DIALETHEISM AND THE PROBLEM OF EVIL

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Abstract. According to dialetheism, some contradictions are true. In a recent paper, Aaron Cotnoir has suggested that theists who are also dialetheists can resolve the paradox of the stone by accepting a contradiction, and arguing that God both can and can’t make the stone. However, Zach Weber has replied that dialetheism is no help for avoiding one of the most serious problems for theism, namely the problem of evil. In this paper, I argue the situation is even worse than this for dialetheist theists, since one motivation for dialetheism closes off what otherwise might be a loophole in a classic version of the problem of evil.

1. Introduction

According to dialetheism, some contradictions are true. For example, consider the sentence ‘this sentence is false’. Suppose it is false. Then since this is what it says, it is true. Suppose on the other hand that it is true. Then what it says is true, and so it is false. So if it’s true, it’s false. And if it’s false, it’s true. So paradoxically, it must be both true and false or, in other words, both true and not true. This is the well-known liar paradox.

One of the central motivations for the doctrine of dialetheism is that it allows us to take the reasoning in paradoxes like the liar at face-value, by accepting their contradictory consequences.¹

Now consider the paradox of the stone – can God make a stone so heavy that even God cannot lift it? If God can’t, then this brings into question God’s omnipotence, since there is something that God cannot do. But if God can make a stone that God can’t lift, there is something else that God

¹See, for example, Priest (2006, p. 9).
cannot do – namely, make that stone and then lift it. In a recent paper, Aaron Cotnoir (2018) has suggested that theists who are also dialetheists can resolve this problem by accepting the contradiction, and arguing that God both can and can’t make the stone.\(^2\)

However, Zach Weber (2019) has replied that dialetheism is no help for avoiding one of the most serious problems for theism, namely the problem of evil. As he writes:

... *if* you think that the problem of evil defeats theism, then you will almost certainly think it defeats dialetheic theism too. ... If there is no God, then there is still no God *even* if the Russell set is both self-membered and not. If traditional theism is already absurd, then traditional theism may be no worse off than any other theism, but it is no better off either, because it is still theism (Weber 2019, p. 405).

In this paper, I argue the situation is even worse than this for dialetheist theists, since one motivation for dialetheism closes off what otherwise might be a loophole in classical versions of the problem of evil.

In particular, consider the following version of the argument from evil, adapted from Brown and Nagasawa (2005, p. 309):

1. The actual world is not the best possible world
2. If the actual world is created by God, it is the best possible
3. Therefore, the actual world is not created by God

Famously, Leibniz rejected the first premise of this argument, arguing the actual world is the best possible.\(^3\)

But it’s also possible to reject the second premise of the argument, by arguing that there is no best possible world. As Robert Adams (1972, p. 317), for example, writes:

> I do not in fact see any good reason to believe that there is a best among possible worlds. Why can’t it be that for every possible world there is another that is better? And if there is no maximum degree of perfection among possible worlds, it would be unreasonable to blame God, or think less highly of His goodness, because He created a world less excellent than He could have created.

If there is no best possible world, then arguably an omnipotent, omniscient, and omnibenevolent God may still create a world that is not the best.\(^4\)

In section (2), I will argue that the most plausible reason for denying that there is a best possible world is that there is no maximum infinity, and so even if God had created an infinitely good world, it would still not have been the best possible, since God could still have created another world with a higher infinite amount of goodness. But as I explain in section (3), one important motivation for dialetheism is to resolve Cantor’s paradox, by allowing that there is (but also is not) a greatest infinite number. In that case, an omnibenevolent, omnipotent, and omniscient God could – and so should – have created a world with that infinite amount of goodness.

In section (4), I consider whether a dialetheist theist can resolve this problem by conceding that there is a best possible world, but simultaneously arguing that there is not a best possible world. I argue that their best

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\(^3\)Brown and Nagasawa (2005, p. 309) call this the “problem of inferiority” rather than the “problem of evil”, but I prefer the more familiar name.

chance of doing so is to maintain that the actual world both is and is not the best, but that even this defence fails. Then in section (5), I consider and argue against ways in which a dialetheist might simply deny (without also accepting) that there is a best is a possible world, and argue against these too. While the issues discussed in sections (4) and (5) are admittedly subtle, I conclude in section (6) that the problem of evil is worse for dialetheic theists than it is for their classical cousins.

