

# Objects that are not Objects

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## Abstract

When involved in projects concerning language and its limits, a number of philosophers (Wittgenstein, Heidegger, Frege) have been driven to the conclusion that there are certain things which appear to be both objects and not objects. They have tried to avoid the contradiction by various strategies, such as the apparently desperate one of declaring some of their own assertions to be meaningless. However, a quite different strategy is to accept the contradictions involved. This requires the use of a paraconsistent logic, though this is only a first step. How, given the resources of such a logic, can one understand the thought that something both is and is not an object? And does such a thing in any way destroy meaning? The paper explores these issues, and answers the questions.

## 1 Introduction

In the *Philosophical Investigations*, Wittgenstein says that:<sup>1</sup>

the results of philosophy are the uncovering of ... bumps that the understanding has got by running its head against the limits of language

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<sup>1</sup>Anscombe (1968), p. 48.

and adds, ‘These bumps make us see the value of the discovery’. The point of this essay is to examine one of those bumps.

Many major philosophers have argued that there are things beyond the limits of language, things which language cannot talk about. Of course, there is a rub: if one argues that there are such things, one must, in the process, be talking about them. Contradiction stares one in the face.

One hardly needs to be a philosophical genius to see the contradiction involved; and the philosophers in question usually attempted some kind of philosophical evasive action. A notable one is the rather desperate strategy of the philosopher declaring his<sup>2</sup> own words meaningless. I think that, if one endorses the philosophical projects in question, there is a better solution: one should just accept the contradiction—or at least the contradiction which is generating the problem.

In the first half of this essay, we will look at three prime examples of philosophers who, for closely related reasons, found themselves in this situation, and were inclined to this move. In the second part, we will look at the alternative. This presupposes a basic knowledge of paraconsistent logic, which many people will not have. So between these two parts, I insert an interlude explaining those basics.

## 2 The Phenomenon

First, then, to the phenomenon in question. We will see three notable philosophers in whose thought this arises.

### 2.1 Wittgenstein

The first is the Wittgenstein of the *Tractatus*. In this, Wittgenstein puts forward an account of language, reality, and the relationship between them. The propositions of language are composed of names, put together with a certain form. Reality comprises states of affairs. These are composed of objects, put together with a certain form. And a proposition,  $p$ , describes a state of affairs,  $s$ , if the names in  $p$  refer to the objects in  $s$ , and the form of  $p$  is the same as that of  $s$ . (One might call this the *isomorphism* theory of representation.) However, the form of a proposition/state-of-affairs cannot be another object. If it were, a proposition/state-of-affairs would just be a

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<sup>2</sup>Yes, all the ones I can think of were men.

congeries of names/objects. A form is the *way* that the names/objects are put together, something quite different.<sup>3</sup>

But now the rub. Form is not an object, and so cannot be the component of a proposition. One cannot, therefore, talk about form, which of course the *Tractatus* does at length. In his introduction to the English translation of the *Tractatus*, Russell comments:<sup>4</sup>

Everything ... which is involved in the very idea of the expressiveness of language must remain incapable of being expressed in language, and is, therefore, inexpressible in a perfectly precise sense. ... [One may have] some hesitation in accepting Mr Wittgenstein's position, in spite of the very powerful arguments which he brings to its support. What causes hesitation is the fact that, after all, Mr Wittgenstein manages to say a good deal about what cannot be said...

Wittgenstein was, of course, well aware of the issue, and it motivates the stunning conclusion of the *Tractatus*:<sup>5</sup>

6.54. My propositions are elucidatory in this way: he who understands me finally recognizes them as senseless, when he has climbed out through them, on them, over them. (He must so to speak throw away the ladder, after he has climbed up on it.) He must surmount these propositions; then he sees the world rightly.

