

# WHAT IS THIS THING CALLED DIALETHEISM?

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**Abstract.** This paper has two parts. In the first I discuss two claims made by Priest in *Some Comments and Replies* (2019a): (i) that the idea of ‘contradictions in reality’ lacks textual support in his work, and (ii) that such contradictions would require a theory of truth as correspondence with entities such as facts or states of affairs. With respect to (i), I will recognize that, after a closer reading of his texts, in particular *In Contradiction* (2nd edition, OUP, 2006), I have not been able to find clear examples of dialetheias related to real contradictions. As far as I could see, for Priest, dialetheism is mainly a thesis about our conceptual framework and mental processes. As for (ii), in opposition to him, I will argue that all we need to make sense of the idea of contradictions in reality is the apparatus provided by Tarski’s definition of truth, and an object  $a$  and a predicate  $P$  such that  $a$  satisfies both  $P$  and  $\neg P$ . In the second part, I discuss what one must accept to be a dialetheist and what is required for dialetheism to be a plausible and interesting thesis. My conclusion is that dialetheism ends up being either a strong but implausible thesis about contradictions in extra-mental and extra-linguistic phenomena, or a weaker but interesting claim about contradictions produced by thought and language.

**Keywords:** contradictions • negations • paraconsistency • dialetheism

RECEIVED: 02/09/2023

REVISED: 23/02/2025

ACCEPTED: 02/04/2025

## 1. Introduction

The validity of the principle of explosion in classical logic is the result of taking preservation of truth not only as a necessary but also as a sufficient condition for logical consequence.  $A, \neg A \vdash B$  is valid because there is no circumstance in which  $A$  and  $\neg A$  are true and the conclusion  $B$  is false, and this is so because  $A$  and  $\neg A$  cannot be both true.

In order to make explosion invalid, we need a model in a formal semantics such that  $A$  and  $\neg A$  hold in it but  $B$  does not hold. There is no difficulty in providing a semantics with such a model, for there are a variety of semantics for paraconsistent logics available in the literature. The problem, rather, is to intuitively interpret such a model – that is, to answer the question: what does it mean to say that there is a circumstance in which a pair of sentences  $A$  and  $\neg A$  both hold? The dialetheist answer



to this question is that there are circumstances in which a pair of sentences  $A$  and  $\neg A$  are both *true*. In Priest's words:

A dialetheia is a pair of sentences (or their conjunction, if you like) of the form  $A$  and  $\neg A$ , such that both are true. ... Dialetheism is the claim that some  $A$ s are dialetheias. (Priest 2019a, pp.588–589).

In Carnielli and Rodrigues (2017, p.3790) (see also Carnielli and Rodrigues 2019, Sect.9.8, and 2020, Sect. 4) it has been claimed that dialetheism requires the existence of contradictions in reality and so it is an ontological approach to paraconsistency. Priest in (2019a, pp.588ff.) rejected these claims, arguing that: (i) they lack textual support in his work, and (ii) contradictions in reality demand a theory of truth as correspondence with entities like facts and states of affairs, but dialetheism is not committed to a specific view of truth, in particular truth as correspondence.

This paper has two main parts and is structured as follows. The first part (Sections 2 and 3) is more exegetical and concerned with items (i) and (ii) above respectively. Section 2 discusses Priest's views on dialetheism based on a careful (but not exhaustive) reading of some of his texts, mainly the relevant chapters of *In Contradiction* (Priest 2006a)). I acknowledge that I have not found explicit examples of contradictions in reality, although there are passages that suggest that there are dialetheias of this kind (real contradictions). In Section 3, I argue that a theory of correspondence based on fact-like entities is not at all necessary in order to make sense of real contradictions, all we need is the apparatus provided by Tarski's definition of truth. The second part, Section 4, is mainly concerned to what it takes for dialetheism to be a plausible and interesting thesis at all. There I argue, with the help of the distinction proposed by Azzouni (2004) between ontologically dependent and independent entities, that dialetheism ends up being either a strong, but implausible, thesis about contradictions in reality, or a weaker, but rather interesting, claim about contradictions produced by thought and language. The paper ends with some brief remarks on dialetheism and the logics of evidence and truth, proposed in Carnielli and Rodrigues (2017) as a non-dialetheist approach to paraconsistency.

## 2. On Priest on real contradictions

Let me start with the objections raised by Priest in (2019a, p.588–589) to the claim that dialetheism requires real contradictions and is an ontological approach to paraconsistency. I will number the quotations for ease of reference.

- (1) [T]hey [Carnielli and I] attribute to me views about dialetheism which I do not hold.

[Fn. 56:] In fairness to them, these are views I hear not infrequently. I have no idea why this is so, since the views are without textual support; indeed, they are against textual support.

[Dialetheism] is not committed to any particular view of truth. ...

It is therefore mistaken to claim that “the dialetheist claims that some contradictions are ontological in the sense that they are due to some ‘inner contradictory essence of reality’”.

Indeed, as IC2, 20.6 [*In Contradiction 2nd ed.*, (2006a)] points out, it is not even clear that the claim that there are contradictions, in reality, makes sense. For it to do so, one has to endorse some kind of correspondence theory of truth, holding reality to comprise facts or fact-like entities. [suppressed footnote] I have never endorsed such a view.