2. The No Best World Defence

How could there be no best possible world? One way is that there might be a tie – two possible worlds which are both as good as each other, and such that no other possible world is strictly better than either of them (Brown and Nagasawa 2005, pp. 311–4). Exactly similar considerations apply if the value of some worlds is incomparable, and there are two worlds neither of which is better than the other, and such that no other worlds are strictly better than either of them. In this case, if God creates either of these two possible worlds, he does not create the best possible, but merely a best possible. But in either case, it does not seem reasonable to fault God for creating one world rather than the other, and so the second premise of the argument above is false (Brown and Nagasawa 2005, p. 314).

However, the argument can easily be restated to avoid this objection (Brown and Nagasawa 2005, pp. 314–5):

(1) The actual world is not a best possible world
(2) If the actual world is created by God, it is a best possible world
(3) Therefore, the actual world is not created by God

The new first premise is stronger than before, and Leibniz’ would deny it for the same reason as he denies the original. Nevertheless, the stronger first premise is plausible for the same reasons as the weaker, which is that we can easily imagine a world which is strictly better than this one.
But the new second premise, although it is weaker than before, is open to further objections. Firstly, another way in which there could be no best world is if there are cycles with respect to the goodness of worlds (Brown and Nagasawa 2005, p. 315). Supposing, for example, that there are three worlds – rock, scissors, and paper – such that rock is better than scissors, scissors is better than paper, but paper is better than rock. Then none of these worlds is best since, for each of them, there is another which is better. In this case, God could hardly be faulted for not creating a world which is best, and so the new version of the second premise is false too.

For the sake of argument, I follow Brown and Nagasawa (2005, p. 315) in assuming that betterness is transitive as well as antisymmetric, thus ruling out cycles of betterness. That leaves a second way in which there may be no best possible world, which is that the number of worlds may be infinite – in which case just as for every number, there is a number greater than it, it may be that for every possible world, there is a world strictly better than it (without any cycles of betterness). And in this case too, God could hardly be faulted for not creating a world which is best, and so the new version of the second premise is false (Brown and Nagasawa 2005, pp. 315–7).

Moreover, this possibility is close to the situation an omnipotent, omniscient and omnibenevolent creator would face. As Brown and Nagasawa (2005, p. 317) explain:

Such a scenario does not seem implausible. For one thing, there appears to be no logical limit on the size of the universe, and, in particular, no limit on the number of sentient beings it contains; so, for any world filled with happy creatures, we can imagine a better world simply by adding a few more happy creatures. Moreover, there may be no limit on sentient beings’ capacity for pleasure; so we could improve on any world by making the happy creatures even happier.
One natural response to this point would be to argue that the best possible world would be *infinitely* good, in which case – one might argue – it could not be improved further by adding more happy creatures, or by increasing their already infinite happiness. But as we shall see in the next section, this response works only if we reject classical logic and mathematics.

3. **Dialetheism and Paradoxes**

In the late nineteenth and early twentieth centuries, the semantic paradoxes were joined by the paradoxes of set theory, such as Russell’s paradox. Consider the set of all and only sets which are not members of themselves. Is it a member of itself? Suppose it is a member of itself. Then since it includes only sets which are not members of themselves, it is not. On the other hand, suppose it is not a member of itself. Then since it includes all sets which are not members of themselves, it is. So if it is, it isn’t. And if it isn’t, it is. So paradoxically, it must both be and not be a member of itself.

One standard solution to Russell’s paradox is to deny the existence of the set of all and only sets which are not members of themselves. In order to do so, one must also deny the axiom schema of naive comprehension, according to which for every predicate, there is a set of all and only things which satisfy that predicate.\(^5\) In particular, since ‘is a set which is not a member of itself’ is a predicate, the axiom schema of naive comprehension entails that there is a set of all and only sets which are not members of themselves. But instead of following this route, dialetheists may embrace naive comprehension, and argue that the set of all and only sets which aren’t members of themselves is and isn’t a member of itself.\(^6\)

For our purposes, two paradoxes of set-theory are especially important: namely, Cantor’s paradox and the Burali-Forti paradox. Cantor’s paradox

\(^5\)Formally, \((\exists x)(\forall y)(x \in y \leftrightarrow \phi(x)))\), where \(x\) does not occur in \(\phi\) (Suppes 1972, p. 6).