7. Whereof one cannot speak, thereof one must be silent.

Wittgenstein gritted his teeth (albeit with evident pleasure) and says that claims of the *Tractatus* are meaningless.<sup>6</sup>

One cannot but admire Wittgenstein's chutzpah. But the move really will not wash. The claims of the *Tractatus* are not meaningless. You can read

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<sup>3</sup>For more on this and the following, see Priest (2002), ch. 12.

<sup>4</sup>Pears and McGuinness (1974), p. *xxi*.

<sup>5</sup>Pears and McGuinness (1974), p. 74.

<sup>6</sup>I note that the the full quotation from the *Investigations* in Section 1 above reads:

the results of philosophy are the uncovering of one or another piece of plain nonsense and of bumps that the understanding has got by running its head against the limits of language.

So despite the obvious differences between the *Tractatus* and the *Investigations*, as far as the present matter goes, we do not seem to be in such different situations.

them and understand them; philosophers teach them to their students, who, likewise, understand them. To add insult to injury, the move saws off the very branch on which Wittgenstein is sitting. If the claims of the *Tractatus* are, indeed, meaningless, they cannot establish anything; in particular, then, they cannot establish that one cannot talk about form; and so they provide no reason for supposing that they are meaningless.

Here, then, is our first historical example.

## 2.2 Heidegger

Let us turn to the second: Heidegger. In the opening pages of *Being and Time*, Heidegger poses his *Seinsfrage*: what is *being*, what is it to be? This was the question that was to dominate his philosophical thinking, one way or another, for the rest of his life. But immediately after asking the *Seinsfrage*, he warns that, whatever being is, it is not, itself, a being. There is a difference of kind between being and beings: the so called ontological difference. He does not, there, give a reason for this, but it is a natural enough Neoplatonic thought. Being is the ground of beings; it is what makes them be; as such, it must be a quite different kind of thing.<sup>7</sup>

But now there is an obvious problem. To answer the question of being, one has to say something like: being is such and such. This puts being in a subject-position, and thus treats it as a being. So you can't answer the question of being. Heidegger came to accept this conclusion. An important line of thought in his later writing was that, though one cannot say what being is, art, poetry, and so on, can open people's eyes to being *showing* itself.

Be that as it may, matters are more desperate than this. It is not just that one cannot *answer* the question of being: one cannot even *ask* it. To ask 'what is being?' is itself to treat it as a being. Indeed, one cannot say *anything* about being. To say anything *about* it, would be to treat it as a being. Yet Heidegger's writings are replete with thoughts about being.

Heidegger, of course, realised that he had a problem, and essays various strategies to cope with it. One technique he attempted was "writing under erasure", saying it and crossing it out, as in:<sup>8</sup>

... a thoughtful glance ahead into the realm of *being* can only

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<sup>7</sup>For this and what follows, see Priest (2002), ch. 15.

<sup>8</sup>Kluback and Wilde (1959), p. 81.

write it as ~~being~~. The crossed lines at first only repel, especially the almost ineradicable habit of conceiving *being* as something standing by itself ... Nothingness would have to be written, and that means thought of, just like ~~being~~.

The technique does not avoid the problem, though: even to explain what the crossing out means, Heidegger has to talk about being.

Evasion is, in fact, a forlorn cause. If being really isn't an object, then speaking about it is grammatically impossible, as Heidegger himself realises:<sup>9</sup>

If we painstakingly attend to the language in which we articulate what the principle of reason [*Satz vom Grund*] says as a principle of being, then it becomes clear we speak of being in an odd manner that is, in truth, inadmissible. We say: being and ground/reason [*Grund*] 'are' the same. Being 'is' the abyss [*Abgrund*]. When we say something 'is' and 'is such and so', then that something is, in such an utterance, represented as a being. Only a being 'is'; the 'is' itself—being—'is' not. The wall in front of you and behind me is. It immediately shows itself to us as something present. But where is its 'is'? Where should we seek the presencing of the wall? Probably these questions already run awry.