Priest in (1) is referring to the following passage of Carnielli & Rodrigues (2017, p.3790):

- (2) The dialetheist claims that some contradictions are ontological in the sense that they are due to some ‘inner contradictory essence of reality’ — or in other words, that reality, in order to be correctly described, demands pairs of contradictory propositions.<sup>1</sup>

First of all, let me say that the phrase ‘inner contradictory essence of reality’ between quotes in (2) were meant to express a bit of irony, not to quote from Priest. I believed then, and still believe now, after a more careful reading of Priest, that dialetheism cannot be a substantial philosophical thesis unless there is something in reality that makes true a true contradiction.

I always understood dialetheism as committed with real contradictions, and of course I am not alone, as Priest acknowledges in (1). Dialetheism is widely understood as a thesis about contradictions/inconsistencies in reality/the world — see e.g. Bates (2002, p.138), Dunn (2000, p.6), Dunn and Kiefer (2019, p.232), da Costa et al. (2007, p.900), da Costa and French (2003, p.106), Frapolli (1996, p.438), Garfield (2004, p.237), Mares (2004, p.265), Meheus (2002, p.viii), Odintsov and Wansing (2016, p.180), Steinberger (2016, fn.2). But why is dialetheism understood in this way, if Priest claims that this is against textual support?

First, because reading a text, in particular a philosophical text, involves a principle of charity, which means that the reader should try to make the best possible sense of the text. In the standard philosophical vocabulary, something is said to be ontological when it belongs to, or has to do with, reality. That the truth of a sentence depends on reality is a sort of philosophical platitude. So it seems natural to say that dialetheism is an ontological view of paraconsistency, otherwise dialetheism would be an empty

claim about true sentences whose truth is not grounded in reality.

Second, at first glance, this understanding does not really seem to be without textual support, as the following passages show:

- (3) [Cases of dialetheias] involve contradictions affecting concrete objects and the empirical world (Priest et al. 2018, Sect.3.4).

[I]t is now time to look at contradictions that arise in more concrete realms, and especially the empirical world (Priest 2006a, p.159).

[I]f we are realists, we will let our best theory, provided that it is not ruled out as a candidate for truth on other grounds, inform us as to what reality is like; and if our theory is inconsistent, there is no reason to suppose that the theory does not get it right: reality itself is inconsistent (Priest 2006b, p.149).

In Priest et al. (2018, Sect.3.4) the cases of dialetheias include transition states, Zeno's paradoxes, vague and multi-criterial predicates, and in Priest (2006a, p.159ff.) he proceeds with an analysis of change and motion.

Given passages such as these, combined with the well-known attacks on Aristotle's arguments in defense of the law of non-contradiction (see e.g. Priest 2006b, Ch.1), it is not surprising that a reader (myself included) would assume that Priest accepts contradictions in reality. A closer reading, however, shows that the issue is more complex. Priest's rhetoric is somewhat slippery, so to speak, and there are passages, in spite of the passages quotes above, in which he rejects such ontological commitments. In what follows I will discuss some passages with the aim of bringing to light Priest's views on dialetheism.

## 2.1. Back to data mining

As far as I know, the place where we find the most thorough presentation and defense of dialetheism is the second edition of *In Contradiction* (2006a), and the most of the quotes below are from that book. However, I begin with another text, (Priest 2008), where Batens asks Priest whether contradictions stem from properties of nature or properties of humans. The answer is:

- (4) Any statement is part of a language; and language, with its meaning, is a human product. But statements describe reality; and, in general, if they are true, they are so in virtue of that reality as well. Hence, any truth is liable to be a product of both of these factors. Dialetheias are no different in this regard. Of course, the reality which a language describes may itself be a human product, but often it is not. Thus, natural objects, such as a planet, are not. If a natural object in motion generates dialetheias, as I hold, then the truth of these will be

partly a function of a human product (language and its meanings), and partly a function of nature and its doings (Priest 2008, p.2).

To what extent the truth of a contradiction is a ‘function of nature’ is open to at least two readings (the quotation above illustrates why I said Priest’s rhetoric is slippery). The first (a somewhat Kantian reading) would say that reality just ‘affects’ the human mind in the sense that it puts thought and language to work, but dialetheias are produced by language, our conceptual framework and mental processes.<sup>2</sup> In this case, there is not much to say about contradictions in reality. Let us call this reading, just for convenience, the *anti-realist* reading. A second reading may be that nature, that is, reality, in particular extra-linguistic and extra-mental phenomena, has contradictory features and as a consequence it has to be described by means of some contradictions. This I will call the *realist* reading.

The first pages of the first edition of *In Contradiction* (1987) suggest the anti-realist view:

- (5) [O]ur conceptual net, or the set of meaning connections of our language, produces dialetheias ...

The only point that I wish to isolate and highlight is Hegel’s contention that our concepts are contradictory, that there are true contradictions. The notion of true contradiction is at the heart of this book. ...

It is the main claim of this book that Hegel was right: our concepts, or some of them anyway, are inconsistent, and produce dialetheias (Priest 2006a, p.4).

