sup>11</sup> Picollo and Schindler [2018] argue for understanding 'true' as a device for simulating higher-order quantification. They demonstrate the inter-translatability of languages with primitive higher-order quantifiers and first-order languages with disquotational truth-predicates. Their results hold even for impredicative propositional generalizations—those whose instances themselves involve propositional quantification.

in acting on *b*.

In other words, true beliefs tend to promote successful actions. Because it uses only first-order, individual quantifiers, (HT) must treat propositions as if they were individuals and use 'true' as if it picked out a robust property of those individuals. That makes it seem as though accepting (HT) as a lawlike generalization commits us to *truth* as a robustly explanatory property. But we need not take (HT)'s formulation in terms of first-order, individual quantification at face-value. We can instead see it as our way of expressing what we would express with primitive propositional quantifiers (and no mention of truth) if such a device were available.

So understood, (HT) uses 'true' and first-order quantifiers to simulate the primitive propositional quantification in (HA\*). The generalization (HA\*) expresses is constitutive of belief, lawlike, and supports more particular explanations such as:

I believed my neighbour was giving away puppies, and my belief was true.

Because true beliefs tend to promote successful actions, and I acted on a true belief, I succeeded in my aim of getting a puppy.

Many deflationists (notably Horwich) are inclined to treat (HT) or (HA\*) as expressing the collection of (S)'s instances. That's an error similar to thinking of first-order universal generalizations as expressing just the conjunctions of their instances. (HT) and (HA\*) aren't conjunctions; they are higher-order generalizations. *Content-truth* need not be a substantial property for (HT) to be a lawlike generalization, with content beyond the collection of (S)'s instances. *Belief* is already a higher-order function from contents to behaviour, and so we need higher-order resources to characterize it. Thanks to its generalizing function, 'true' provides the resources we

need in the absence of primitive propositional quantification.

Deflationists deny that *truth* is an explanatorily robust property of propositions. That is not the same as denying that *vehicle-truth*, the (higher-order) property of having true contents, can be explanatory. Given (G), the *vehicle-truth* of our beliefs often helps to explain the success of our actions. The challenge for deflationists is to make sense of *vehicle-truth* as an explanatorily potent property, without thereby construing *truth* as a robust property of the contents of beliefs. They can do that by pointing out that occurrences of ‘true’ in contexts such as (HT) are ineliminable only because we lack resources for primitive propositional quantification. With such resources, we can express (G) with (HA\*), and we can define a property of *vehicle-truth* along these lines:

(VT) For any  $b$ ,  $b$  is *vehicle-true* if and only if, (a) for some  $p$ ,  $b$  has the content that  $p$ , and (b) for all  $q$ , if  $b$  has the content that  $q$ , then  $q$ .

As before, ‘ $p$ ’ and ‘ $q$ ’ in (VT) are propositional, not individual, variables, bound by primitive propositional, not individual, quantifiers.

## 5. Meeting the Critics’ Demands

Kitcher’s version of the Success Objection demands that we account for the *systematicity* of successful patterns of action based on related beliefs. We need to explain both why particular actions on particular occasions succeed and why families of actions guided by sets of related beliefs exhibit a tendency to succeed. But we have the higher-order law (H), from which we can derive (HA\*):

(HA\*) For any  $S, b, p$ : If (a)  $S$  acts on  $b$ , (b)  $b$  is a belief that  $p$ , and (c)  $p$ , then,

ordinarily, *S* accomplishes *S*'s goal in acting on *b*.

Suppose *S* has a set of related beliefs, *b*<sub>1</sub>, *b*<sub>2</sub>, ... *b*<sub>*n*</sub>, which are true or close to the truth. Each belief has some content: *P*<sub>1</sub>, *P*<sub>2</sub>, ..., *P*<sub>*n*</sub>. *S*'s beliefs dispose her to act as though *P*<sub>1</sub>, *P*<sub>2</sub>, ..., *P*<sub>*n*</sub>, and because *P*<sub>1</sub>, *P*<sub>2</sub>, ..., *P*<sub>*n*</sub>, (or nearly enough), she tends to succeed. We can explain the systematicity of her success when she acts on *these* beliefs by way of the higher-order law that relates believing that *p* with acting successfully if *p*.

