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#### CAN DEFLATIONISTS BE DIALETHEISTS?

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ABSTRACT. Philosophical work on truth covers two streams of inquiry, one concerning the nature (if any) of truth, the other concerning truth-related paradox, especially the Liar. For the most part these streams have proceeded fairly independently of each other. In his "Deflationary Truth and the Liar" (JPL 28:455–488, 1999) Keith Simmons argues that the two streams bear on one another in an important way; specifically, the Liar poses a greater problem for deflationary conceptions of truth than it does for inflationist conceptions. We agree with Simmons on this point; however, we disagree with his main conclusion. In a nutshell, Simmons' main conclusion is that deflationists can solve the Liar only by compromising deflationism. If Simmons is right, then deflationists cannot solve the Liar paradox. In this paper we argue that, *pace* Simmons, there is an approach to the Liar that is available to deflationists, namely dialetheism.

KEY WORDS: dialetheism, deflationism, Liar paradox, truth

#### 1. DIALETHEISM

Dialetheists maintain that some sentences are equivalent to their own negations. Such sentences, according to dialetheists, are both true and false. On this view negation and conjunction behave standardly: A negation is true (false) iff its negatum is false (true); a conjunction is true iff each conjunct is true, and false iff one of its conjuncts is false. Hence, if, as per dialetheism, A is both true and false, then so too is its negation,  $\sim A$ , and so too, by conjunction, is the contradiction:  $A \wedge \sim A$ . Accordingly, dialetheism is sometimes formulated as the thesis that there are true contradictions. <sup>1</sup>

One may be a dialetheist with respect to any sentence; however, in practice dialetheists tend to be dialetheists only with respect to a "small" number of sentences, specifically the sentences generating the so-called semantic and logical paradoxes.<sup>2</sup> A paradigmatic example is the simple liar sentence, a sentence that (appears) to say of itself only that it is false – for example, 'This expression is false', where 'This expression' is used to denote the quoted sentence in this sentence. Every known dialetheist is a dialetheist with respect to the Liar. According to dialetheists the liar paradox is a sound argument the conclusion of which is a true contradiction.

At this stage an important question arises: When dialetheists assert the existence of true contradictions do they thereby invoke some exotic nature of truth (or falsity)? No. Dialetheism purports to be neutral with respect to the nature (if any) of truth and falsity.<sup>3</sup> In particular, dialetheism purports to be neutral with respect to disquotational (or otherwise deflationary) theories of truth. Indeed, by our lights, dialetheism sits exceedingly well with deflationary approaches to truth. After all, deflationary accounts agree that, where 's' is a sentence and ' $\lceil$ ' a name-forming device (of any familiar sort), an assertion of  $\lceil s \rceil$  is *equivalent*, in some suitably strong sense (often conceptual equivalence, or necessary material equivalence), to an assertion of ' $\lceil s \rceil$  is true'. But, then, given an assertion of liar-like sentences, we immediately get sentences equivalent to their own negations – true contradictions, where 'true' is understood as per the given version of deflationism.

That being said, our aim in this paper is not to argue that deflictionism and dialetheism *do* sit well together; that task is taken up elsewhere [2]. In this paper we take up a prior task: we defend the claim that deflationism and dialetheism *can* sit well together – that deflationists need not compromise their deflationary credentials by accepting dialetheism.

That deflationists *can* be dialetheists (without thereby compromising deflationism) has recently been challenged by Keith Simmons [27]. In this paper we consider Simmons' arguments against the compatibility of deflationism and dialetheism. Our chief aim is to show that Simmons' arguments do not go through.

The paper runs as follows. In Section 2 we briefly rehearse Simmons' understanding of disquotationalism. In Section 3 we present Simmons' chief arguments, which turn on ungrounded sentences; Section 3.1 presents the eliminability problem, which (allegedly) confronts all disquotationalists; Section 4.1 presents the explanatory problem, which (allegedly) confronts would-be dialetheic disquotationalists. Sections 3.2 and 4.2 are devoted to answering the problems covered in Sections 3.1 and 4.1, respectively. In Section 6 we summarize the overall debate.

## 2. SIMMONS ON DISQUOTATIONALISM

Although Simmons aims to show that the Liar presents a special problem for any deflationary view of truth he focuses on disquotationalism as a representative deflationary view. We will do the same: we will focus on disquotationalism but intend our arguments to extend to deflationary views of truth, generally.