Almost twenty years separate the above quote and the following one, from the expanded edition of *In Contradiction* (2006). There, in Section 20.6, called *Contradictions in the world*, we read:

- (6) [Dialetheism] is a view about language (or language-like entities). One may therefore ask ‘does it follow that there are contradictions in the world?’ In one quite unproblematic sense it does. If something is true, there must be something that makes it so. Call this the world. ...

What it is in the world that makes something true is another matter. It might be just that our concepts have such and such a structure, or that our words have such and such a meaning. ... The contradictions of motion are due, no doubt, to our concept of motion, but there would be no contradictions unless things in the world moved. In a world where everything was frozen there would be none (Priest 2006a, p.299).

The passage above also supports the anti-realist view. We read that dialetheism “is a view about language” and that “contradictions of motion are due, no doubt, to our concept of motion”.

Priest then proceeds with a discussion of the distinction proposed by Mares between metaphysical and semantic dialetheism: the former holds that “there are things in the world that are actually inconsistent”, while the latter holds that “there are no inconsistencies in things but ... inconsistencies arise because of the relationship between language and the world”. (Mares 2004, p.265 apud Priest 2006a, p.299). Metaphysical dialetheism amounts to the realist view. Semantic dialetheism, though similar, is not identical to the anti-realist view, since the latter says nothing about “inconsistencies in things”. Priest connects metaphysical dialetheism with a theory of correspondence based on fact-like entities, but I will turn to this point in the next section. Regarding Mares’ distinction, we read:

- (7) In the truth-conditional semantics [for a paraconsistent logic], predicates have extensions and anti-extensions. If these report a structure that pre-exists in the objects (so providing not just the appropriate factual structure, but also the polarities within it), we have **2** and **3** [**2**: reality is constituted by facts and **3**; there are polarities within facts — see Section 3 below]. If, on the other hand, these are a structure that language simply imposes on them, then not. But that is an issue on which *In Contradiction* is silent (Priest 2006a, p.302).

A first-order semantics for a paraconsistent logic, like for example Belnap-Dunn logic and the logics of evidence and truth (Antunes et al. 2022; Rodrigues and Antunes 2022), assigns to each predicate letter an extension and an anti-extension. Given a unary predicate  $P$ , the objects that satisfy  $P$  belong to its extension  $P^+$ , and the objects that satisfy  $\neg P$  belong to the anti-extension  $P^-$ . The intersection between  $P^+$  and  $P^-$  may be not empty, so we have a counter-model for explosion. As I understand the quotation (7) above, taking into consideration quotes (5) and (6), Priest leaves it open only whether or not this semantics expresses a feature of reality. *In Contradiction* is not silent with respect to contradictions in language, quite the contrary.

A passage from Priest (2006b, Sect.2.7) is the clearest I have been able to find that can be understood as taking a position against real contradictions. The correspondence theory of truth is acknowledged by Priest as the one that poses more problems for dialetheism precisely because it would require contradictions in reality — which implies that the latter are a problem for dialetheism.

- (8) [The correspondence theory of truth] is the one, I think, that puts up the stiffest psychological resistance 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? ...

‘Brisbane is in Australia’ is true because it corresponds to Brisbane’s actually being in Australia. There must therefore be, in some sense, things like Brisbane’s being in Australia, call them facts or states of affairs or whatnot. A correspondence theory of truth requires an account of things of this kind.

So what are we to make of all this? First, I concede that if one does not take quotation (3) literally and goes a little deeper into Priest’s texts, there is no textual support for the realist view of dialetheism. The best conclusion I can draw from the passages above is that for Priest dialetheism is a thesis about language, our conceptual framework and mental processes: these three elements are at the origin of dialetheias (this is confirmed by the examples of dialetheias discussed in Section 4.1 below). Although he does not say so explicitly, I would say that he has no sympathy for the idea of contradictions in extra-linguistic and extra-mental phenomena. Nevertheless, I do not think that one needs entities like facts or states of affairs in order to hold the realist view. This is the point of the next section.

### 3. Making true a true contradiction

#### 3.1. On fact-like entities

In the quote (8) Priest connects the idea of contradictions in reality to a theory of truth as correspondence based on fact-like entities, as if the latter were a necessary condition for the former. This point also appears in Priest (2006a, pp.300ff.), where he presents three conditions that should be satisfied in order to make sense of Mares’ metaphysical dialetheism, which is the realist view:

- (9) 1. There is an extra-linguistic reality ...
2. Reality is constituted by facts or by fact-like entities such as objects-cum-properties ...
3. There are polarities within facts [i.e.] if  $f^+$  is a possible fact, say one that would make  $\alpha$  true, there must be a corresponding one,  $f^-$ , that would make  $\neg\alpha$  true (Priest 2006a, p.300).

Condition 1 can easily be accepted as true. Conditions 2 and 3, however, require a formal account of facts, which makes them problematic.

The notion of polarities, like Russell’s negative facts (Russell 2010), intends to explain the truth of negated sentences. The problem — which is a version of the problem of non-being that can be traced back to Parmenides — is that the world seems to be composed of positive things only. A strong notion of truth as correspondence was

brought to light again in the 1980s in the form of truthmaker theories (see e.g. Armstrong (2004), Mulligan et al. (1984), Read (2000), Rodriguez-Pereyra (2005)), but the notion of truthmaker has virtually the same problems faced by Russell's logical atomism (see e.g. Merricks 2007). Consider, for example, the true sentence:

(10) The United Kingdom is not a member of the European Union.