\(^6\)See, for example, Priest 2006, pp. 28–9.
arises from his theorem, the proof of which is very similar to the reasoning which gives rise to Russell’s paradox:

**Theorem 1** (Cantor’s Theorem). Every set has more subsets than elements

**Proof.** Suppose for reductio that a set had as many elements as it has subsets – then each subset could be labelled with one of the elements. Then consider the subset which includes all and only elements which are not in the subset they label. Does this subset contain its label or not? Suppose it does. Then since it includes only elements which are not in the subset they label, it does not. Suppose on the other hand it does not. Then since it includes all elements which do not label themselves, it does. But this is a contradiction, completing the reductio. □

Cantor’s paradox results when we apply this theorem to the set of everything: the set of everything includes its subsets as elements, so it has at least as many elements as subsets. But since every set has more subsets than elements, this is a contradiction.

One standard solution to Cantor’s paradox is to deny the existence of the set of everything. In order to do so, one must again deny the axiom schema of naive comprehension. In particular, since ‘is a thing’ is a predicate, the axiom schema of naive comprehension entails that there is a set of all and only things or, in other words, a set of everything. But instead of following this route, dialetheists may again embrace the axioms schema of naive comprehension, and accept that there is a set of everything, but argue both that it has at least as many elements as subsets, while simultaneously maintaining that it has strictly more subsets than elements.

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7In classical Zermelo-Fraenkel set theory, the axiom schema of naive comprehension is replaced by the axiom of schema of separation, according to which $(\forall z)(\exists x)(\forall y)(y \in x \leftrightarrow (y \in z \land \phi(z)))$, where $x$ doesn’t occur in $\phi$ (Suppes 1972, pp. 6–7). If there were a set of everything, each instance of the axiom schema of separation would imply the corresponding instance of the axiom schema of naive comprehension, thus reintroducing Russell’s paradox, and further motivating denying the existence of a set of everything.
For our purposes, the important point about this solution to Cantor’s paradox is that it implies that there is no maximum cardinal number, finite or infinite. For every set $A$ with cardinality $|A|$, there is its power-set $\mathcal{P}(A)$ with strictly greater cardinality $2^{|A|}$. On the other hand, if dialetheism is true, and Cantor’s paradox is resolved by accepting that there is a set of everything, which both has and does not have at least as many elements as it has subsets, then there is a greatest cardinality, viz.: the cardinality of the set of everything (although it is also true that this is not the greatest cardinality, an issue to which I will return later).

As Cantor’s paradox is to the cardinal numbers, the Burali-Forti paradox is to the ordinal numbers. We can think of an ordinal number as the set of all the ordinal numbers preceding it, beginning with $0 = \{\}$, followed by $1 = \{\{\}$, $2 = \{0, 1\} = \{\}, \{\{\}$, and so on through all the ordinal numbers of finite cardinality and then, as Buzz Lightyear says, “to infinity and beyond” beginning with the first infinite ordinal number $\omega = \{1, 2, 3, ...\}$ and its successor $\omega + 1 = \{1, 2, 3, ..., \omega\}$, and so on, until we reach $2.\omega, 2.\omega + 1, ...$, and so on through all the ordinal numbers of countable cardinality. Then the set of all ordinal numbers of finite or countable cardinality is $\omega_1$, the first ordinal number, and so on through $\omega_1, \omega_2, ...$, and so on.

In each case, every ordinal number has a successor which is strictly greater than it, consisting of the set of it and all its predecessors – we can always make a greater ordinal number by adding one. But now consider the ordinal number consisting of the set of all ordinal numbers. Since it is the set of its predecessors, it is greater than all ordinal numbers. But since every ordinal number has a successor which is greater, it is not greater than all ordinal numbers. This is a contradiction. As before, the standard solution is to deny the existence of the set of all ordinal numbers. But if dialetheism is true, we may accept its existence, by accepting that it both is and is not the largest ordinal number.
4. Both best and not best?

As we saw in the previous section, a dialetheist may resolve the Cantor and Burali-Forti paradoxes by accepting that there is (but also is not) a greatest cardinal and ordinal number. So a dialetheist cannot deny that there is a best possible world simply on the grounds that there is no highest infinite cardinal or ordinal number (or at least, not on the grounds that a highest infinite cardinal or ordinal number would be inconsistent). But as always in philosophy, there are numerous moves a dialetheist could make to defend their position.

Firstly, a dialetheist could concede that there is a best possible world, but point out that there is also not a best possible world (just as there both is and is not the highest number). Does this help to resolve the argument? It doesn’t help to avoid either version of the second premise since if there is a best possible world, then God should have created it (even if it is also true that he should not have created it). Nevertheless, it’s worth dwelling on this point for a moment, since some of the material in section (2) now appears in a different light.