Though not as forthright as Wittgenstein, the thought is essentially the same: Heidegger's statements about being are meaningless. And the problem with this is exactly the same as that for Wittgenstein. Heidegger's statements are not meaningless. We *do* understand them. Even when he explains what cannot be done, in the process doing it, we still understand him. Heidegger's words belie his claims.

This is the second example of our target phenomenon.

### 2.3 Frege

Let us turn to the third. This is to be found in Frege. Driven by the construction of his concept script (*Begriffsschrift*) Frege formulated an impressive and systematic philosophy of language. One of the problems he had to confront in doing this was what might be called *the unity of the proposition*.<sup>10</sup>

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<sup>9</sup>Lilly (1991), p. 51f.

<sup>10</sup>For this and what follows, see Priest (2002), ch. 12.

Consider a sentence like, *Socrates is sitting*. ‘Socrates’ refers to an object: the Ancient Greek philosopher we know and love. Objects are the referents of noun-phrases. ‘Is sitting’ refers to the property of sitting, or, as Frege calls it, the concept. Concepts are the referents of predicative phrases. However, *Socrates is sitting* is no mere list, <Socrates, sitting>; its two parts cooperate in some way to produce the unity expressed by the sentence.<sup>11</sup> How do they do this?

According to Frege, objects and concepts are quite different kinds of things. In particular, concepts are “unsaturated”; they have a “gap” in them; this can be filled by an object to create a unity. Thus, *Socrates* plugs the gap in the concept *is sitting* to deliver the appropriate unity.

But now we have a problem, and it is not that Frege’s language of gaps and filling them is metaphorical: sometimes metaphors are all we have. Consider the concept *is sitting*. ‘The concept *is sitting*’ is a noun phrase, and so refers to an object, not a concept, as one might expect. This is awkward. For it means that the concept *is sitting* (that object) does *not* have a gap in it. What Frege really needs to say is something like: *is sitting has a gap in it*. The ungrammaticality of this is patent.

Frege is well aware of the point, and comments on it in a well known passage of ‘Concept and Object’ concerning the concept *horse*. He says:<sup>12</sup>

I admit that there is a quite peculiar obstacle in the way of an understanding with my reader. By a kind of necessity of language, my expressions, taken literally, sometimes miss my thoughts; I mention an object when what I intend is a concept. I fully realize that in such cases I was relying on the reader who would be ready to meet me half-way—who does not begrudge me a pinch of salt.

Frege is clearly embarrassed—but not embarrassed enough. The point appears to constitute a *reductio ad absurdum* of his whole theory. The claim that a sentence *Pa* expresses a unity because the object denoted by *a* fills a gap in the concept denoted by *P*, is just plain false. The concept denoted by *P* has no such gap.

Frege says no more about the problem. Wittgenstein and Heidegger offer a solution—albeit a Pyrrhic one. Frege has nothing to offer.

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<sup>11</sup>One might naturally think of this as a proposition, though for Frege it was a truth value.

<sup>12</sup>Geach and Black (1960), p. 54.

## 2.4 The Underlying Problem

Here then, are our three examples, three outstanding philosophers who hit the fact that, according to their own lights, they cannot really say what they want to say. And two of them, as least, explicitly or implicitly, declare their own words meaningless.

*Prima facie*, the situations of our three philosophers might appear to be quite distinct; but in fact, they are all manifestations of one and the same problem, namely that the special kind of thing that creates a unity out of objects, cannot itself be an object—but it is, because we refer to it in this way.

This is most obvious in the case of Frege. For him, concepts are the special kind of thing which create unities. They are not objects, or they could not do the job of unifying; but they must be, because we refer to them with noun phrases.

It is not difficult to see that Wittgenstein's problem is exactly of this kind. Form is the kind of thing which creates unities of names or of objects. As such it is not itself an object, but we refer to it as such. Indeed, Wittgenstein's problem is just the intellectual descendent of Frege's.<sup>13</sup>

It is not immediately obvious that Heidegger's issue is the same, but in fact it is. This is because he is working with an Aristotelian (pre-Fregean) notion of logical form. Statements are of the form: *S is [not] P*. There is, then, only one concept in Frege's sense, the copula, *is*, that is, *being*. The problem is a special case of Frege's.