Lynch claims deflationists cannot account for the *modal significance* of explanations that credit successful action to the truth of beliefs. If Jack found the water because his belief that it was in the bucket was true, then it should turn out that, had he had a different true belief (say, that there was water in a certain bottle), he would still have succeeded.

(H) supplies what Lynch wants. It guarantees that, if Jack had believed there was water in the bottle, then Jack would have acted as though there was water in the bottle. Given that his belief was true—i.e., that there *was* water in the bottle, Jack would have been successful.

Because (H) characterizes a central aspect of the relationship between belief and action, it supports counterfactuals. When we explain successful action by appeal to the vehicle-truth of beliefs, the counterfactual link comes from the implicit reference to the higher-order law that true beliefs tend to promote successful action. That law, however, can be derived as a higher-order generalization from (H) without any mention of truth at all. It requires no resources not available to deflationists.

Gamester's version of the problem turns on the idea that deflationists can't distinguish success due to true belief from coincidental success. The basic difference between the cases is that, in the non-coincidental case, the law (G) is involved in

explaining one's success, and in the coincidental case, it is not. Take Jack and the bucket of water. In the coincidental case, Jack's success is not an instance of the law that true beliefs tend to engender successful action. In the non-coincidental case, Jack's success is explicable as an instance of that law. To distinguish the cases, deflationists only need to make sense of (G) as a lawlike generalization. They can do that, because they can interpret (G) as (HA\*) without incurring commitment to *truth* as a robust property of reified propositions.

Deflationists need to distinguish success due to true belief from coincidental success when acting on false beliefs. There is no higher-order, lawlike regularity connecting false believing to successful action. That's why success when acting on false belief seems coincidental. There is such a regularity connecting vehicle-true belief to successful action, and deflationists can acknowledge it. By doing so, they can distinguish success due to true belief from coincidental success.

Deflationism has room for the generalization that true beliefs tend to promote successful action, as a higher-order, lawlike generalization. It doesn't require more metaphysical resources than deflationists have, and they can appeal to it in responding to modern versions of the Success Objection.

## 6. What is Deflationism? What is Propositional Quantification?

Deflationism is sometimes identified with denying that truth has explanatory power. But that doctrine is ambiguous between the claim that *content-truth* has no explanatory power and the claim the *vehicle-truth* has none. Content-truth is a property of propositions, and deflationists do deny that the truth of <Water is wet> (for example) explains anything beyond what the wetness of water explains. *Vehicle-truth*, on the other hand, is a property of belief-states. They have it when their contents are true propositions, and they lack it when their contents are not true

propositions.

Deflationists such as Horwich have tended to treat the Success Objection as if it concerned the *content-truth* of beliefs. When an action succeeds because of the content-truth of a particular proposition believed, those deflationists have shown we can reformulate the explanation with no appeal to truth at all. But they've missed the more damning objection. Sometimes the *vehicle-truth* of our belief-states explains our success. To make sense of that, deflationists need to account for regularities such as (G) without construing *truth* as a robust property of propositions, such that believing a proposition with that property renders one's actions likely to succeed.

The view outlined above shows how deflationists can meet that demand. They can understand (G) as (HA\*), which involves primitive propositional quantification but no commitment to *truth* as a robust property of propositions. This view is designed around the idea that the main function of 'true' is not to describe the properties of propositions (construed as abstract individuals), but rather to expand the expressive power of our language. The availability of a truth-predicate means we can press our existing individual quantifiers and terms into service to simulate primitive propositional quantification, and so we can express generalizations, including lawlike ones, that we otherwise could not.