On the disquotational view, as Simmons notes, there is nothing more to truth than is revealed by the instances of the schema

(T)  $\lceil s \rceil$  is true iff s,

and nothing more to falsity than is revealed by the instances of

(F)  $\lceil s \rceil$  is false iff not-s,

where substituends of 's' are English sentences and 'iff' is understood in terms of some notion of equivalence.<sup>4</sup> Each substitution instance of (T) says all that there is to say about truth for the substituend, and the collection of instances captures everything there is to say about truth; hence, according to the disquotationalist there is no more to truth than is revealed by the collection of instances of (T).<sup>5</sup> The same goes for falsity and (F).<sup>6</sup>

An immediate question arises for the disquotationalist: If, as per the disquotational theory, asserting  $\lceil s \rceil$  is equivalent to asserting that  $\lceil s \rceil$  is true, why have a truth predicate in the language? The disquotationalist's answer, following Quine [20, p. 12] is that the truth predicate is useful as a device of disquotation. Quine explains the utility of such a device as follows:

We may affirm the single sentence by just uttering it, unaided by quotation or by the truth predicate; but if we want to affirm some infinite lot of sentences that we can demarcate only by talking about the sentences, then the truth predicate has its use. We need it to restore the effect of objective reference when for the sake of some generalization we have resorted to semantic ascent

Truth as a device of disquotation undoes the effect of quotation, allowing us to say what we would say directly were we able to. This shifting of levels – from talk about sentences to talk about what those sentences talk about – is important; it enables us to express generalizations such as

(1) Every alteration of a sentence with its negation is true,

which, due to the finite contexts in which we speak (think, etc.), we could not otherwise express. Similarly, the shifting of levels afforded by 'true' is useful in so far as it enables us to express claims, such as

(2) The first sentence uttered by Tarski on 27 March, 1970 is true,

which, for epistemic reasons, we are barred from affirming directly.

Both the expression of generalizations like (1) and of blind ascriptions like (2) may be described as two aspects of one single purpose – the purpose of expressing infinite conjunctions. Accordingly, the deflationist

assigns 'true' a purely logical role on a par with that of the logical connectives and quantifiers. It is in this additional expressive power that the disquotationalist sees the utility of truth; and she claims that beyond such additional expressive power the truth predicate serves no purpose.

By way of capturing the foregoing points and focusing his discussion Sim-mons settles on the following disquotational definitions of 'truth' and 'falsity'.<sup>7</sup>

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(DefT) x is true iff (x = `s_1` \& s_1) or (x = `s_2` \& s_2) or ...,
(DefF) x is true iff (x = `s_1` \& \sim s_1) or (x = `s_2` \& \sim s_2) or ..., where `s_1`, `s_2`, \ldots abbreviate sentences.
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Simmons concentrates on DefT and DefF as his representative disquotational account of truth and falsity. Of this account Simmons [27, p. 458–459] writes:

There are two features of this account that are worthy of special attention – they capture the basic disquotational intuitions about truth. First, there is no more to the truth of a sentence than is given by the disquotation of its quote-name. Second, the truth predicate is eliminable. DefT is an eliminative definition: truth-talk can in principle always be eliminated in favour of direct talk about the world. [Italics original.]

According to Simmons, then, the following two theses are central to the disquotational conception of truth:

- (D<sub>1</sub>) There is no more to the truth of a sentence than is given by the disquotation of its quote-name.
- (D<sub>2</sub>) The truth predicate is (in principle) eliminable.

In his case against disquotationalism and the prospects of dialetheic disquotationalism Simmons makes heavy use of  $D_2$ . In the course of our response to Simmons we shall challenge  $D_2$ . For now, however, we turn to Simmons' main case against disquotationalism and his case against dialetheic disquotationalism.

#### 3. THE UNGROUNDED PROBLEMS

Let an *ungrounded sentence* be any grammatical sentence in which 'true' or 'false' is (in principle) ineliminable – that is, the predicate cannot be eliminated by paraphrase from the given (grammatical) context in which it occurs. Simmons argues that the existence of ungrounded sentences raises two problems for the disquotationalist. The first problem is a problem for all disquotationalists, the second, a problem for would-be dialetheic disquotationalists. We present and reply to each problem in turn. In Section

3.1 we present the *eliminability problem*; in Section 3.2 we offer our reply. In Section 4.1 we present the *explanatory problem*; in Section 4.2 we offer our reply.

## 3.1. The Eliminability Problem

The eliminability problem for disquotationalists falls directly out of  $D_2$ . The problem is straightforward: Assume, as Simmons does, that the disquotationalist is committed to eliminability. Since ungrounded sentences have (in principle) ineliminable occurrences of 'true' ('false'), the eliminability requirement is not satisfied, which means that disquotationalists can give no disquotational account of truth for ungrounded sentences. Hence, in so far as the disquotationalist must provide an eliminative account of truth, the disquotational theory fails; ungrounded sentences stand in the way.

How should disquotationalists respond to the eliminability problem?

#### 3.2. Response to the Eliminability Problem

Our response to the eliminability problem is straightforward: We reject  $D_2$ . Disquotationalists, we suggest, need not be committed to the eliminability constraint.

