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THE BEST OF ALL POSSIBLE WORLDS

ABSTRACT. The Argument from Inferiority holds that our world cannot be the creation of an omnipotent and omnibenevolent being; for if it were, it would be the best of all possible worlds, which evidently it is not. We argue that this argument rests on an implausible principle concerning which worlds it is permissible for an omnipotent being to create: roughly, the principle that such a being ought not to create a non-best world. More specifically, we argue that this principle is plausible only if we assume that there is a best element in the set of all possible worlds. However, as we show, there are conceivable scenarios in which that assumption does not hold.

1. INTRODUCTION

The Argument from Inferiority, as we shall call it, holds that the possibility of a better world than ours is inconsistent with our world's being created by an omnipotent and omnibenevolent being. For an omnipotent being would be capable of creating *any* possible world she desired to create, and an omnibenevolent being would desire to create only the very *best* possible world; hence, if our world were created by any such being, then it would be the best one possible. The argument maintains, however, that there evidently *is* some better possible world than ours, and so it concludes that our world cannot be the creation of an omnipotent and omnibenevolent being (henceforth, an "omni-being").[1]

More formally, the argument may be briefly stated as follows.[2]

ARGUMENT 1 (Argument from Inferiority)

(1a)   There exists a better possible world than the actual world;

(1b)   if there exists a better possible world than the actual world, then the actual world is not the best possible world;

(1c)   if the actual world were created by an omni-being, then the actual world would be the best possible world;

therefore,

(1d)   the actual world was not created by an omni-being.

Clearly, the conclusion (1d), were it proved, would be bad news for traditional theists; for they maintain that our world was indeed created by an omni-being, whom they call God. In this way, the Argument from Inferiority implies that the God of traditional theism does not exist.

We shall not challenge here either premise (1a) or premise (1b), since both strike us as quite plausible. In support of the former, suppose that we isolate some minor misfortune in the actual world – the stubbing of someone's toe, say – and then we imagine a world that is identical to the actual world, except with that minor misfortune erased. Surely, we would thereby be imagining a better possible world than this one; or so it seems to us, at any rate. So premise (1a) looks all right. And premise (1b) is true simply by definition; "x is best" surely must entail "none is better than x".[3]

However, we reject (1c). As we shall argue, an omni-being *might* choose to create a non-best possible world; for it might be that she faces such a range of possibilities that there simply is *no* best possible world for her to create. That the Argument from Inferiority might be undermined in this way has been observed before. For example, Adams (1972, 317) 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.

Unfortunately, Adams does not try to elaborate his insight expressed above. He provides instead a quite distinct theodicy by assuming, for the sake of argument, that there *is* a best possible world.

Similarly, Plantinga (1974, 168) writes:

> [W]e have the question whether there is such a thing as the best of all possible worlds, or even a best. Perhaps for any world you pick, there is a better.[4]

Again, unfortunately, Plantinga does not refine his insight on the Argument from Inferiority and focuses rather on the argument from moral evil, which he thinks a more powerful antitheist argument.

We think that, while their insight is on the right track, the Argument from Inferiority should not be so easily dismissed. Thus, our aim in this paper is to expand on the insight, and to give a more detailed treatment of the issues involved. As we shall show, the argument can be construed in two different ways, depending on how the word "best" is interpreted. We argue that, in either case, the argument rests on a principle that appears implausible in light of the observation that there might be no best possible world. We present three distinct conceivable scenarios, in which there is no

best world. Finally, we suggest a strategy for reformulating the Argument from Inferiority so as to avoid our objections; this strategy would involve claiming, not that the actual world is not the best, but rather that it is not "good enough".

Before moving on to evaluate the Argument from Inferiority, however, it may be worth noting that it differs importantly from another argument: the famous Argument from Evil. The latter argument holds that the existence of evil in our world is inconsistent with our world's being created by an omni-being; hence, it differs from the former argument, most obviously, because the former makes no mention of evil at all.[5] The Argument from Inferiority makes no claims about the extent of evil in our world; nor does it rest on any view concerning the possibility of, as it were, "reducing" the extent of evil without thereby sacrificing valuable commodities such as free-will.[6] Rather, as we say, it makes only the quite innocuous claim that things might have been – perhaps only ever-so-slightly – better than they are.[7]

2. STRICTLY BEST POSSIBLE WORLDS

There are two senses of "best possible world", corresponding to two senses of "best". We shall refer to the latter two senses as *strictly best* and *weakly best*. Hence, there are two versions of the Argument from Inferiority: one in which the occurrences of "best possible world" in Premises (1b) and (1c) are read as meaning "*strictly* best possible world", and one in which those occurrences are read as meaning "*weakly* best possible world". We shall consider each of these versions in turn.