There is no fact in the world to which a negative sentence like (10) corresponds.<sup>3</sup> Saying that the whole world makes (10) true is not a quite satisfactory answer because the whole world trivially makes true every true sentence. Saying that the UK (as an object) is what makes (10) true is not a satisfactory answer as well, because the UK does not necessitate the contingent truth of (10).<sup>4</sup>

A polarity, which can be either 1 or 0, indicates whether the fact is a 'positive' or a 'negative' one. Consider the true sentence

(11) Portugal is a member of the European Union.

The truth (in 2023) of the sentences (11) and (10) is then explained: they correspond, respectively, to the facts

(12)  $\langle \text{is a member of EU, Portugal, 1} \rangle$ ,

(13)  $\langle \text{is a member of EU, UK, 0} \rangle$ .

The latter is a negative and the former a positive fact. In each case, the third coordinate means, respectively, that Portugal has and the UK does not have the property *a member of the European Union* (see Priest 2006b, p.51).

I am not sure whether adding polarities changes anything to the problem of the truth of negated sentences — I think it doesn't —, but in any case, this is not the point I am interested here. My point is that the conditions 2 and 3 above require too much to make sense of the claim that dialetheism requires contradictions in reality. That truth is grounded in reality does not depend on a fully worked out theory of facts, and even a correspondence view of truth is not necessarily committed with negative facts and the like.

### 3.2. Truth, Tarski, and philosophy

The notion of truth, from the point of view of philosophy, is rather problematic, to say the least. It is definitely not easy to give a substantive and plausible account of what is it that makes true sentences true. The claim that truth is grounded in reality, and thus reality is what makes a true sentence true, is a platitude — but a platitude that motivated the pursuit of a quite general account of truth as a correspondence relation between language and the world. The nature of such a relation, however, has never



been successfully explained, even though several attempts have been made. Russell's logical atomism failed, truthmaker theories failed.

In the context of analytical philosophy, it is fair to say that Tarski's approach to truth succeeded because of two main features. The first is the plausibility of T-schema. Indeed, it is not easy to object to the claim that an instance of the T-schema, like

(14) 'Aristotle is Greek' is true iff Aristotle is Greek,

is not only convincing and unproblematic but, in addition, states quite clearly what has to be the case for the corresponding sentence to be true. The second is that Tarski's approach, by taking a deflationist stance to truth, indicates that a philosophical investigation which aims at a substantive and general account of truth is doomed to failure. Indeed, there is much to be said about the truth (and falsity) of particular sentences, but not by philosophy.

Tarski's definition does not appeal to any 'metaphysical concept' (like properties, propositions, states of affairs); truth is defined in (1956a) by means of language, logic, set theory, and objects.<sup>5</sup> To overcome technical difficulties related to open formulas, Tarski defined truth in terms of satisfaction. The truth predicate is eliminated by means of a device analogous to the T-schema:

(15) 'Aristotle is Greek' is true iff the denotation of 'Aristotle' satisfies 'x is Greek'.

Putting (14) and (15) together, we get

(16) The denotation of 'Aristotle' satisfies 'x is Greek' iff Aristotle is Greek.<sup>6</sup>

Satisfaction is a semantic concept because it is intended to capture the connections between the language and the world, and for this reason the corresponding concept of truth is semantic (see Tarski (1956b, p.402; 1956a, p.252; 1944, p.345). According to Tarski, his definition of truth fits the idea of truth as correspondence to reality (see e.g. 1956a, p.153 and 1944, p.343).<sup>7</sup>

Indeed, in the literature we find the idea that both the T-schema and the satisfaction relation can be understood as a kind of correspondence. This has been pointed out by Popper, who argues that in order to explain the correspondence between sentences and reality we need a language capable of talking about both, which is the point of Tarski's move to metalanguage (Popper 1972, p.314).<sup>8</sup> Sher argues that the task of a correspondence theory of truth is to reduce truth predications, which are linguistic, to objectual predications. The left-hand side of an instance of the T-schema is a linguistic predication, that is, the attribution of the truth predicate to a sentence, and the right side is an objectual or 'worldly' predication (see Sher 1999a, pp.135–6; 1999b, p.151). There is still another argument, put forward by Kolář (1999), to the

effect that Tarski's definition can be read as a kind of correspondence. His idea is that the satisfaction relation expresses a relation between the universe of discourse and open formulas, and therefore is a correspondence relation in which objects act as truthmakers.

I agree that Tarski's definition of truth can be regarded as a account of truth as correspondence, albeit a weak one, but it is the best philosophy alone can provide: it avoids the idea that there must be some kind of isomorphism between language and reality and, therefore, does not require complex entities like facts and states of affairs; it aligns with previous attempts to provide an analysis of propositions, namely, the Aristotelian idea of 'saying something about something' (*On Interpretation*, Aristotle (1996, 17a25) and the Fregean account in terms of objects and functions (Frege 1984a; 1984b); it also removes from philosophy the task of providing a more detailed account of what makes a given sentence true. But my purpose here is not to defend Tarski's definition as a theory of truth as correspondence. My point is to show that the satisfaction relation, which is the apparatus necessary to give an account of truth, does establish a connection with the world by means of objects that satisfy open formulas.