What we have seen, then, is that what is driving the predicaments of our three philosophers is the need to recognise something that is not an object—a principle of unity—as an object.

## 3 Interlude: Paraconsistent Logic

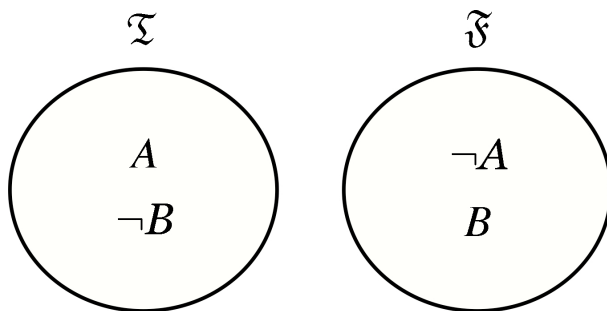
So much for our target phenomenon. In the second main part of this essay I will turn to the question of how better one might respond to it. But first, as promised, a short primer on paraconsistent logic.

Let us start with so called classical propositional logic; that is, the logical theory invented by Frege, adopted by Russell, and then polished by a number of great logicians in the first half of the 20th Century. According to this

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<sup>13</sup>As noted, e.g., by Anscombe (1959), pp. 108 ff.

theory, every situation—or interpretation as logicians call them—divides up all the sentence of the language in question into two: those that are true in the situation,  $\mathfrak{T}$ , and those that are false in it,  $\mathfrak{F}$ . Every sentence is in one or other of these, but not both. Negation,  $\neg$ , toggles a sentence between the two zones; so if anything is in one, its negation is in the other. We have, then, the following picture:



An inference is valid if in every situation in which the premises are in the  $\mathfrak{T}$  zone, so is the conclusion. Said differently, it is valid if there is no situation in which the premises are in the  $\mathfrak{T}$  zone, and the conclusion is not. So consider the inference of *Explosion*:

- $A, \neg A \vDash C$

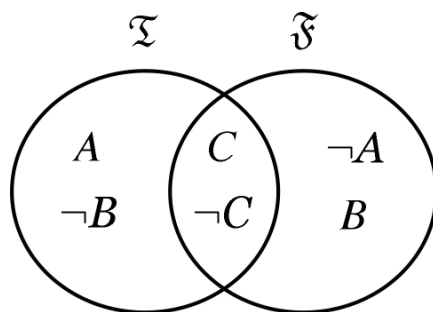
This is valid, simply because there is no situation in which the premises are both in the  $\mathfrak{T}$  zone; *a fortiori*, there is no situation in which the premises are both in the  $\mathfrak{T}$  zone *and* the conclusion is not.

A paraconsistent logic is (by definition) one in which Explosion is not valid. There are many paraconsistent logics, but let me describe a simple one.<sup>14</sup> This is *exactly* the same as classical logic—with one modification. In a situation, the  $\mathfrak{T}$  and  $\mathfrak{F}$  zones may overlap. Negation still toggles a sentence between the two zones. If a sentence is in the overlap between the two zones, it is true and false, and so, then, is its negation. That is, it is in the overlap as well. Thus, we may have:

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<sup>14</sup>For a survey of paraconsistent logics, see Priest, Tanaka, and Weber (2013). The one described here is the logic *LP*.





Explosion then fails to be valid. In the above diagram, both  $C$  and  $\neg C$  are in the  $\mathfrak{T}$  zone (and in the  $\mathfrak{F}$  zone as well, but that is irrelevant), but  $B$  is not. So  $C, \neg C \not\vdash B$ . In virtue of the failure of Explosion, a paraconsistent logic can accommodate theories which are inconsistent, but in which not everything holds. Contradictions can, as it were, be isolated as singularities.