Simmons assumes that any disquotational *definition* of 'true' (similarly, 'false') must be eliminative, on pain of not being a definition at all. We reject this. We agree that in the "strict sense" of 'definition', at least as understood by Quine [21, p. 241f], any strict definition of 'true' requires eliminability of 'true' (by paraphrase) from every context in which it can grammatically occur. Moreover, we agree with Simmons that, given ungrounded sentences, no strict definition (so understood) is available to disquotationalists. We think, however, that the unavailability of a strict definition of 'true' falls directly out of the *circularity* of truth, and so the quest (or demand) for a strict definition is misguided.<sup>8</sup>

The current dialectical situation, perhaps, is of the proverbial *one philosopher's modus ponens...* sort. As above, we agree with Simmons on the following claim:

(3) If ungrounded sentences are true or false (disquotationally understood), then (disquotational) truth has no non-circular, eliminative definition.

Simmons performs a Modus Tollens on (3); we perform Modus Ponens.<sup>9</sup> Who is correct? This is difficult to adjudicate, and we shall not attempt to so adjudicate. What is important to notice, however, is that in the present context Simmons must give an argument against the viability of our move—

an argument as to why disquotationalists cannot perform the given Modus Ponens (as it were). Unfortunately, Simmons provides no such argument; he simply assumes  $D_2$  as a constraint on disquotationalists (and, as he intends, deflationists generally). Without such an argument, however, the disquotationalist, we think, has no rason to endorse  $D_2$ , provided she accepts that truth is circular. <sup>10</sup>

Are there any reasons for thinking that the disquotationalist cannot reject  $D_2$ ? We imagine that there are two arguments one might give against such a rejection. The first, which is implicit in Simmons' paper, regards the importance of  $D_2$  to the disquotational conception of truth; the second, which is familiar from general reflection on definitions, regards the untenability of circular definitions. We consider each of these arguments in turn.

## 3.2.1. $D_2$ : From the Spirit of Disquotationalism?

Simmons seems to think that a rejection of  $D_2$  compromises the "spirit" (or core "intuitions") of disquotationalism. But is this correct? Consider, again, the core commitments of disquotationalism, which are captured in the following two theses.

- (a) Truth is a device of disquotation (whereby an ascription of truth to a sentence is equivalent to the disquotation of its quote name).
- (b) The *point* of truth its *raison d'être* is to provide a means by which we can talk about the world through talk about sentences (a device for making non-semantic claims semantically, when the need arises).

The question is: Do either of these theses commit the disquotationalist to  $D_2$ ? That is, do either of (a) or (b) pose a problem for the disquotationalist who wishes to *reject*  $D_2$ ?

Nothing in (a) itself seems to pose a problem, even if we consider paradoxical or ungrounded sentences; for (a) is compatible with the ineliminability of truth. Indeed, given the existence of a sentence,  $\lambda$ , such that  $\lambda = \lceil \lambda$  is not true $\rceil$ , (a) entails precisely what we would expect if we thought dialetheism and disquotationalism compatible – that the Liar and its negation were equivalent. So, if there is to be a problem, it must come from (b).

Indeed, (b) does seem to pose a problem; for it strongly suggests

(c) In principle, anything that can be said using the truth predicate, can be said without using the truth predicate.

A commitment to (c) brings about a commitment to  $D_2$ . Consider, for example,  $\lambda$ , which, when used in the right context, says only that  $\lambda$  is not

true. This cannot be said without using the truth predicate, which means that there is no sentence in the 'true'-free (T-free) fragment of the language to which  $\lambda$  (on its intended interpretation) is equivalent. But, given (c), there must be such a sentence. Since there is not, the disquotationalist, if committed to (c), is forced to say that a sentence such as  $\lambda$  (on its intended interpretation) says nothing at all, which is to say that, given (c), disquotationalism is incompatible with the claim that ungrounded sentences are *significant*, and that amounts to the claim that disquotationalism is incompatible with a rejection of  $D_2$ . Hence, in so far as the disquotationalist is committed to (c) she is committed to  $D_2$ ; since (b) strongly suggests (c), and (b) is a core commitment of disquotationalism, it looks as though the rejection of  $D_2$  is incompatible with the spirit of disquotationalism.

We accept that (b) strongly suggests (c) and that (c) rules out the rejection of  $D_2$ . Moreover, we accept that (b) is central to the disquotational conception of truth. However, we stand firm in our belief that the disquotationalist should reject  $D_2$ . How is this viable?