It is thus potentially misleading to construe deflationism as necessarily denying that 'true' figures essentially in any correct explanations.<sup>12</sup> If we have other means of propositional quantification available, then we can eliminate 'true' from any explanation without loss; it is inessential. But if we don't have any such means, the

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<sup>12</sup> It's also misleading to identify deflationism with the idea that adding 'true' to a language must be 'conservative' in the sense of not making anything in the original language provable that wasn't provable before. Because 'true' simulates higher-order quantification, its addition to a first-order language is no more conservative than the addition of higher-order quantifiers. See Picollo and Schindler [2018] and Cieśliński [2017]. Conservativeness isn't required for 'true' merely to be a device for generalization.

truth-predicate is indispensable. Its indispensability, though, is consistent with deflationism. It might seem otherwise because we assume any predicate that we can't eliminate from correct explanations must pick out a metaphysically substantial property. Deflationists should simply reject that assumption. They should take an attitude toward 'true' like that of many other philosophers toward 'exists': it is to be understood as expressing a kind of primitive quantification, not as attributing a property.

Not all deflationists will welcome this news. It requires construing 'true' as a device for simulating primitive propositional quantification, but it's controversial how best to understand propositional quantifiers. Two proposals that *won't* work are to construe them substitutionally and to construe them as individual objectual quantifiers ranging over reified propositions.

On a substitutional interpretation, 'For all  $p$ , ...  $p$  ...' is either a syntactic device for expressing all of the results of substituting sentences for ' $p$ ' in the context '...  $p$  ...', or else it's a roundabout way of quantifying over those results (as individuals) and saying they're all true. Either way, there are two problems. First, the generalizations are insufficiently general. If we add a new term to the language, we have to redefine the quantifier to include sentences using that term to its substitution class. Second, the generalizations can't *explain* their instances if their function is to *express* them. Such explanations would be circular. The substitutional interpretation is no progress over Horwich's schematic (S).

It conflicts with deflationism to construe the propositional quantifier as an individual quantifier ranging over reified propositions. Then 'For all  $p$ , ...  $p$  ...' would abbreviate 'For all  $x$ , ...  $x$  is true ...'. In the case of (H), that means construing 'true' as a predicate that designates an explanatorily potent property.

Deflationists should instead see higher-order, propositional quantification for



what it is: a primitive logical device that expresses a kind of generality *other than* what is expressible in a purely first-order language. A likely objection to such an understanding is related to an objection to substitutional quantification: We need to deploy the concept TRUE to understand propositional generalizations, and so they presuppose a substantial conception of *truth* after all. Such an objection doesn't accomplish much. If our ordinary conceptual apparatus lacks primitive propositional quantifiers, and instead deploys TRUE to simulate them, then *of course* we can't understand propositional quantifiers without deploying TRUE. That's what TRUE is for! Consider the parallel argument for '∃'. Maybe we can't understand it without deploying EXISTS, but that's far from enough to show that *existence* is a metaphysically robust property. Likewise, even if we need to deploy TRUE to understand propositional quantification, that doesn't show *truth* is a metaphysically robust property either.

Translating propositional quantifiers into the idiom of truth is one way to understand them.<sup>13</sup> There are others. We can grasp the quantifiers by analogy with resources already in our language. In formal work, it's common to introduce them by showing how to add them to a first-order language and giving them introduction and elimination rules analogous to their first-order counterparts. Once we have the knack of replacing names with variables and binding them with quantifiers for cross-reference, it's a short step to doing the same with expressions of other semantic types. That doesn't suffice to give the *meaning* (and certainly not the truth-conditions) of primitive propositional quantifiers in first-order, deflationary terms, but we shouldn't expect it to. As Timothy Williamson puts it, only higher-order languages have the resources to adequately capture the semantics of higher-order

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<sup>13</sup> See Picollo and Schindler [2018] for some formal details.

quantification. To understand higher-order quantifiers ‘one must take the plunge, participate in [their use] oneself, and, all being well, thereby understand them from the inside. That is no special feature of higher-order quantifiers; it is the normal case with understanding’ [2013: 259-60].<sup>14</sup>

