DISCUSSIONS

FURTHER REMARKS ON TRUTH
AND CONTRADICTION

By Bradley Armour-Garb and JC Beall

We address an issue recently discussed by Graham Priest: whether the very nature of truth (understood as in correspondence theories) rules out true contradictions, and hence whether a correspondence-theoretic notion of truth rules against dialetheism. We argue that, notwithstanding appearances to the contrary, objections from within the correspondence theory do not stand in the way of dialetheism. We close by highlighting, but not attempting to resolve, two further challenges for dialetheism which arise out of familiar philosophical theorizing about truth.

I. INTRODUCTION

Dialetheists, like Graham Priest and ourselves, believe that some truths have true negations. Given that a conjunction is true if and only if each of its conjuncts is true, dialetheism is equivalent to the thesis that some contradictions are true, where contradictions are of the form $\alpha \wedge \neg\alpha$, where α is a truth-bearer and $\neg\alpha$ is its negation.

For the most part, arguments for dialetheism arise from familiar paradoxes, including, for example, the Liar paradox – the apparent existence of some α such that α is (apparently) equivalent to its own negation. (The English expression 'This expression is false', where 'this expression' may be used to denote the English sentence quoted in this parenthetical remark, when used in certain contexts appears to be equivalent to its own negation.) By our lights, the dialetheist response to such paradoxes is not only simpler than its rivals but also the most natural response, at least if one believes, as we do, that English, as Tarski said, is *semantically universal*:

> A characteristic feature of colloquial language (in contrast to various scientific languages) is its universality. It would not be in harmony with the spirit of this language if in some other language a word occurred which could not be translated into it;

it could be claimed that 'if we can speak meaningfully about anything at all, we can also speak about it in colloquial language'.[1]

Along the same line, Tarski comments on the voracious appetite of natural language, an appetite that ensures its apparent universality:

> The common language is universal and is intended to be so. It is supposed to provide adequate facilities for expressing everything that can be expressed at all, in any language whatsoever; it is continually expanding to satisfy this requirement.[2]

Admittedly, this semantic universality is little more than a *prima facie* appearance: the thesis rests on little more than 'intuitive data' about English. In philosophical semantics, however, such *prima facie* linguistic data are important: the appearances form both the starting-point and the object of study. The aim of philosophical semantics, at least as we construe it, is to systematize the data into a precise (ideally, a formal) theory, while preserving the appearances as much as is reasonably possible. This understanding of philosophical semantics we think is fairly standard; it seems, e.g., to be precisely what Bill Lycan takes it to be.[3] We believe that dialetheism, more than any of its rivals, succeeds in this task, at least with respect to the given paradoxical phenomena. (We should make it plain that we do not think that dialetheism affords a reasonable theory of vague or sorites-type phenomena. This limitation, however, does not undermine the success of dialetheism with respect to other paradoxical phenomena; it indicates only that further approaches are required to give a full theory of English, or of natural languages generally.) Of course the apparent universality of English is not necessary for dialetheism; another apparent datum suffices, namely, that English can express its own semantics. If English can express its own semantics, then, as is familiar, English gives rise to paradox, and dialetheism, we think, is the best available approach to such paradox.

In this paper, however, we do not advance arguments for dialetheism. Our concern here is an issue discussed recently by Priest.[4] The issue is whether the very nature (if any) of truth rules out true contradictions – and hence whether the very nature of truth rules against dialetheism. Priest argues that none of the current theories of truth rules out dialetheism. We agree with his conclusion; however, we think that in the case of the correspondence theory there are outstanding issues to be addressed. Moreover, in so far as the correspondence theory appears to be the dominant theory of truth among philosophers, if it rules out dialetheism, so much the worse for dialetheism.

The paper is structured as follows. We focus entirely on the issue of dialetheism and correspondence truth. In §II, we briefly rehearse Priest's remarks about the correspondence theory, and then we discuss issues not discussed by Priest. Our hope in all of this is to clarify dialetheism further, and to fend off worries that may

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[1] A. Tarski, *Logic, Semantics, Metamathematics: Papers from 1923 to 1938*, tr. J.H. Woodger (Oxford: Clarendon Press, 1956), p. 164.

[2] Tarski, 'Truth and Proof', *Scientific American*, 220 (1969), pp. 63–77, at p. 89.