### 3.3. Back to true contradictions

The law of non-contradiction appears in Aristotle's *Metaphysics* in three different versions (see e.g. Gottlieb 2019), but its standard formulation is given in a often quoted passage:

- (17) [T]he same attribute [property] cannot at the same time belong and not belong to the same subject [object] in the same respect Aristotle (1996, 1005<sup>b</sup> 19–20).

Proposition (17) is usually called in the literature the ontological version of non-contradiction (see e.g. Gottlieb 2019, Lukasiewicz 1971). The talk of attributes and properties can be avoided by expressing the same idea in terms of objects and formulas:

- (18) For any predicate  $P$  and any object  $a$ , it cannot be that  $a$  satisfies and does not satisfy  $P$ , at the time and in the same respect.

Aristotle also presents what is called by Gottlieb (2019) a semantic version of non-contradiction:

- (19) [C]ontradictory statements are not at the same time true (Aristotle 1996, 1011<sup>b</sup> 13).

While (18) is a quantified (second-order) version of non-contradiction, (19) above can be seen as a propositional version of non-contradiction. Note, however, that given the already mentioned Aristotle's analysis of every proposition as a saying of something about something, the semantic version collapses into the ontological. As remarked above, this analysis of the general form of a proposition is in line with Tarski's satisfaction relation.

In a paraconsistent setting, saying that an object  $a$  does not satisfy  $P$  is not the same as saying that  $a$  satisfies  $\neg P$ . So let us rewrite proposition (18) as follows:

- (20) For any predicate  $P$  and any object  $a$ , it cannot be that  $a$  satisfies  $P$  and  $a$  satisfies  $\neg P$ , at the time and in the same respect.<sup>9</sup>

A true contradiction requires an object  $a$  and a predicate  $P$  such that  $a$  satisfies both  $P$  and  $\neg P$ , thus providing a counter-example to proposition (20). The existence of such a contradictory object is a necessary condition for dialetheism.<sup>10</sup> If the contradictory object that satisfies  $P$  and  $\neg P$  is independent of thought and language, given the usage of the words 'epistemic' and 'ontological', we have an ontological approach to paraconsistency. Therefore, the realist view does not require fact-like entities, and all we need are objects, predicates, and the satisfaction relation. On the other hand, if such an object is related to thought and language, we have an epistemic approach to paraconsistency. Note, moreover, that there is nothing to prevent one from requiring fact-like entities in order to explain the truth of sentences about phenomena of thought and language.

At this point, I have addressed the two points of Priest's criticism mentioned in the Introduction. So far so good. But, as we will see in the next section, the anti-realist view introduces some subtleties that require a more refined analysis.

## 4. So, what is this thing called dialetheism?

Now I come back to the question that is the title of this paper. This question is actually twofold. On the one hand, it is about what dialetheism is for Priest. On the other hand, it is about what it takes for dialetheism to be a plausible and interesting thesis. I begin by putting some order into what we have seen here.

- I. The realist reading of dialetheism says that reality has contradictory features and as a consequence it has to be described by means of some contradictions. It is pretty much the same as Mares' metaphysical dialetheism.
- II. The anti-realist reading of dialetheism says that reality puts our conceptual framework to work, and dialetheias are produced by our linguistic and conceptual

framework when affected by reality. With a Kantian flavor, this view remains silent on whether contradictions exist in reality itself.

III. Semantic dialetheism is like the anti-realist view, except for rejecting real contradictions.

IV. The linguistic reading says that dialetheism is primarily a thesis about language, and does not take a position on whether contradictions arise from thought or from reality.

These readings are not one hundred percent exclusive, they can be combined. For example, one can hold the anti-realist view and at the same time, to a greater or lesser degree, be sympathetic to the semantic view — for example, because she believes that there is no real contradiction but cannot prove that. Let me also introduce here the distinction proposed by Azzouni (2004) between ontologically dependent and independent entities, which will be useful for the discussion that follows.

*Ontologically dependent* entities are those whose properties depend entirely on psychological processes or linguistic practices. As examples of ontologically dependent entities, we have dreams, hallucinations, feelings of love and anger, laws, fictional characters, etc. I add to this list self-referential sentences.

*Ontologically independent* entities are those whose properties do not depend on such processes or practices, but only on the extra-linguistic and extramental reality. Such entities are objects like people, animals, planets, etc.

#### 4.1. On Priest on dialetheias

So what are we to make of all this? First, let us recall what has been said about Priest's dialetheism in Section 2.

If one does not take the talk about “contradictions affecting concrete objects” and “contradictions in the empirical world” in the quote (3) at face value, and digs a little deeper into Priest's texts, one finds (somewhat surprisingly, I think) that, despite the mention of concrete objects and the empirical world, there is not only no textual support for the realist view, but he actually shows no sympathy for it, even though he does not explicitly reject it. In (6) and (4) Priest says that dialetheism is about language, but he does not espouse the linguistic view. That dialetheism is not primarily a thesis about language is supported by his remark in the more recent paper (Priest 2019b, p.48), where we read that dialetheism “is a quite general metaphysical/semantic view about truth and negation”. I understand that dialetheias are thus originated in our conceptual framework and mental processes. Therefore, as far as I

can see, among the four views listed above, the one that best fits the passages quoted here is the anti-realist view.