Given the disquotationalist's view of the point of truth – that is, of the truth predicate's role in the language – it is natural to infer (c) from (b). However, (c) is false and (b) is true, so there must be a mistake in the inference. The mistake, it seems, is in concentrating only on the T-free fragment of the language. Admittedly, it is natural to concentrate only on the T-free fragment, as it is this fragment for which the truth predicate was introduced. However, by concentrating only on the *intended* target of 'true' (i.e., the T-free fragment for which 'true' was introduced) we overlook the "side-effects" of introducing 'true' into the language – including, in particular, ungrounded sentences such as  $\lambda$ .

It is one thing to say that the point of truth – the reason for introducing a truth predicate in the first place – is to afford speakers the means for giving expression to non-semantic claims. It is quite another thing to say that, once the truth predicate is introduced, every sentence in which it occurs is equivalent to some sentence expressible in the T-free fragment of the language. That these two claims come apart is one lesson of the Liar (and ungrounded sentences, generally). Once the truth predicate is introduced into the language the body of expressible claims is expanded in two ways:

- CONSERVATIVELY EXPANDED: We can now express "old" T-free claims that, due to the aforementioned limitations (Section 2), we could not previously express.
- CREATIVELY EXPANDED: We can now express claims that are *new* to the language claims not equivalent to any previous ("old") T-free claims.

Overlooking the genuinely new claims – the claims not equivalent to any of the old T-free claims – is responsible for the inference from (b) to (c).

That such (genuinely) new claims are easily overlooked is not surprising. After all, such claims – the Liar and the Truth-teller – were entirely unintentional; they entered the language at truth's inception and came about merely due to the rules governing 'true' and the underlying (pre-established) grammar of various expressions. But while such claims were unintentional, to be sure, they were also inevitable – they are inevitable by-products of introducing 'true', with its intended behaviour, into a language featuring the grammar and (other semantic features) enjoyed by English. <sup>12</sup> In a nutshell: the given class of (ungrounded) sentences comprises *semantic spandrels* – unintentional but inevitable by-products of introducing 'truth' into the language. <sup>13</sup> Spandrels are easy to overlook, but they are notoriously difficult to avoid.

We discuss the view of ungrounded sentences as spandrels elsewhere [1], so we will not pursue it further here except to note the following. It is perfectly consistent with (b) that the introduction of the truth predicate brought with it the introduction of ungrounded sentences, even though the purpose for which the truth predicate was introduced – the *raison d'être* of truth – is not served in those sentences; that is, (b) is consistent with the existence of such semantic spandrels. As above, however, (c) is not consistent with the existence of such semantic spandrels. Hence, (c) does not follow from (b). We conclude that if, as Simmons suggests, (a) and (b) capture the spirit of disquotationalism (i.e., the heart of disquotationalism, the core intuitions behind disquotationalism), then the spirit of disquotationalism does not require commitment to the (in principle) eliminability of the truth predicate. In short, one doesn't get  $D_2$  from the heart of disquotationalism alone.

There is, however, another reason one might think that the disquotationalist is committed to  $D_2$ , a worry about circular definitions – an epistemic worry.

## 3.2.2. D<sub>2</sub>: From Understanding Truth?

On the traditional view circular definitions are a disaster. Traditionally, we determine the meaning of a definiendum on the basis of the meaning of its definiens; if the definition is circular, then we cannot determine the meaning of the definiens unless we already have the meaning of the definiendum. We have, then, a compelling motive for endorsing eliminability: namely, that circularity undermines the proper functioning of standard explicit definitions.

The motive, however, is not applicable to the present case. In a standard explicit definition, understanding the definiendum is a matter of grasping the definiens. But in the case of DefT, this is impossible; the definiens is infinite (and not recursive) and we are finite, which means that we cannot grasp it. Since we nevertheless manage to grasp the concept of truth, it follows that our understanding of truth must proceed differently. Of course, disquotationalists are aware of this, and they have offered various alternative ways of explaining in what our grasp of the concept of truth consists. The result is that on the disquotational theory DefT is not supposed to do all that a standard explicit definition is supposed to do.

What, according to the disquotationalist, is DefT supposed to do? We think that it has two primary jobs. First, it is supposed to say what it is for a sentence to be true, that is, to specify truth conditions for all sentences that have them. Second, it is supposed to characterize a notion of truth adequate to the expressive function that the truth predicate plays. As is easy to verify, neither of these jobs requires that DefT be eliminative. Hence, whether or not we choose to call DefT a *definition of truth*, there is no reason to think that it must be eliminative; to suppose otherwise is to assume that it is capable of playing a role that it was not introduced to play and that it is not capable of playing.

We have considered two reasons that Simmons might have given to support his claim that disquotationalists are committed to D2; under scrutiny, neither consideration holds up. For this reason, we conclude that, in fact, the disquotationalist does not encounter Simmons' eliminability problem. That problem arises from a thesis that disquotationalists need not – indeed, should not – accept.