This is nearly all we need; there is just one more thing. In first-order logic, predicates have extensions and anti-extensions (in a situation). The things in the extension are things which satisfy the predicate; the things in the anti-extension are things which satisfy its negation. In the classical case, the extension and the anti-extension of a predicate are exclusive and exhaustive. But in the paraconsistent case, as one would expect, these may overlap.

One predicate, in particular, will concern us in what follows. This is the identity predicate,  $=$ . This is a binary predicate, and so its extension and anti-extension are sets of pairs of objects from the domain of objects,  $D$ . The extension of this predicate is as in classical logic,  $\{\langle d, d \rangle : d \in D\}$ . The anti-extension can be anything one likes, except that every pair,  $\langle d_1, d_2 \rangle$ , must be in either the extension or the anti-extension. The extension of  $=$  is sufficient to deliver all the usual properties of identity. (The anti-extension is, as a matter of fact, completely inert in these matters.) However, the fact that the extension and anti-extension can overlap means that there can be situations in which things of the form  $a = b$  and  $a \neq b$  are both true.

## 4 Meaning and Ineffability

With these preliminaries under our belt, let us now return to our target phenomenon. The problem of our three philosophers arose because of seemingly being forced to recognise some objects which are not objects. That is, of

course, a contradiction, but the resources of paraconsistent logic show how to make sense of it. Let us see how.

## 4.1 To be and not to be an Object

First, what is it to be an object? Simply to be something; that is, simply to be in the domain of quantification. So we can define:<sup>15</sup>

- $x$  is an object  $:= \exists y y = x$

We may now reason as follows:

- $x = x$
- so  $\exists y y = x$
- so  $\forall x \exists y y = x$

That is, (unsurprisingly!) everything is an object.

But if  $x$  is not an object, we may also reason as follows:

- $\neg \exists y y = x$
- so  $\forall y \neg y = x$ ,
- so  $x \neq x$

What we see is that if  $x$  is an object that is not an object,  $x = x$  and  $x \neq x$ .<sup>16</sup>

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<sup>15</sup>I do not intend the quantifiers here to be “existentially loaded”.  $\exists$  should simply be read a *some*. In Priest (2005) I use  $\mathfrak{E}$  for the particular quantifier; and indeed, I think that it is better to write it like this. However, in the present context, this would merely distract from the matters at hand.

<sup>16</sup>As a matter of fact, the conditional goes in the other direction as well. For suppose that  $x \neq x$ . For any  $y$ , either  $y = x$  or  $y \neq x$ . In the second case,  $y \neq x$  by the substitutivity of identicals. Hence, in either case,  $y \neq x$ . That is,  $\forall y y \neq x$ , and so  $\neg \exists y y = x$ :  $x$  is not an object.

## 4.2 Naming

But does the fact that something is an object and not an object imply that claims about it are meaningless, or that one cannot talk about it? Let us investigate.

Take some object that is not an object, and let ‘ $n$ ’ be a name for it. The principle which naively (and correctly) governs the truth predicate,  $T$ , is the well-known  $T$ -Schema:

- $T\langle A \rangle \leftrightarrow A$

The angle-brackets here are a name-forming device. Of course, many who have addressed the semantic paradoxes of self-reference have taken the Schema to have restricted validity. I do not. However, this is not the place to go into that matter.<sup>17</sup>

Now, other semantic notions are governed by similar schemas. In particular, if  $D$  is the denotation relation, it is governed by the  $D$ -Schema:<sup>18</sup>

- $\forall x(D(\langle t \rangle, x) \leftrightarrow t = x)$

Here,  $t$  is any term, and  $\langle t \rangle$  is its name.