[3] W.G. Lycan, *Philosophy of Language* (London: Routledge, 2000).

[4] G. Priest, 'Truth and Contradiction', *The Philosophical Quarterly*, 50 (2000), pp. 305–19; references to Priest's claims, arguments, etc., are to this article unless otherwise indicated.

naturally arise in response to Priest's own discussion. Indeed, our reasons for attempting this clarification arise mostly from (unpublished) discussion with various philosophers (on various occasions).[5] §III closes by pointing to other issues that are worth considering, but that take us beyond the topic of this paper – the compatibility of dialetheism and the correspondence theory of truth.

II. CORRESPONDENCE AND TRUE CONTRADICTIONS

Priest's guiding concern, with respect to correspondence theories of truth, is whether there is anything in the nature of truth (as understood in correspondence theories) which rules out the existence of true contradictions.

As he points out (p. 314), the correspondence theory may seem to be the most resistant to dialetheism:

> [Correspondence truth] puts up the stiffest resistance psychologically to the idea that there might be true contradictions. For it entails that reality itself is inconsistent in a certain sense; and how could that be? Reality is all there together; how could parts of it possibly contradict other parts?

Priest proceeds to address this concern by providing a formal model of how reality might be inconsistent. The model invokes negative and positive facts, each distinguished by a so-called *polarity*. We shall not rehearse the details of this model.[6] The important point comes to this: if correspondence theorists are willing to swallow negative facts, then correspondence truth provides no obstacle to dialetheism. So goes Priest's main conclusion, with which we generally agree.

What we wish to discuss, however, is a further concern which, though not addressed by Priest, strongly suggests the incompatibility of dialetheism and correspondence truth. By responding to the concern, we hope to clarify further both dialetheism and, in particular, any would-be dialetheist correspondence theory. We shall frame the concern as an objection, and then reply to the objection in turn.

II.1. *Objection*

It is one thing to accept that truth-bearers may be both true and false, where, as on Priest's model, truth and falsity are independent properties that may both apply to the same truth-bearer. Accepting just this much, however, is far from all that a would-be dialetheist correspondence theorist must accept. Such a correspondence theorist will also be committed to the claim that the strengthened Liar, $\lambda = $ 'λ is not true', corresponds to one and the same state of affairs, and that *that state of affairs both obtains and fails to obtain.* But this is impossible – no state of affairs *both* obtains *and* does not obtain. Hence the correspondence theorist cannot accommodate dialetheism, contrary to Priest's discussion.

[6] For discussion, see Priest, pp. 315ff.; and for further discussion, Beall, 'On Truthmakers for Negative Facts', *Australasian Journal of Philosophy*, 78 (2000), pp. 264–8.

II.2. *Reply*

Let *s* be some state of affairs. The objection assumes that correspondence theorists can accept dialetheism only if they reject the *impossibility* of *s*'s both obtaining and failing to obtain. (We apologize for the double negative 'rejects the impossibility'. In the current context, however, this way of putting the matter is less misleading than others, as will be made clearer below.) But that assumption is incorrect, and it is illuminating to see why.

To begin with, suppose we assume, according to the objection, that the correspondence theorist is committed to the claim that it is impossible for *s* to obtain and fail to obtain, for any state of affairs *s*. Contrary to the objection, this impossibility does not stand in the way of dialetheism. Dialetheists likewise accept that, for any *s*, it is impossible for *s* to obtain and fail to obtain. However, dialetheists accept more: they also accept that, for some *s*, it is possible that *s* may both obtain and fail to obtain – it is *both* possible *and* impossible! This may *sound* crazy, at least initially, but in the end it is part and parcel of dialetheism (at least as practised by known dialetheists).

An example might help. Dialetheists agree that α and $\neg\alpha$ are contradictories, and, accordingly, that it is impossible for both α and $\neg\alpha$ to be true. To make this clearer, we shall write '$\neg\Diamond$' for 'it is impossible that ... '. Then dialetheists (or at least all known dialetheists) accept

LNC. $\neg\Diamond(\alpha \wedge \neg\alpha)$.

That (LNC) is true falls out of standard truths about negation and conjunction (and de Morgan principles, generally); this is why dialetheists accept (LNC), for *all* truth-bearers α.