We would like to close this section with a point to which we briefly alluded in Section 1. The driving intuition behind disquotationalism – and deflationism, generally – is that truth is *fully* characterized by some sort of (strong) equivalence between  $\lceil s \rceil$  and  $\lceil \lceil s \rceil$  is true $\rceil$ . Given the existence of semantic spandrels – sentences, such as  $\lambda$  and the like, which arise as by-products of introducing 'true' into a language with the underlying grammatical rules that exist in English – there is seemingly little, beyond apparent ad hocery, that stands in the way of true contradictions (where 'true' is understood as per disquotationalism). For this reason, we think that disquotationalism is not just compatible with dialetheism, but that it actually supports it.

But a question remains: Can disquotationalists be dialetheists without thereby compromising their disquotationalist credentials? As above, Simmons' eliminability problem does not stand in the way; however, Simmons' *explanatory problem* must still be addressed.

# 3.3. The Explanatory Problem

The eliminability problem is independent of the inconsistency generated by various (paradoxical) ungrounded sentences. As Simmons [27, p. 464] puts it:

The [eliminability] problem for the disquotational theory goes beyond the strictly paradoxical sentences and the contradictions they produce. The reason that the theory cannot handle the Liar and the Truth-Teller, and ungrounded sentences generally, is that the theory cannot eliminate 'true' (or 'false') from these sentences, and a vicious regress seems unavoidable.

Now, while all disquotationalists face the eliminability problem would-be dialetheic disquotationalists face a further problem: They are apparently forced to explain the truth of certain (paradoxical) ungrounded sentences in terms of falsity; and *that*, according to Simmons, compromises disquotationalism, on which falsity is not an explanatory "property" at all.<sup>17</sup> Simmons [27, p. 479] puts the point thus:

[C]onsider the dialetheic approach, according to which a Liar sentence, say

#### (1) (1) is false,

is both true and false.... If these are attributions of disquotational truth and falsity, then the disquotational schemas generate a contradiction. Presuming that the disquotationalist is willing to accept this, the problem of ineliminability remains. Any attempt to eliminate the semantical predicate from (1) goes against the dialetheic grain: it is just because (1) attributes falsity to itself, and so generates a semantic paradox, that the dialetheist declares it true and false. We cannot explain what the truth (and falsity) of (1) consists in independently of the notion of falsity.

How should the (would-be) dialetheic disquotationalist reply?

# 3.4. Response to the Explanatory Problem

We shall argue that there is a straightforward reply to Simmons' charge, one that does not compromise the union of dialetheism and disquotationalism.

Simmons' explanatory problem focuses on the dialetheist's thesis that some ungrounded sentences are true/false. Consider an ascription of truth to a Liar sentence like  $l = \lceil l$  is false  $\rceil$ . According to the dialetheist, l is both true and false. How do we explain this sentence's truth status? According to Simmons [27, p. 479], the dialetheist declares l both true and false because it attributes falsity to itself and so generates paradox. From the dialetheic perspective, there is nothing wrong with invoking falsity to explain the truth of l; in fact, given what l says, it is hard to see how else we would explain it. But the claim that truth or falsity is ex-planatory is anathema to the disquotationalist's view. Recall from Section 2 that the disquotationalist is committed to the claim that utility of

truth is *exhausted* by its expressive role. If, in addition to its expressive role, truth or falsity have substantial explanatory roles, that spells the end of disquotationalism. <sup>18</sup> Hence, it looks as though disquotationalism and dialetheism form an unstable pair.

Does the dialetheist implicate falsity in her explanation of the truth (and falsity) of l? It certainly seems as if she might; for, at least prima facie, the most plausible explanation of its truth is that it ascribes falsity to itself and it is, in fact, false. This strongly suggests that there is an explanatory property of falsity – the very property invoked in the explanation of the truth of l.

Intuitive though this explanation may seem, no dialetheist, whether or not she is also a disquotationalist, should provide it. In order to see why not, consider the correlative explanation that the dialetheist would provide for the *falsity* of l. Such an explanation would invoke the truth of l together with the fact that it ascribes falsity to itself. Now, considered separately, each explanation seems to be the sort of thing that the dialetheist would provide. But when we consider the explanations together, we note that they are viciously circular: the falsity of l is implicated in the explanation of its truth, which, in turn, is implicated in the explanation of its falsity. Since the two explanations are symmetrical, if the dialetheist is correct in providing the one, she is correct in providing the other. But she cannot be correct in providing both. Hence, we conclude that she should provide neither. Appearances to the contrary notwithstanding, these are not good explanations of the truth and falsity of l.

They are also not the sorts of explanation that the dialetheic disquotationalist would provide. This is important: even if the aforementioned explanations were adequate, unless they were the only ones that could be given, this would not signal a problem for the disquotationalist. Fortunately, the dialetheic disquotationalist can provide alternative explanations for the truth and falsity of l.