In particular, consider the highest ordinal number. And recall that adding one to that number produces an ordinal number that is strictly higher, and which both is and is not the same number we had before. If the goodness of worlds is analogous to the ordinal numbers, then we would have a best possible world, and a better possible world, which both is and is not the same world as we had before. In this case, we have (and also do not have) a cycle of worlds, from the best possible world to its successor/itself, each of which is better than the previous one.

But, recall from section (2) the point that if there is a cycle of worlds, each one of which is better than the last, then God cannot be faulted for not creating the best amongst these worlds. Shouldn’t we concede the same here? I don’t think we should, because in the previous case God had no good way to choose between the three worlds in the cycle (Brown and Nagasawa...
2005, p. 315). But in this case there is still only one best world for God to choose, and so he should choose that world (even if it is also true that there is a better, and so he should choose it instead). ⁸

Likewise, because adding one to any ordinal number produces a strictly higher ordinal number (and also does not), we still have (and also do not have) an infinite chain of numbers, each of which is higher than the last. So if the goodness of worlds is analogous to ordinal numbers, we may still have (and also not have) an infinite number of worlds such that for every world, there is another better than it (almost without any cycle of betterness, modulo the issue discussed in the previous two paragraphs).

In section (2), we conceded that God cannot be faulted for not creating the best in a similar situation. Shouldn’t we do the same here? Still I don’t think so, because in this case, there is still a unique best possible world which God ought to create (even though it is also true that for each such world, there is a better world that he ought to create). So while this issue is admittedly subtle, I think a dialetheist who concedes that there is a best possible world (even while also arguing that there isn’t) should accept both versions of the argument’s second premise.

Similarly subtle issues arise for the first premise. If a dialetheist concedes that there is, but also is not, a best possible world, then they may follow Leibniz in arguing that the first premise is false, and that the actual world is in fact a best possible world (while also conceding that it is true, and that the actual world is not a best world). It may seem that this is a slight improvement on Leibniz’ position, since a dialetheist theist taking this line could accept that there is unnecessary evil in the world, even while arguing

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⁸We also put this example aside before on the grounds of transitivity. But here the issue is trickier, because even though the example is inconsistent with the transitivity of betterness, a dialetheist may still retain transitivity in the face of the example by accepting the inconsistency.
that there is not (whereas Leibniz has to argue that all evil is necessary, perhaps for some hidden purpose or reason known only to God).

But even if it is an improvement on Leibniz, this line of defence is ultimately unsuccessful. As Weber (2019, p. 402) stresses, dialetheism claims merely that some contradictions are true, and not that all are. And the thesis that we are living in the, or even merely a, best possible world is one of those which is simply false, and not both true and false. If this were the best possible world, but also not the best, then although there would be evil, there would also not be evil. Unfortunately, it’s just true that there is evil, and it is not also true that there is not evil.

So a dialetheist who concedes that there is (but also is not) a best possible world should ultimately accept both premises of the argument. Nevertheless, there are at least two further options. Firstly, they may accept the conclusion of the argument, that the actual world is not created by God, while at the same time accepting it’s contradictory, that the actual world is created by God. In my view this is preferable to maintaining that the actual world both is and isn’t the best possible, which does not cohere with what we observe around us. But it’s still better not to accept this contradiction.

The final option is to deny the validity of the argument – which in this case involves denying the validity of modus tollens. Typically dialetheists accept the validity of modus tollens, but Blumson and Helke (2021) suggest that it is undermined by some intuitive cases in which the antecedent of the major premise is simply true but the consequent is both true and false. But even if the validity of modus tollens is rejected for this reason, this only returns us to the option of arguing that it is both true and not true that we are in the best of all possible worlds. But as already argued, it is most plausible that this is simply true, and not that it is also not true.
5. DIALETHEISM AND NO BEST WORLD

Of course, a dialetheist theist need not concede that there is a best possible world, for several reasons. Firstly, while it is open to dialetheists to resolve the Cantor and Burali-Forti paradoxes by accepting that there is, but also is not, a greatest number, they need not do so. But if so, they need to motivate their dialetheism on other grounds. Opinions will vary on this matter, but for my part the plausibility of a unified solution to the logical and set-theoretic paradoxes is the most persuasive consideration in favour of dialetheism, and the distinctively religious reasons canvassed above for accepting dialetheism are not sufficient in their absence.