It may appear that (LNC) does not sit well with dialetheism, since dialetheists hold that some contradictions are actually (and thus possibly) true. If, in addition to accepting its truth, dialetheists also rejected the falsity of (LNC), then dialetheism would indeed be untenable. Dialetheists, however, accept that (LNC) is both true and false – that (LNC) is itself a dialetheia. For, according to dialetheism, falsity is truth of negation: that is, $F[\alpha] \leftrightarrow T[\neg\alpha]$.

So, by accepting that (LNC) is both true and false, the dialetheist accepts both (LNC) and its negation, i.e.,

   $\neg\neg\Diamond(\alpha \wedge \neg\alpha)$

which, given standard clauses for negation, is equivalent to

   $\Diamond(\alpha \wedge \neg\alpha)$.

Hence, by conjunction-introduction, the dialetheist accepts

   $\neg\Diamond(\alpha \wedge \neg\alpha) \wedge \Diamond(\alpha \wedge \neg\alpha)$.

Is this incoherent? It is no less coherent than dialetheism itself; for to accept (LNC) and its negation is just to accept another pair of contradictory statements. The only difference between accepting this contradiction and accepting, say, the

conjunction of the Liar and its negation is that the former involves the possibility operator. But if, as we are assuming, it makes sense to accept α and ¬α for *some* ◇-free α, how can it be nonsensical to accept the ◇-ful correlate? It cannot be; and, for that reason, in so far as dialetheism is coherent (and we assume that it is), it is coherent to take the conjunction of (LNC) and its negation to be true.

So there appears to be nothing in dialetheism *per se* to rule out the case in which something is both possible and impossible. To return, however, to the objection above, the nub of the objection is that dialetheists are forced to declare as possible something that is clearly impossible. Now, in so far as dialetheists can affirm

$$\neg\Diamond(\beta \wedge \neg\beta) \wedge \Diamond(\beta \wedge \neg\beta)$$

for some β, it would seem that they are in a position to accept *both* the possibility *and* the impossibility of *s*'s both obtaining and failing to obtain, for some state of affairs *s*. At least there is nothing in dialetheism to rule this out. Hence dialetheists can agree with the objector that it is indeed impossible for a state of affairs both to obtain and to fail to do so; but dialetheists, unlike the objector, will add that such a situation is also possible. In fact, if they are also correspondence theorists, dialetheists will take such a situation to be actual: the state of affairs in which λ is both true and false, and thus true and not true, is a prime example.

Although we believe that this adequately answers the objection, we fear that the objector might not be satisfied, feeling that we have made it no easier to see how it could be that one and the same state of affairs both obtains and fails to obtain. We think that this worry might rest on a mistake. In what follows, we try to allay the worry and reveal the mistake.

To begin with, correspondence theorists need not hold that for *every* state of affairs *s* it is possible that *s* both obtains and fails to do so.[7] If they accept dialetheism, it is likely to be with respect to claims such as λ. Now let s_λ be the state of affairs corresponding to λ. What is important to note is that there is nothing more to understand (or 'see') about s_λ's obtaining and not obtaining than that λ is both true and false. Hence anyone who focuses on states of affairs corresponding to dialetheias such as λ will be able to see that no more is required to understand dialetheism given the correspondence theory than is required to understand dialetheism without it. (Perhaps the objector will claim not to understand dialetheism either. That may be, but the coherence of dialetheism is not at issue here.)

Our hunch is that the difficulty in seeing how a state of affairs could both obtain and fail to do so involves the mistake of trying to imagine *observable* states of affairs both obtaining and failing to do so – e.g., the journal's being here in front of you and its not being here in front of you. For what it is worth, we cannot imagine such states of affairs both obtaining and failing to obtain, either. Priest argues that

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[7] On Priest's usual *LP* semantics, one is led to this logical possibility: see Priest, 'The Logic of Paradox', *Journal of Philosophical Logic*, 8 (1979), pp. 219–41, and *In Contradiction: a Study of the Transconsistent* (The Hague: Nijhoff, 1987). However, there are alternative semantics available, where the class of claims that may be inconsistent are restricted in certain ways, and in particular to *unobservable* sentences: see, e.g., Armour-Garb and Beall, *To Be and Not To Be: Linguistic Spandrels and the Natural Inconsistency of Language*, forthcoming, 2001.