According to the dialetheic disquotationalist the claim that l is both true and false is an analytic consequence of her theory of truth, together with the identity,  $l = \lceil l$  is false  $\rceil$ , and uncontroversial principles of logic (uncontroversial, at least in the present context). That is, given the instance of (T) corresponding to l, together with the given identity (wrt l) and either excluded middle or *consequentia mirabilis*, l the dialetheic disquotationalist concludes that l is both true and false. Indicating how the claim that l is true and the claim that l is false follow from the disquotational theory (together with the given identity and principles of logic) constitutes the only explanation the disquotationalist can – or must – provide for the truth/falsity of l. Moreover, by explaining the truth/falsity of l in these

terms, the disquotationalist appeals to neither truth nor falsity. In this way, it appears that, without invoking facts about a property of truth or falsity, the disquotationalist can explain the truth status of l and, thus, that she can accept that the liar is both true and false.

There may still be a problem, however. The disquotationalist invokes an instance of (T) in her explanation of the truth and falsity of l. If the relevant instance of (T) is explained by reference to properties of truth or falsity, then we might nevertheless have reason to worry that the disquotationalist is assigning to those properties a forbidden role in the explanation of l's truth status.

In fact, there is no problem. The disquotationalist does not invoke truth or falsity in the explanations of (T) or (F). Unlike other truth theorists, the disquotationalist does not explain the instances of (T) or (F) by reference to the nature of truth or falsity; rather, she claims that the instances of (T) and (F) hold as a matter of conceptual necessity, in virtue of the meaning of 'true', which meaning is given by (T) and (F), respectively. The disquotationalist does not invoke facts about a property of truth or falsity in order to explain this instance of (T); hence, her explanation of l's truth value(s) does not invoke properties of truth or falsity.

#### 4. SUMMARY

In this paper we have defended the compatibility of dialetheism and disquotationalism. We have argued that disquotationalists need not accept Simmons' eliminability constraint, according to which 'true' must be eliminable (by paraphrase) from every sentence in which it grammatically occurs. Disquotationalists, we argued, should accept that truth (as it behaves in English) is a circular notion, in which case any accurate definition of 'true' (similarly, 'false') will be circular. With eliminability constraints thus removed, only Simmons' second problem, the problem of explaining the truth of liar sentences in terms of their falsity, stands in the way of dialetheic deflationism. Our response to this putative problem, however, is that the disquotationalist is in a good position to explain the truth/falsity of the liar – its truth and falsity are analytic consequences of disquotationalism (underwritten by suitable and, in the present context, uncontroversial principles and facts). Hence, Simmons' second argument fails.

As far as we know, the only arguments against a viable dialetheic disquotationalism are Simmons' arguments.<sup>20</sup> These removed, there is no reason to think that disquotationalists cannot (in good faith, as it were) be dialetheists. Whether disquotationalists *should be* dialetheists is a question we answer elsewhere [2].<sup>21</sup>

### **NOTES**

- <sup>1</sup> On pain of being a *trivialist* (i.e., one who accepts that every sentence is true) any dialetheist will be a paraconsistentist, maintaining that her (given) language is underwritten by a paraconsistent logic; however, many paraconsistentists are not dialetheists. By 'paraconsistent logic' we mean the following: Let  $\vdash$  be our (given) consequence relation (either semantically or syntactically defined),  $\vdash$  is said to be *explosive* iff for all *A* and *B*, {*A*, ∼*A*}  $\vdash$  *B*.  $\vdash$  is *paraconsistent* iff it is not explosive. There are a variety of paraconsistent systems from which the dialetheist (or anyone else) may choose. For a discussion of various forms of paraconsistent logic, see Priest [18]. Non-dialetheic interpretations of (some) paraconsistent logic(s) are given by, among others, Brown [8], Belnap [5, 6], Restall [25, 26], and Beall and Restall [3].
- <sup>2</sup> Dialetheists tend to reject Ramsey's distinction between semantic and logical paradoxes; however, we won't dwell on this point ('small' is in scare quotes given that there are infinitely many such paradoxical sentences.)
- <sup>3</sup> Graham Priest [19] discusses this point in a general setting, briefly surveying various standard theories of truth and concluding, in each case, that dialetheism is compatible with the given theory in the sense that none of the theories rules out dialetheism (except by ad hoc maneuvre) and none of the theories is otherwise compromised by dialetheism. Priest's discussion, however, does not address the explicit challenge raised recently by Keith Simmons [27], to which our current paper is directed.
- <sup>4</sup> As in Section 1, disquotationalists frequently favour intensional equivalence or necessary material equivalence.
- <sup>5</sup> As Field [12] notes, the disquotationalist will also need a device for generalizing the instances. He has suggested ways in which the deflationist might handle this, each of which is compatible with the general characterization of disquotationalism assumed by Simmons.
- <sup>6</sup> We will speak primarily about truth, though what we say carries over in obvious ways to falsity.
- <sup>7</sup> The following characterization, as Simmons [27, p. 481, fn. 10] notes, are suggested in remarks by Leeds [16], Field [11, 12], Resnik [23, 24], and David [10].
- <sup>8</sup> It bears mentioning that the most sophisticated contemporary work on circular "concepts", notably that of Gupta and Belnap [4], purports to be neutral with respect to deflationary views. Such revision theorists argue that truth is a circular "concept" or "property", but whether deflationism or correspondence is correct is an independent matter. We agree; however, we are not suggesting that disquotationalists need to endorse Gupta–Belnap revision theory (or its close offspring), at least not in detail. Indeed, we think that disquotationalists ought to be dialetheists; whether they should employ some version of revision theory is an open question. (Andre Chapuis and Anil Gupta [9] provide a useful collection of papers on revision theory, its offspring, and a variety of related topics. Beyond other virtues this collection is useful both for its various discussions of the circularity of truth and its various discussions of deflationism.)
- <sup>9</sup> We're assuming a genuinely detachable conditional, here. Dialetheists reject the validity of "material modus ponens", for obvious reasons (reasons that apply to Modus Tollens on stronger conditionals). For present purposes, however, this issue is not relevant and, accordingly, we don't pause further on the matter. (Priest [17] discusses the issue in question.)
- <sup>10</sup> We should emphasize that any acceptable non-circular definition is a non-creative one. This is not at issue.