Now, what about the dialetheias acknowledged by Priest? How do they fit into Azzouni's distinction? I cannot provide a detailed and exhaustive analysis of Priest's work here, but if I am right in saying that he holds the anti-realist view and rejects the realist view, then dialetheias would be phenomena restricted to thought and language, and thus ontologically dependent. This seems to be in line with the examples of dialetheias given by him.

To start, it is fair to say that both the Liar and Russell's paradox, typical examples of dialetheias, stem from language and thought, and thus are ontologically dependent dialetheias.

The pre-theoretical concept of set suggests that to any predicate  $P$  corresponds a set whose members are exactly the entities that satisfy  $P$ . This idea is expressed by the so-called naive comprehension schema, from which a contradiction can be proved in a few steps. This result should not be a surprise, however, if we recall that the negation of the instance of the comprehension schema that yields the paradox, viz.,

$$(21) \quad \neg \exists y \forall x (x \in y \leftrightarrow x \notin x),$$

is a theorem of classical first-order logic. In any case, without the *concept* of a set of all sets that are not members of themselves — a set, by the way, that does not exist — there is no paradox. The contradiction, thus, is ontologically dependent.

The Liar paradox can be formally represented in a theory that contains the truth predicate, the T-schema, and enough mathematics to prove the diagonal lemma:

$$(22) \quad \text{Let } P \text{ be a predicate with just } x \text{ free; then there is a sentence } S \text{ such that } S \text{ is provably equivalent to } P(\#S),$$

where  $\#S$  is the Gödel number (that is, a name) of  $S$ , so the sentence  $S$  says of itself that it satisfies the predicate  $P$ . A contradiction is obtained in a few steps by taking  $P$  as the negation of the truth predicate,  $\neg T$ , so the sentence  $S$  says that  $S$  is not true. It must be noted that the diagonal lemma is not a result about mathematics, but rather a result about language that can be expressed in a theory with sufficient mathematical resources. Without the T-schema and the concept of truth there is no contradiction, nor without reasoning and language. Again, the contradiction is ontologically dependent. Priest et al. (2018, Sec. 3.2) seem to agree: according to them, the Liar provide evidence for dialetheism “in the sense that they [provable contradictions] are entailed by plain facts concerning natural language and our thought processes”.

In Priest (2019b, p.50) we read that although the paradoxes of self-reference have

been at the center of contemporary discussions on dialetheism, what Priest himself takes as the “most transparent” examples of dialetheias are rather contradictions in law. A third example of dialetheias, in addition to paradoxes and inconsistent laws, is given by philosophers that “held that there are things which are beyond the limits of our language/concepts” (Priest 2019b, p.48). Priest claims that Kant, Heidegger, and Wittgenstein were aware of the contradiction “involved in speaking of the ineffable”, and tried without success to escape from that. In this same paper he offers a fourth example, a psychological dialetheia, which is one that “describes some agent’s mental state”:

[A] situation where something is so revolting that one cannot take one’s eyes off it. For example, one may sometimes go past a gruesome traffic accident, where mangled people and bodily parts are strewn round a crash-site. It is revolting, but one cannot help but look. Another example: many of the portraits of the British artist Francis Bacon are of faces horribly distorted. They are hideously revolting, but riveting. In situations like this, one is phenomenologically attracted to and repelled (or repulsed) by the same thing. (Priest 2019b, pp.50–51).

All of the above examples are ontologically dependent dialetheias.

In Priest et al. (2018, Sect.3.4) some other examples are mentioned. Transition states, Zeno’s paradoxes, vague and multi-criterial predicates can be explained in a way that fits the anti-realist view: our theories, constrained by language and our conceptual framework, produce contradictions, but from this one cannot draw the conclusion that these contradictions *describe* reality. They also mention contradictions in theology and in the ‘speculative realism’, which are — purely speculative ways of thinking. All of these examples are also ontologically dependent dialetheias. Again, to the best of my knowledge, there is no clear example of an ontologically independent dialetheia in Priest’s texts.

## 4.2. What does it take to be a dialetheist?

As already said, a necessary condition for dialetheism to be a substantial philosophical thesis is that there must be something in reality that makes true a true contradiction. We cannot give up the idea that truth is grounded in reality. The realist view of dialetheism is a strong but implausible thesis. Indeed, Priest is right to say (8) that it is difficult to accept the idea that reality is inherently contradictory. On the other hand, it is no big deal to admit that there are ontologically dependent contradictions, this is not a very controversial claim. Anyway, ontologically dependent entities are also part of reality, but whether it is appropriate to say that sentences about such entities are true is a more complicated issue — I will return to this point soon. As Priest

himself remarks, the view that dialetheias arise because language and our concepts “engage with it [reality] in an inconsistent way” is not uncommon (Priest 2006a, p.299). It is not difficult to find the idea that people have contradictory beliefs, feelings, and the like. Kant’s antinomies are ontologically dependent contradictions, as well as contradictions in law and the psychological dialetheia we just saw — I would say that there would be many dialetheias that originate in mental processes.