so-called impossible pictures (à la Escher, et al.) provide us with a clear understanding of what observable contradictions would look like, were there any such beasts.[8] We disagree with Priest on this issue; however, we shall not pursue the matter here. Perhaps we should emphasize that Priest agrees with us that there are no observable true contradictions; the disagreement comes over whether there are strong grounds for admitting even the possibility of such things.[9]

But observable states of affairs are not proper candidates for true contradictions. Accordingly, the fact that you cannot imagine what it would be like for them both to obtain and not to obtain should not lead you to conclude that you cannot understand what it would be like for s_λ, or similar paradoxical states of affairs, both to obtain and not to obtain. As mentioned above, to imagine *this* requires nothing more than is needed to grasp dialetheism: the combination of dialetheism and the correspondence theory is no less coherent than dialetheism itself.

II.3. *Objection*

Suppose a given proposition – a contradiction, perhaps – is impossible. One might think that it could not then be possible. Not so, we argue: that would follow only if (LNC) were true (i.e., true only), but it is not – it is both true and false. Hence this given proposition which is impossible is also possible; its impossibility does not impugn its possibility.

But there could be an even more extreme view, to be called *trivialism*, the view that every proposition is true. One might think that proving a given proposition to be false could refute trivialism. This is not so. Using the same strategy as we employ, trivialists could immunize themselves (in Popper's sense) by claiming that the given proposition that was proved to be false is also true – its falsity does not impugn its truth.

Most (if not all) dialetheists reject trivialism. But if we reject trivialism, we must reject the trivialist's use of this immunizing move. How can we do so, given that we use precisely the same move in our argument for the compatibility of dialetheism with the correspondence theory? Indeed, how could we argue, as we must, that this immunizing move is more noxious in this case than it is in our argument for the aforementioned compatibility? It seems we cannot; and for this reason, given the strategy that we employ, dialetheism threatens to degenerate into trivialism. If this is the price to pay for a reconciliation of dialetheism and the correspondence theory, then the costs of reconciliation are far too great.[10]

II.4. *Reply*

The foregoing objection attempts to undermine our response to the previous objection by showing that the strategy we employed there could also be employed to defend trivialism, a view which we most assuredly do not wish to defend. If our use

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[8] Priest, 'Perceiving Contradictions', *Australasian Journal of Philosophy*, 77 (1999), pp. 439–46.
[9] Related discussion of this issue is given in Beall, 'Is the Observable World Consistent?', *Australasian Journal of Philosophy*, 78 (2000), pp. 113–18.
[10] We would like to thank an anonymous referee for raising this objection.

of the strategy was legitimate, then how can we block its use in a defence of trivialism? If we cannot block this use of it, how can we stop dialetheism from degenerating into trivialism?

Our answer is simple: as far as we can tell, the strategy is no more noxious as employed to defend trivialism than it is as employed to defend the compatibility of dialetheism with the correspondence theory. Moreover, we think that if it can be used to defend trivialism, then dialetheism does indeed threaten to degenerate into what we take to be a wildly implausible view. Nevertheless, as we shall show, dialetheists ought not to be worried by the threat of trivialism.

In this paper we have been arguing for the compatibility of dialetheism and the correspondence theory. The objection levelled above, if successful, establishes only that the strategy we use to argue for this compatibility can also be used to defend trivialism. Hence if this strategy is effective it follows that, given dialetheism, trivialism is possible; that is, it follows that dialetheism is compatible with trivialism. We agree: dialetheism is compatible with trivialism, but this should not bother the dialetheist. (The correspondence theory is also compatible with trivialism, but that does not provide the correspondence theorist with reason to worry.)

The reason why this should not bother the dialetheist is that, although the strategy at issue commands the trivialist to counter every proof that a given proposition is false with the claim that it is also true, trivialism cannot be established as correct unless, in each case, the relevant truth ascription can be substantiated. We think that it is highly unlikely that the trivialist will be able to achieve this. So although the strategy of establishing as true each proposition proved false is available to the trivialist in principle, this should not worry the dialetheist, for there is no reason to think that its employment will be successful. Hence there is no reason to think that the fact that the present strategy is available to the trivialist undermines the use to which we have put it.