Let W be the set of all possible worlds; let us denote the actual world as $w_@$ (clearly $w_@ \in W$, since "actuality implies possibility"); and let $\succeq$ be a reflexive binary relation defined on W, where $x \succeq y$ is interpreted as "x is at least as good as y"[8] The relation $\succeq$ induces two further relations – $x \succ y$ interpreted as "x is better than y", and $x \approx y$ interpreted as "x and y are equally good" – where the following two equivalences hold.

(i) $x \succ y \Leftrightarrow (x \succeq y \land y \nsucceq x)$

(ii) $x \approx y \Leftrightarrow (x \succeq y \land y \succeq x)$.

Then we may define the strict sense of "best possible world" as follows.

DEFINITION 1 (Strictly Best). The set of strictly best worlds in W, relative to $\succeq$, is

$$B_s(W, \succeq) = \{x \in W \mid \forall y \in W(x \neq y \Rightarrow x \succ y)\}.$$

Definition 1 states that a given possible world is strictly best if and only if that world is better than all other possible worlds.

Thus, the "strictly best" version of the Argument from Inferiority may be stated as follows, where N is the set of all beings, $Mx =$"x is an omnibeing", and $xCy =$"x created y"

ARGUMENT 2 (Strictly Best Version).

(2a) $\exists x \in W(x \succeq w_@)$,

(2b) $\exists x \in W(x \succ w_@) \Rightarrow w_@ \notin B_s(W, \succeq)$,

(2c) $w_@ \notin B_s(W, \succeq) \Rightarrow \nexists i \in N(Mi \wedge iCw_@)$,

therefore,

(2d) $\nexists i \in N(Mi \wedge iCw_@)$.

Clearly, premise (2b) is true by definition; for $x \succ w_@ \Rightarrow w_@ \not\succeq x \Rightarrow w_@ \not\succ x$, and $x \succ w_@ \Rightarrow x \neq w_@$. And, as we have said, premise (2a) lies beyond the purview of the present paper; hence, we are left with Premise (2c).[9] How might (2c) be justified? It seems to us that the rationale for (2c) implicit in the Argument from Inferiority appeals to two principles. The first principle follows from one of the essential properties of an omnibeing: namely, omnibenevolence. An omni-being is "morally perfect", and so she will never do anything that she ought not to do; in the present context this implies that she will not create any possible world that ought not to be created by her.[10] The second principle says simply that, if a possible world is not strictly best, then it ought not to be created by an omni-being.[11]

Thus, the two principles may be stated as follows, where $O(p) =$"it *ought* to be the case that p".[12]

PRINCIPLE 1. $\forall i \in N(Mi \Rightarrow \forall x \in W(O\neg(iCx) \Rightarrow \neg(iCx)))$.

PRINCIPLE 2. $\forall x \in W(x \notin B_s(W, \succeq) \Rightarrow \forall i \in N(Mi \Rightarrow O\neg(iCx)))$.

Let us assume that premise (2c) is false; that is, let us assume that the actual world is not strictly best, and that it was created by an omni-being, g. Then, by employing Principles 1 and 2, we may derive a contradiction, as follows.

ARGUMENT 3 (Deriving (2c) from Principles 1 and 2).

(3a)	$w_@ \notin B_s(W, \succeq)$	[assumption]
(3b)	$gCw_@$	[assumption]
(3c)	Mg	[assumption]
(3d)	$Mg \Rightarrow O\neg(gCw_@)$	[(3a), Principle 2]
(3e)	$O\neg(gCw_@)$	[(3c), (3d)]
(3f)	$O\neg(gCw_@) \Rightarrow \neg(gCw_@)$	[(3c), Principle 1]
(3g)	$\neg(gCw_@)$	[(3e), (3f)]

But (3g) contradicts (3b); so, one of the assumptions – (3a), (3b), or (3c) – must be false. That is, if $w_@$ is not strictly best, then either g is not an omni-being, or g did not create $w_@$. But our choice of g was entirely arbitrary; the same result would have followed regardless of which being we had chosen. Therefore, given Principles 1 and 2, we have $w_@ \notin B_s(W, \succeq) \Rightarrow \forall i \in N(\neg Mi \lor \neg(iCw_@))$, which is equivalent to premise (2c).