Instantiating the  $D$ -Schema, we get:

- $D(\langle n \rangle, n) \leftrightarrow n = n.$

And since  $n = n$ , it follows that  $D(\langle n \rangle, n)$ . That is, as one would expect,  $\langle n \rangle$  is a name for  $n$ . However, since  $n$  is not an object,  $\neg\exists y y = n$ . That is,  $\forall y y \neq n$ , and so for any term,  $t$ ,  $t \neq n$ . Again instantiating the  $D$ -Schema again we get:

- $D(\langle t \rangle, n) \leftrightarrow t = n.$

And assuming that this biconditional contraposes, we have:

- $\neg D(\langle t \rangle, n)$

One might have worries about the contraposibility of the biconditional here: there are certainly plausible reasons for supposing that the biconditional of the cousin of the  $D$ -Schema, the  $T$ -Schema, does not contrapose.<sup>19</sup> But let us set those issues aside here. What the last displayed statement shows us is that no term,  $t$ , is the name of  $n$ .  $n$  has not name—not even ‘ $n$ ’!

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<sup>17</sup>I have defended the  $T$ -Schema in many places. For a start, Priest (2006).

<sup>18</sup>See, e.g., Priest (2005), ch. 8.

<sup>19</sup>See, e.g., Priest (2006a), 4.9.

### 4.3 Statements About $n$

What follows from this? First, it does not follow that statements about  $n$  are meaningless. They are meaningful. Even if  $n$  is not an object, ‘ $n$ ’ is a perfectly good syntactic name, and so statements deploying it—such as  $Pn$ , where  $P$  is some monadic predicate—are perfectly grammatical. Not only are such statements grammatical, their meaning is perfectly clear, and is given by the standard truth conditions. Thus,  $Pn$  means that  $n$  satisfies ‘ $P$ ’.

So Wittgenstein and Heidegger were wrong about this matter (of course!). One can talk perfectly meaningfully about objects that are not objects.

However, that is not an end of the matter. For something of the form  $Pm$  to be about an object, ‘ $m$ ’ must be a name for it. But we have seen (assuming the contrapositionality of the  $D$ -Schema) that  $n$  has no name. So one can say nothing about  $n$ . Statements about  $n$  are ineffable: one can say nothing about  $n$ —even though one can! So Wittgenstein and Heidegger were right about this matter, the objects they wished to talk about (and did) were ineffable.

What we have seen, then, is that if our three philosophers had simply accepted that the things they were dealing with were objects that were not objects, they could have had their cake and eaten it too. They would indeed have been trespassing into the ineffable.<sup>20</sup> But there is no reason to suppose that the things said are meaningless; nor any temptation to the self-destructive thought that they are so.<sup>21</sup>

Of course, some will see being a dialetheist, and accepting contradictions—such as that something is and is not an object—as an unacceptable cost. This is not the place to go into that matter.<sup>22</sup> So let me just put it this way. You come out of a lecture by Wittgenstein or Heidegger in 1925. Which is worse to have to say?—‘Well, you know, he actually contradicted himself’, or ‘Well, his lecture was totally meaningless’?

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<sup>20</sup>Further on this theme, see Priest (2002).

<sup>21</sup>Interestingly, there is evidence showing that in his later years, and mostly in his private diaries, Heidegger actually became a dialetheist in the matter at hand. See Casati (2016).

<sup>22</sup>On which, see, for example, Priest (2006b).

## 4.4 König's Paradox

We have been dealing with some hard-core metaphysics, and it might well be thought that the kind of knots we have been exploring are restricted to such matters. Let me conclude by pointing out that they are not. They occur just as much in logic and set theory.

There are many paradoxes of self-reference, but let us consider one of them: König's Paradox.<sup>23</sup> This concerns ordinals. Ordinals are numbers that extend the natural numbers,  $0, 1, 2, \dots$  into the transfinite. Thus, after all the natural numbers, there is a least infinite ordinal,  $\omega$ , and then a next  $\omega + 1$ , and so on. So the ordinals look something like this:

- $0, 1, 2, \dots, \omega, \omega + 1, \omega + 2, \dots, 2\omega, 2\omega + 1, \dots, \omega^2, \dots$

A crucial feature of the ordinals is that they preserve the property of the natural numbers that any collection has a least member. This is called the *well-ordering property*.