- <sup>11</sup> For convenience we will speak mostly about T-free sentences, but in most cases we are talking about T-free and/or F-free sentences.
- $^{12}$  As is well-known, Kripke [15] showed how, in a sense, one could define truth for a language within the language itself, thereby seeming to obviate the need for Tarskian "language-levels". (Strictly speaking, as Field [12] has emphasized, it is more accurate to say that Kripke defined 'Comes out true when all quantifiers are restricted to set  $\mathcal{D}$ '.) As is also well-known, Kripke's theory of truth is plagued by the strengthened liar, which, though apparently true, cannot be so-declared without contradiction ensuing. This result is continuous with, and, indeed, explained by, the facts that we are highlighting in this section.
- <sup>13</sup> A *spandrel* is a necessary by-product of creating something else, as for example in the spandrels of the San Marco basilica in Venice, cited by Gould and Lewontin [13], which are the triangular spaces formed by the basilica's rounded arches. These spaces are elaborately decorated, creating the *mis*impression that they were intentionally created. They weren't; rather, they were unavoidable by-products of the intended architectural features.
- <sup>14</sup> Even if the disquotationalist were to replace DefT with a finite definition that employed substitutional quantification (i.e., x is a true sentence iff  $\Sigma p(x = 'p'\&p)$ ), since she must understand substitutional quantification in terms of infinite conjunction, a grasp of the right-hand side of DefT would still involve infinite capacities. If a recursive definition were available, qualifications here might be in order; however, given the wide variety of English sentences, including those involving prepositional attitude ascriptions, etc., such a definition seems to be unavailable, at least for English and other natural languages with which disquoteitionalists are concerned.
- <sup>15</sup> The standard view, most explicitly given by Horwich [14] but also discussed by Field [12] and others, is that a grasp of the concept of truth consists in the disposition to accept those instances of (T) that a given speaker can formulate.
- <sup>16</sup> We should also note that, while we do not here push the point, another, perhaps more fundamental, question might be asked: namely, why think that DefT is a definition at all? As Hartry Field (in correspondence) pointed out, a deflationist will regard DefT as something the grasp of which is central to the meaning of the term 'true', but that is quite different from being a *definition*. If Field's position is correct, then Simmons' eliminability constraint on *definitions* misses the target theory (deflationism, so construed). For present purposes, we shall simply grant Simmons that DefT is a definition of 'true'. As above, we reject that DefT need be a "strict" definition.
- <sup>17</sup> Of course, the same goes for the dialetheist who wishes to say, as we do, that  $t = \lceil t \rceil$  is true  $\rceil$  is either true or false. Simmons' point remains in this case: The would-be dialetheic disquotationalist is apparently forced to explain the truth value of t (whatever it is) merely in terms of truth; but *that*, according to Simmons, compromises disquotationalism, on which truth is not an explanatory "property" at all.
- <sup>18</sup> By *substantial* explanatory roles we mean explanatory roles that do not simply fall out of the expressive roles played by truth and falsity. As was pointed out to us by Hartry Field and an anonymous referee, disquotationalists can allow truth and falsity to play explanatory roles, so long as those roles fall out of their expressive roles. We would like to thank both Field and the anonymous referee for suggesting that we make this distinction.
  - <sup>19</sup> i.e.,  $\alpha \rightarrow \sim \alpha \vdash \alpha$ .
- <sup>20</sup> We should note that Elke Brendel [7] gives an argument against disquotationalism based on the liar. Brendel's argument is very similar to Simmons', except that Brendel ignores the possibility of dialetheic disquotationalism. Brendel considers "glut theories"

in passing, but seems to have in mind only the sort of non-dialetheic glut theories of, e.g., Rescher and Brandom [22].