We believe that Principle 1 is plausible, and we shall not challenge it here. However, as we shall argue, Principle 2 is implausible: more precisely, it is plausible *only if* we make certain contentious assumptions about the nature of the set of possible worlds W and the betterness relation $\succeq$.

Consider the following case.

CASE 1 (No Uniquely Best World). Let w_a and w_b be two distinct worlds in W (i.e., $w_a, w_b \in W$ and $w_a \neq w_b$) such that $w_a \approx w_b$ and $\forall x \in W - \{w_a, w_b\}(w_a \succ x \land w_b \succ x)$.

In this Case the relation $\succeq$ is such that *no* world is strictly best; that is, $B_s(W, \succeq) = \emptyset$;. World w_a cannot be strictly best because it is not better than w_b (since $w_a \approx w_b \Rightarrow w_b \succeq w_a \Rightarrow w_a \not\succ w_b$); similarly, world w_b cannot be strictly best because it is not better than w_a. And none of the possible worlds besides w_a and w_b can be strictly best, because none of them is better than either w_a or w_b. Hence, Principle 2 implies that, given Case 1, no world ought to be created: or, more precisely, every possible world is such that it ought not to be created. But this is implausible. Surely it would not be wrong to create either w_a or w_b; after all, these two worlds are worse than none.

Consider an analogous case: one may donate money to either of two famine-relief charities; but one will do just as much good – relieve just as much suffering, etc. – no matter which of the two charities one chooses. Thus, the two relevant actions (i.e., donating to the first charity and donat-

ing to the second charity) may plausibly be regarded as equally good, in which case neither is strictly best. But an analogous principle to Principle 2 would say that, if an action is not strictly best, then one ought not to perform it; and that analogous principle would imply that one ought not to donate to either charity. But that implication is quite counter-intuitive. To be sure, one might not be morally *required* to donate; but it is hard to see how one's donating could be *wrong*. And so, by analogy, Principle 2 is implausible.

We conclude, therefore, that Argument 3 is unsound, on the ground that it rests on an implausible principle. And since we see no other source of justification for premise (2c), we conclude that Argument 2 – i.e., the "strictly best" version of the Argument from Inferiority – is also unsound.

3. WEAKLY BEST POSSIBLE WORLDS

The problem with Argument 2 might be diagnosed as follows. No more than one possible world can be strictly best; that is, $|B_S(W, \succeq)| \leq 1$.[13] In this strict sense of "best", then, either there is a *uniquely* best world or there is no best world at all. However, in Case 1, there are two equally good candidates for the title of best world – the worlds w_a and w_b are tied for first place, as it were – and so there are no strictly best worlds in that case. It might be thought, therefore, that the reason Argument 2 fails is that the sense of "best possible world" it employs is too demanding.

Perhaps it would be better, then, to try the following weaker sense of "best possible World".

DEFINITION 2 (Weakly Best). The set of *weakly best* worlds in W, relative to $\succeq$, is

$$B_w(W, \succeq) = \{x \in W \mid \forall y \in W(y \not\succ x)\}.$$

A given possible world is weakly best, on this definition, if no other possible worlds are better than that world.[14]

Corresponding to this weaker sense of "best" is a revised version of Principle 2:

PRINCIPLE 2*. $\forall x \in W(x \notin B_w(W, \succeq) \Rightarrow \forall i \in N(Mi \Rightarrow O\neg(iCx)))$.

If there is a better possible world than the actual world, then the actual world is not weakly best; that is, $\exists x \in W(x \succ w_@) \Rightarrow w_@ \notin B_w(W, \succeq)$. Hence, Principle 2* may figure validly in (a suitably revised version of)

Argument 3. So the crucial question here is whether, and to what extent, this revised principle is more plausible than the original. Or, to put the question a little differently: what must the set W and the relation $\succeq$ be like – what properties must they have – in order for Principle 2* to be a plausible principle?

One such property of $\succeq$ is brought out by the following case.

CASE 2 (Cycling). Let the set of worlds W be finite, with $n = |W|$. And let there be an index of worlds $w_1, w_2, \ldots, w_n$ such that

(i) $w_i \succ w_{i+1}$, where $0 < i < n$,

(ii) $w_n \succ w_1$.