A more attractive possibility for a dialetheist theist is to accept that there are and aren’t highest ordinal and cardinal numbers, but not to accept that there is and isn’t a best possible whose degree of goodness is measured by one of those numbers. One way would be to argue, for example, that worlds only have finite degrees of goodness and then to argue that there is no best possible world simply on the grounds that there is no highest finite number. And the same move could be made by choosing some other threshold – perhaps, for example, worlds only have ordinal degrees of goodness below $\omega_2$ or some other limit ordinal (an ordinal with no immediate predecessor).

However, insofar as goodness is numerically measurable at all, and there is an omnipotent God, it would seem to me to be within God’s power to create a world of any degree of goodness, be it finite or infinite. Just as God can improve a finitely good world by adding finitely many more goods to it, it seems to me that he could create an infinitely good world by adding infinitely many more goods to it. It was this intuition that led us to denying there is a best possible world in the first place. But then so long as there is a greatest infinite cardinal or ordinal number, then God could and should continue to improve the world until it reaches that infinite degree of goodness.

This raises the question of whether goodness is numerically measurable at all. But recall from section (2) the concession that betterness is transitive
and asymmetric. In this case, it follows that we can construct an ordinal scale for the goodness of worlds using the real numbers, so long as they have a countably order-dense subset, meaning that there is a countable subset of the possible worlds such that between every pair of nonequally good worlds, there is a world from the subset which is in between them with in respect of goodness (Krantz et al. 1971, p. 40).

But in this context, because there are plausibly infinitely many worlds, with more than continuum many degrees of goodness, this condition cannot easily be met – there are simply too many worlds, with two many differences in goodness, for a real-valued ordinal scale (Lewis 1973, p. 51). So in order to construct even an ordinal scale for the goodness of worlds, we will have to look beyond the real numbers to transfinite numbers, and possibly even hyperreal or surreal numbers, to accommodate fractional and infinitesimal degrees of goodness. This is a project far beyond the scope of this paper, especially given the non-classical background logic in play.

However, while the details of this task may seem daunting, there is reason for optimism in this context, since only an ordinal scale is needed. In order to know which world to create, God only has to know which world is best – in other words, he would only have to know which world has the highest numerical degree of goodness. If he faced a decision under risk, he would also have to know how much better some worlds are than others, so that he could weigh the additional goodness of a world against the chance he fails to create it. But as God knows he will create which ever world he wills, there is no risk in question. God need only know which world is best.

6. Conclusion

To conclude, let us compare how the no best world defence against the problem of evil fares in both the classical and dialetheist context. As Brown and Nagasawa (2005) summarise the dialectic:
We see two strategies open to the proponent of that argument. Firstly, she might try to show that there must be a best possible world, where this would involve denying that any of the cases we have put forward can accurately describe the range of possibilities faced by an omni-being. This seems to us a hard row to hoe, but we do not deny that an argument to that effect could be made.

As we have seen, in the context of dialetheism it is easier to argue that there is a best possible world, because it is easier to accept that there is a highest infinity. So in the context of dialetheism, this is an easier row to hoe, and the problem of evil is worse for theism in this respect.

However, Brown and Nagasawa (2005, p. 317) also suggest a different way to strengthen the argument by arguing that even if there is no best possible world, the actual world is still not good enough because it:

... does not cross some threshold of minimal goodness. It is tricky to pinpoint the location of such a threshold, and doubtless if there is one, it lacks sharp boundaries; but this may be the most plausible thing there is to say about such examples. Perhaps, then, the proponent ... might argue that even if the goodness of possible worlds increases infinitely, it is clear that the actual world is not good enough ...

This may well be the best version of the argument available in the classical context, but it leaves considerable wiggle room for the theist, who may argue both for lowering the threshold, and raising our assessment of the actual world, until the actual world comes out as “good enough” relative to the threshold.

For my part, I am unsatisfied with this response – I don’t see why the bar should need to be lowered to make it easier for an omnipotent being to limp over it. If God really exists, he ought not only to make a good world, but the absolutely best world possible. If we accept dialetheism, we gain the
ability to set the bar sufficiently high, because we can say that God should create a world which is good to the very highest infinite degree. This reflects dialetheism’s advantage in providing a natural response to the set-theoretic paradoxes, and especial to Cantor’s and the Burali-Forti paradox. But it also means that the problem of evil is worse for dialetheist theists, because dialetheists can better prosecute the case against God.\(^9\)

References


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