In this paper we are supposing that there is good reason to endorse the correspondence theory and that there is good reason to endorse dialetheism. Our goal is to enquire into their compatibility. If we have good reason to suppose the correspondence theory to be correct, then we have good reason to hold that the proposition that a given state of affairs both obtains and fails to do so is impossible. Likewise, if we have good reason to endorse dialetheism with respect to claims such as λ, then we also have good reason to think that the proposition that some state of affairs both obtains and fails to do so is possible. Hence, given our supposition, we have good reason for holding that there is a proposition that is both possible and impossible. Our argument does not rely only on the assumption that the impossibility of a given proposition does not impugn its possibility; it relies as well on the supposition that we have good reason to accept both the possibility and the impossibility of that proposition. Therein lies the disanalogy with the case of trivialism. Accordingly, while the strategy we use could indeed be used to establish trivialism, this in no way threatens our argument for the compatibility of dialetheism and the correspondence theory.

III. FURTHER ISSUES

In this paper we have tried to address a few important issues concerning the cohesion of dialetheism with one of the leading theories of truth, issues which were not addressed in Priest's recent discussion of the topic and which might be (and in conversation have been) raised in response to that discussion. We have argued that the objections from within the correspondence theory do not stand in the way of dialetheism. In this way, we have supported Priest's own conclusion, with which we generally agree.

In closing, we wish to highlight two further issues which are both philosophically interesting and particularly relevant to the current topic. We do not here attempt to resolve the following issues; we merely aim to indicate directions of future work.

III.1. *Supervenience of truth upon non-truth*

Many have the intuition, perhaps arising from semantic naturalism, perhaps arising from other commitments, that all truths supervene (in some sense) on non-semantic facts, states of affairs, etc. Regardless of the details (e.g., of the nature of supervenience, of facts, etc.), one thing seems plain: if any such 'supervenience intuition' essentially underwrites a given theory of truth, then dialetheism will be at odds with that theory. After all, the key (and, by our lights, the only) candidates for true contradictions are semantically paradoxical sentences – each one of which is ungrounded, or otherwise irreducibly *semantic*.[11] One challenge for dialetheists, then, is to argue against the 'supervenience intuition'.

III.2. *Circular truth*

Given dialetheism, there are some truth-bearers, e.g., λ, for which there is no non-circular reductive analysis of 'true'. Any definition of 'true' will have variables ranging over truth-bearers. If dialetheism is accepted, then some of these truth-bearers will contain ineliminable occurrences of 'true' – again λ is an instructive example. Accordingly, dialetheism, if accepted, commits one to the impossibility of a non-circular definition of truth, that is, a definition which affords elimination of 'true' by paraphrase from every context in which it can grammatically occur. For those truth theorists according to whom truth may be given a non-circular 'strict' definition, dialetheism will be problematic and otherwise unattractive.

One challenge for dialetheists, then, is to argue against any attempt at a non-circular definition of 'true'. As with the 'supervenience' issue, we shall not pursue the matter here, except to note just this: it seems that, given the grammar of English (or other natural languages), once a truth-predicate is introduced into the language, it will be exceedingly difficult to avoid having sentences involving ineliminable occurrences of 'true', and in particular ungrounded and paradoxical sentences of

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[11] There might be an exception here. We are inclined to think that naïve set theory may well be true, provided that it is non-trivial. Given Russell's paradox, naïve set theory will be inconsistent, though it is not clear that its truth will 'rest upon' *semantic* facts.

this kind. (A classic example of this phenomenon is evident in Kripke's construction,[12] in which ungrounded *and* paradoxical sentences emerge; they emerge unintentionally, as it were, but they always emerge none the less, once 'true' is introduced.) If this is correct, then the quest for a non-circular definition of 'true' may prove to be futile.[13]

Wolfson College, Oxford, & University of Connecticut

[12] See S. Kripke, 'Outline of a Theory of Truth', *Journal of Philosophy*, 72 (1975), pp. 690–716.
[13] For relevant work on circular definitions of truth (and circular definition generally), and further discussion of the apparent inevitability of ineliminable occurrences of 'true', see N. Belnap and A. Gupta, *The Revision Theory of Truth* (MIT Press, 1993); and A. Chiapus and A. Gupta (eds), *Circularity, Definition and Truth* (New Delhi: Indian Council of Philosophical Research, 2000).