I argued in Section 3 that in order to make sense of the realist view one does not need a fully worked out theory of facts. An ontologically independent object that satisfies contradictory predicates would be a truthmaker for the realist view. Indeed, Antunes in (2019, p.134) characterizes what he calls ontological dialetheism, which amounts to the realist view, as the rejection of the claim that no ontologically independent object can satisfy contradictory predicates, or have contradictory properties.

My thoughts on dialetheism are in between the anti-realist and the semantic view. I do agree that thought and language give rise to contradictions. I do not believe that reality has ‘contradictory features’, and at this point, I am sure I am not alone. Although there is absolutely no evidence supporting the realist view, it is unlikely that this view could ever be conclusively rejected, say, through some kind of transcendental argument. Everything from the empirical sciences indicates that contradictions arise not from reality itself, but from our theories, concepts, methods, measuring instruments, and so on. On the other hand, I agree that contradictory sentences can be used to describe certain phenomena related to thought and language. Whether one chooses to call these sentences true is another matter.

Antunes (2019) argues that ontologically dependent objects do not really exist, although one talks about them and attributes properties to them. Contradictory sentences about them do not imply their existence — that is, from  $Pa \wedge \neg Pa$  one cannot infer  $Ea$ , where  $E$  is an existence predicate, this inference is valid only for ontologically independent objects. As I understand him, Antunes is thinking of fictional characters, hallucinations, dreams, and the like. In any case, nothing prevents one from saying that contradictory sentences about ontologically dependent objects like these are true.

Once one accepts that sentences about ontologically dependent objects can be said to be true, the question arises as to what it is that makes them true. This is an interesting and fruitful question. Consider, for example, the problem related to the psychological dialetheia we have seen above (Priest 2019b, p.55):

- (23) If the agent’s mental state is contradictory, this means that its physiological base must be contradictory too. So physics itself must be inconsistent. Surely that cannot be right? ...

Whilst mental states may well supervene on brain states, it does not follow that a contradictory mental state entails a contradictory physical state. Attraction to

[the object]  $o$  might be encoded in some neurological structure,  $s_A$ . Repulsion from  $o$  might be encoded in some other neurological state,  $s_R$ . It may be that normally the states  $s_A$  and  $s_R$  inhibit each other, but that in odd circumstances they do not do so.

I cannot but agree with him here. Note that this suggests the possibility of ‘non-contradictory truthmakers’ for contradictory sentences: a dialetheia about a psychological phenomenon, but one that can be reduced to a physical phenomenon that does not depend on any real contradiction. The ‘whole phenomenon’ is contradictory, but strictly speaking there is no contradictory object. One might reply that in this case the law of non-contradiction is not being violated – recall the clause *at the same time, in the same respect* in (17). The argument would be analogous to the one to the effect that there is no contradiction in Heraclitus’ fragments: the supposed contradictions are explained away because they arise from different perspectives or different times and places. I leave to the reader’s discretion whether it is appropriate to say that sentences about ontologically dependent objects are true. I will only note that this point makes not one bit of difference to the interesting question about what makes an ontologically dependent dialetheia true.

What does it take, then, to be a dialetheist? A dialetheist is in between two alternatives, depending on how much she accepts ontologically independent contradictions. Dialetheism with ontologically independent contradictions is an implausible thesis. On the other hand, dialetheism without ontologically independent contradictions is a quite interesting and fruitful topic, but it is a much weaker thesis, a one that is not really new in philosophical discussions, and in this case much of the controversy over dialetheism would simply disappear.

### 4.3. Coda: dialetheism vs. the epistemic approach

Let us return to the question posed at the beginning of this paper: what does it mean to say that there is a model in which  $A$  and  $\neg A$  both hold? Logics of evidence and truth refrain from saying that  $A$  and  $\neg A$  are true; rather, the answer is that such a model represents a circumstance in which there is conflicting non-conclusive evidence (or unreliable information) for  $A$  and  $\neg A$  (Carnielli and Rodrigues 2017, p.3791).

Logics of evidence and truth (*LETs*) are a family of logics that have been conceived to express the deductive behavior of evidence in real-life contexts of reasoning (see e.g. Antunes et al. 2022, Rodrigues and Antunes 2022, Rodrigues and Carnielli 2022, Rodrigues et al. 2020). They combine two notions of consequence in the same formal system: it is assumed that conclusive evidence behaves classically, and so it is subjected to classical logic, while non-conclusive evidence is subjected to a sub-classical logic, which is *FDE*, the Belnap-Dunn 4-valued logic (Belnap 1977, Dunn



1976; 2019), or an extension of *FDE*. *LETs* can also be interpreted as information-based logics, in the sense of logics that take a database as a set of premises and draw conclusions from these premises in a sensible way, and can be seen as a further development of Belnap-Dunn's proposal of a logic for possibly inconsistent and incomplete databases — see Rodrigues and Antunes (2022, Sect.2) and Coniglio and Rodrigues (2024, Sect.4.1).