Now, how far the ordinals go on, is a vexed question, both mathematically and philosophically. However, it is beyond dispute that given any language with finite basic resources, such as English as it is here and now, there are ordinals that cannot be referred to by a non-indexical noun-phrase of that language. This can be proved by a perfectly rigorous mathematical argument concerning cardinalities. Hence, there are ordinals that cannot be referred to in this way; and so by well-ordering property, there is a least such ordinal. Call this  $\alpha$  (or let  $\alpha$  be an abbreviation for the description 'the least ordinal that cannot be referred to'). Then since one cannot refer to  $\alpha$ , one can say nothing about it—it is ineffable. But one can say things about it—for example that it is the least ordinal that cannot be referred to.

This is König's Paradox. I am not suggesting that it is driven by the considerations of unity that drive the conundrums of our three target philosophers. It is not. I give it merely to show that the strange territory that our three philosophers would be lead into if they became dialetheists is already to be found in set theory and logic.

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<sup>23</sup>See, e.g., Priest (2002), pp. 131 ff.

## 5 Conclusion

We have been exploring the unfamiliar world of objects that are not objects, and we have seen how the thoughts of three of the most important philosophers of the last 150 years take us into it. I have not tried to defend the views of those philosophers—or the parts of them which lead in this direction. Whether or not one should do so is a matter for an entirely different occasion.<sup>24</sup> This point of this paper is simply to show that dialetheism opens up a whole new world of possibilities—or, one might quip, impossibilities—concerning profound areas of metaphysics.<sup>25</sup>

## References

- [1] Anscombe, G. E. (1959), *An Introduction to Wittgenstein's Tractatus*, London: Hutchinson and Co.
- [2] Anscombe, G. E. (tr.) (1968), *Philosophical Investigations*, Oxford: Basil Blackwell.
- [3] Casati, F. (2016), *Being. A Dialetheic Interpretation of the Late Heidegger*, PhD thesis, University of St Andrews.
- [4] Kluback, W., and Wilde, J. (trs.) (1959), *The Question of Being*, Harrisonburg, VA: Vision.
- [5] Geach, P., and Black, M. (trs.) (1960), *Translations from the Philosophical Writings of Gottlob Frege*, 2nd edn, Oxford Basil Blackwell.
- [6] Lilly, R. (tr.) (1991), *The Principle of Reason*, Bloomington, IN: Indiana University Press.

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<sup>24</sup>There is some discussion of the matter in *One* (Priest (2014)), which gives my own reasons for supposing that there are objects that are not objects. I note that even though the present essay was written after that book, it actually provides a bridge between *Beyond the Limits of Thought* (Priest (2002)) and *One*.

<sup>25</sup>This paper is a written up version of a talk given in a number of places including: the Korean Society for Analytic Philosophy, the Jowett Society (Oxford), Harvard University, Syracuse University, and the CUNY Graduate Center. I am grateful to the audiences for their thoughtful and helpful comments.

- [7] Pears, D., and McGuinness, B. (trs.) (1974), *Tractatus Logico-Philosophicus*, London: Routledge and Kegan Paul.
- [8] Priest, G. (2002), *Beyond the Limits of Thought*, 2nd edn, Oxford: Oxford University Press.
- [9] Priest, G. (2005), *Towards Non-Being*, Oxford: Oxford University Press; 2nd edn, 2016.
- [10] Priest, G. (2006a), *In Contradiction*, 2nd edn, Oxford: Oxford University Press.
- [11] Priest, G. (2006b), *Doubt Truth to be a Liar*, Oxford: Oxford University Press.
- [12] Priest, G. (2014), *One*, Oxford: Oxford University Press.
- [13] Priest, G., Tanaka, K., and Weber, Z. (2013), ‘Paraconsistent Logic’ in E. Zalta (ed.), *Stanford Encyclopedia of Philosophy*, <http://plato.stanford.edu/entries/logic-paraconsistent/>.