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#### REFERENCES

- 1. Armour-Garb, B. and Beall, J. C.: Semantic Spandrels: The Case for Dialetheism, to appear (2001).
- Armour-Garb, B. and Beall, J. C.: Should deflationists be dialetheists?, to appear (2001).
- 3. Beall, J. C. and Restall, G.: Logical pluralism, *Australas. J. Philos.* **78** (2000), 475–493.
- 4. Belnap, N. and Gupta, A.: The Revision Theory of Truth., MIT Press, 1993.
- 5. Belnap, N. D.: How a computer should think, in G. Ryle (ed.), *Contemporary Aspects of Philosophy*, Oriel Press, 1977.
- 6. Belnap, N. D.: A useful four-valued logic, in J. Michael Dunn and G. Epstein (eds), *Modern Uses of Multiple- Valued Logics*, D. Reidel, Dordrecht, 1977, pp. 8–37.
- 7. Brendel, E.: Circularity and the debate between deflationist and substantive theories of truth, in A. Chapuis and A. Gupta (eds), *Circularity, Definition and Truth*, Indian Council of Philosophical Research, New Delhi, 2000, pp. 29–47.
- 8. Brown, B.: Yes, Virginia, there really are paraconsistent logics, *J. Philos. Logic* **28**(5) (1999), 489–500.
- Chapuis, A. and Gupta, A. (eds): Circularity, Definition and Truth, Indian Council of Philosophical Research, New Delhi, 2000.
- David, M.: Correspondence and Disquotation, Oxford University Press, Oxford, 1994.
- 11. Field, H.: The deflationary conception of truth, in G. MacDonald and C. Wright (eds), *Fact, Science, and Morality: Essays on A. J. Ayer's Language, Truth and Logic'*, Basil Blackwell, Oxford, 1986, pp. 55–117.
- 12. Field, H.: Deflationist views of meaning and content, *Mind*, **103** (1994), 249–285.
- Gould, S. J. and Lewontin, R. C.: The spandrels of San Marco and the Panglossian paradigm: A critique of the adaptationist programme, *Proc. Roy. Soc. London* 205 (1978), 581–598.
- 14. Horwich, P.: The minimalist conception of truth, in S. Blackburn and K. Simmons (eds), *Truth*, Oxford University Press, Oxford, 1999, pp. 239–263.
- 15. Kripke, S.: Outline of a theory of truth, J. Philos. **72** (1975), 690–716.
- 16. Leeds, S.: Theories of reference and truth, Erkenntnis, 13 (1978), 111–129.
- 17. Priest, G.: In Contradiction: A Study of the Transconsistent, Martinus Nijhoff, The Hague, 1987.
- Priest, G.: Paraconsistent logic, in D. M. Gabbay and F. Günthner (eds), Handbook of Philosophical Logic, 2nd edn, Vol. 3, D. Reidel, Dordrecht, 200+, forthcoming.
- 19. Priest, G.: Truth and contradiction, *Philos. Quart.* **50**(200) (2000), 305–319.
- Van Orman Quine, W.: Philosophy of Logic, Prentice-Hall, Englewood Cliffs, NJ, 1970.

- 21. Van Orman Quine, W.: *Quiddities*, Belknap Press of Harvard University Press, Cambridge, MA, 1987.
- 22. Rescher, N. and Brandom, R.: *The Logic of Inconsistency*, Rowman and Littlefield, Totowa, NJ, 1979.
- 23. Resnik, M.: Immanent truth, *Mind* **99** (1990), 405–424.
- 24. Resnik, M.: Mathematics as a Science of Patterns, Clarendon Press, Oxford, 1997.
- 25. Restall, G.: Ways things can't be, Notre Dame J. Formal Logic 39 (1997), 583–596.
- 26. Restall, G.: Negation in relevant logics: How I stopped worrying and learned to love the Routley star, In D. Gabbay and H. Wansing (eds), *What is Negation?*, Appl. Logic Series 13, Kluwer Academic Publishers, 1999, pp. 53–76.
- 27. Simmons. K.: Deflationary truth and the liar, J. Philos. Logic 28(5) (1999), 455–488.

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