The notion of evidence is explained as information added with a maybe non-factive justification, which is a justification that may be 'erroneous' or 'mistaken' and so does not justify the sentence it was supposed to justify (Rodrigues and Carnielli 2022, Sect.2). The intended intuitive interpretation is epistemic because evidence, information (understood as meaningful data), and justification (even when non-factive) are all epistemic notions. Note that sentences that convey non-conclusive evidence or reliable information, stored in a database for example, are ontologically dependent entities. *LETs* have been proposed as a non-dialetheist approach to para-consistency. In (2019a, p.590), Priest raises some criticisms of the interpretation in terms of evidence, which have been addressed in Section 3.5 of Carnielli and Rodrigues (2020).

Several things distinguish Priest's dialetheism from the epistemic approach: the latter has a pluralist stance, since different logics are applied to different contexts; it avoids talking about true contradictions; it intends to provide an account of a specific kind of reasoning, rather than 'a general metaphysical view about truth'. However, the epistemic approach fits the anti-realist view, and to the extent that it does not allow for contradictions regarding conclusive evidence/information, it also rejects the realist view. Therefore, if the exegesis carried out here is correct, then Priest's dialetheism, surprising as it may be, is not truly orthogonal to the epistemic approach.

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## Notes

<sup>1</sup>Note that there is no 'category mistake' in the talk about contradictions in reality, it is just a way of talking. Strictly speaking, inconsistency is a property attributed to sets of sentences and a contradiction is a linguistic entity. But one can perfectly understand that by 'real' *PRINCIPIA* **29**(2): 181–201 (2025)

contradictions' and 'inconsistencies/contradictions in reality' it is meant that there must be something in reality/in the world that makes a true contradiction true. And in this sense, if such a thing exists, reality is contradictory.

<sup>2</sup>I am talking about mental processes here in an informal way, but emotions, imagination, and reasoning are mental processes.

<sup>3</sup>Priest himself in (2006b, pp.53ff) surveys some objections to negative facts.

<sup>4</sup>According to the standard account of truthmakers, an entity *s* is a truthmaker of a sentence *A* only if *s* exists and, necessarily, the existence of *s* implies the truth of *A*. See e.g. Armstrong (2004), Read (2000), Rodriguez-Pereyra (2005).

<sup>5</sup>Of course, unless such objects have a metaphysical character, or the object language has metaphysical concepts, see Tarski (1944, pp.362ff.).

<sup>6</sup>In fact, Tarski in (1956a) does not need a denotation function because he works with a language with no individual constants. Satisfaction is defined between sequences of objects and formulas, but the idea is the same: in (15), the denotation of 'Aristotle' is the object Aristotle, which satisfies the predicate '*x* is Greek'. Truth is defined as satisfaction by all sequences of objects, and an appropriate definition of satisfaction allows eliminating the truth predicate. A Tarski-style definition of truth for the language of arithmetic is provided by Heck (2023). A friendly presentation (in Portuguese) of Tarski's definition in (1956a) can be found in Cardoso and Rodrigues (2019).

<sup>7</sup>In Priest 2006b, pp.45–47 Priest discusses the semantic theory of truth, which is the account of truth proposed by Tarski, and concludes that there is nothing in it that precludes the possibility of true contradictions. Quite fair, since Tarski's ideas can be applied to non-classical logics, in particular to paraconsistent logics. A problem with his analysis is that it sticks to propositional logic, so it leaves out the satisfaction relation. But the latter is what makes the connection to the world in Tarski's approach.

<sup>8</sup>Popper, however, is too optimistic with respect to Tarski's work when he says that it is a "rehabilitation and an elaboration of the classical theory that truth is correspondence to the facts" Popper (1972, p.323).

<sup>9</sup>Priest in Priest 2019a, fn.61 correctly pointed out a mistake in Carnielli and Rodrigues (2019 p.185). When explosion does not hold, an object may satisfy both *P* and  $\neg P$ , and this is what characterizes a paraconsistent first-order logic. At that time we had not yet worked on first-order logics of evidence and truth, and some technical and conceptual details escaped me. In a paraconsistent setting, a first-order semantics is better formulated (but not necessarily, see Carnielli et al. (2014)) with extensions and anti-extensions (see Antunes et al. (2022) and Rodrigues and Antunes (2022))

<sup>10</sup>A referee of this paper pointed out a sort of Quinean argument against true contradictions, which can be roughly stated as follows. If a theory asserts that both *A* and  $\neg A$  are true, then accepting that theory commits us to the existence of entities that make *A* and  $\neg A$  true. Thus, we do not need a strong metaphysics like the one contained in a fully worked out theory of facts to reject the idea of true contradictions without a contradictory world, Quine's ontological commitment suffices. To demonstrate the incoherence of the dialetheist, it is enough to show that his theory of the world contains contradictions, as appears to be the case with Priest's dialetheism (cf. Priest 2006b, p.149, see quote (3)). As far as I can see, this argument seems quite good and would deserve a thorough study by someone who is well acquainted with Quine's work.

## **Acknowledgments**

The author acknowledges support from the National Council for Scientific and Technological Development (CNPq, research grants 310037/2021-2 and 408040/2021-1) and from Minas Gerais State Agency for Research and Development (FAPEMIG, research grant APQ-02093-21). The title of this paper has been borrowed from Alan Chalmers and Ella Fitzgerald. I would like to thank the referees, as well as Lucas Andrade, Henrique Antunes, Jonas Arenhart, and Ederson Melo, for their insightful remarks that helped shape the final version of this text.