Some deflationary approaches (for example, Horwich’s) scrupulously avoid propositional quantification. They treat generalizations such as (H) as pseudo-generalizations that express, but can’t explain, their instances. At least some of deflationism’s critics suppose such an approach is mandatory for deflationists. For example, Gamester claims deflationists can’t draw on generalizations such as (G) because they can’t maintain that ‘the sole role for truth is as a device for generalisation’ without adopting the strategy of ‘*earn[ing] the right to [(G)] by first explaining ... each individual instance of success; and then generalising over them*’ [2018]. His mistake is to suppose deflationists must construe truth-involving generalizations as schemata expressing their instances, and so not real generalizations at all.

Deflationists need not construe truth-involving generalizations as merely expressing their instances. Instead, they can see ‘true’ as a device for simulating primitive, higher-order, propositional quantification. It’s a ‘generalizing device’ because it enables us to express generalizations, including lawlike ones, we couldn’t express with only first-order resources. Several existing deflationary approaches put propositional quantification to serious work [Grover 1992; Brandom 1994; Azzouni 2001; Künne 2003; Picollo and Schindler 2018]. A lesson of this article is that a deflationism friendly to primitive propositional quantification can answer the Success Objection, even if Horwich-style approaches don’t.

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## REFERENCES

Azzouni, Jody 2001. Truth Via Anaphorically Unrestricted Quantifiers, *Journal of Philosophical Logic* 30/4: 329–54.

Brandom, Robert 1994. *Making it Explicit: Reasoning, Representing, and Discursive Commitment*, Cambridge, MA: Harvard University Press.

Button, Tim 2014. The Weight of Truth: Lessons for Minimalists from Russell's Gray's Elegy Argument, *Proceedings of the Aristotelian Society* 114/3: 261–89.

Cameron, Ross P. 2019. Truthmaking, Second-order Quantification, and Ontological Commitment, *Analytic Philosophy* 60/4:

Cieśliński, Cezary 2017. *The Epistemic Lightness of Truth*, Cambridge, UK: Cambridge University Press.

Gamester, Will 2018. Truth: Explanation, Success, and Coincidence, *Philosophical Studies* 175/5: 1243–65.

Grover, Dorothy 1992. *A Prosentential Theory of Truth*, Princeton: Princeton University Press.

Grover, Dorothy 1972. Propositional Quantifiers, *Journal of Philosophical Logic* 1/2: 111–36.

Horwich, Paul 1998. *Truth*, New York: Oxford University Press.

Kitcher, Philip 2002. On the Explanatory Role of Correspondence Truth, *Philosophy and Phenomenological Research* 64/2: 346–64.

Künne, Wolfgang 2003. *Conceptions of Truth*, New York: Oxford University Press.

Leeds, Stephen 1995. Truth, Correspondence, and Success, *Philosophical Studies* 79/1:

1–36.

Lynch, Michael P. 2009. *Truth as One and Many*, New York: Oxford University Press.

Piccolo, Lavinia, and Thomas Schindler 2018. Deflationism and the Function of Truth, *Philosophical Perspectives* 32/1: 326–51.

Putnam, Hilary 1978. *Meaning and the Moral Sciences*, Boston: Routledge & K. Paul.

Ramsey, F. P. 2001. The Nature of Truth. In *The Nature of Truth: Classic and Contemporary Perspectives*, ed. M. P. Lynch, Cambridge, MA: MIT Press: 433–45.

Sellars, W. 1956 (1997). *Empiricism and the Philosophy of Mind*, ed. R. Brandom, and R. Rorty, Cambridge, MA: Harvard University Press.

Williamson, Timothy 1999. Truthmakers and the Converse Barcan Formula, *Dialectica* 53/3-4: 253–70.

Williamson, Timothy 2013. *Modal Logic as Metaphysics*, Oxford, UK: Oxford University Press.

Wrenn, Chase B. 2011. Practical Success and the Nature of Truth, *Synthese* 181/3: 451–70.

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