In this case, we have the following sequence:

$$w_1 \succ w_2, w_2 \succ w_3, \ldots, w_{n-1} \succ w_n, w_n \succ w_1.$$

But the sequence ends where it begins, thereby completing a full "cycle" from w_1 through to w_n, and then back to w_1 again.

Clearly, in Case 2, there is no weakly best world – i.e., $B_w(W, \succ) = \emptyset$ – because, for any given world, some other world is better than that world: for any w_i where $i > 1$, the better world is w_{i-1}; and for w_1, the better world is w_n. Hence, Principle 2* implies that, in this case, no possible world ought to be created. We think this implication is at least mildly counter-intuitive. There is a sense in which, given Case 2, all the possible worlds are "on a par", and so it seems arguable that, *contra* Principle 2*, it would not be wrong to create any one of them. Still, we readily concede that intuitions in this area may be rather weak and vague, since the scenario described might not be easily imagined. Nonetheless, we think Principle 2* would be more plausible if cases such as this were excluded. As it happens, that is not at all difficult to do. Notice that Case 2 implies that the relation $\succ$ is not transitive; for, while transitivity requires that $w_1 \succ w_n$, the description of the case implies that $w_1 \not\succ w_n$.[15] Hence, such cases as this might be excluded simply by requiring that $\succ$ be transitive.[16]

So, Case 2 does not appear to pose an insurmountable challenge to the Argument from Inferiority. But consider now another case.

CASE 3 (Infinitely Increasing). Let W be infinite. And let there be an index of worlds $w_1, w_2, \ldots$ such that, $w_{i+1} \succ w_i$, where $i > 0$.

This case generates another sequence:

$$w_2 \succ w_1, w_3 \succ w_2, \ldots, w_n \succ w_{n-1}, \ldots$$

Notice that this sequence will go on in the same fashion *infinitely*. In this case, as in the previous one, there is no weakly best possible world; no matter which world you pick, there is a better one. (Unlike the previous case, though, $\succ$ need not be intransitive.) 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.

Once again, Principle 2* implies that no possible world ought to be created. On this occasion, however, we think this implication is highly counter-intuitive. Consider an analogous case. You are in a car travelling at high speed directly toward an innocent bystander. If the car collides with the bystander, she will be very badly injured. Unfortunately, she is immobilised, and so she cannot move out of the path of the car; moreover, the car's steering has just failed, and so you cannot divert the car from its current path. The bystander's only hope is for you to apply the car's brakes, slowing it to a halt before the point of impact. Presently the car is 50 metres away from her, and, given its current speed, it will stop before impact only if the brakes are applied when the car is further than 20 metres away. But the car has a curious feature: the greater the distance it has travelled, the less likely it is that its brakes will fail – i.e., the less likely it is that, if you press the brake pedal, the brakes will not be applied.

From the point of view of acting benevolently toward the bystander, at what distance would it be best for you to press the brake pedal? Clearly, the best distance must be greater than 20 metres, since you are certain to hit the bystander if the brakes are applied at a distance of 20 metres or less. So we may eliminate all distances less than or equal to 20. Unfortunately, that does not narrow the field of candidates very much at all; for the set of non-eliminated distances remains infinite. Suppose, then, that we pick some arbitrary distance from that set; call it d_1. Now, we can, of course, pick a second such distance, d_2, where $20 < d_2 < d_1$. The probability that the brakes will fail, given that you press the pedal at distance d_1, is greater than the probability that they will fail, given that you press the pedal at d_2. Hence, d_2 must be a better distance than d_1 at which to press the pedal. But now we may repeat that reasoning with a third distance, d_3, where $20 < d_3 < d_2$, concluding that d_3 must be better than d_2. And then we may repeat it again with a fourth distance ... And so on on, and so forth, forever. Whichever distance we pick, there will always be a better one; hence, there is no best distance.

So this case is analogous to the previous one in that, in both cases, (i) there is an infinite set of objects of evaluation (in one case a set of worlds, in the other a set of distances), and (ii) that set lacks a best element. A principle analogous to Principle 2* would imply that, in the latter case, you ought not to press the brake pedal at any distance. But that is absurd! Surely no plausible principle of benevolence could require that you allow the bystander to come to great harm. We concede, of course, that this is a very tricky case, with all the hallmarks of a genuine paradox. However, we maintain nonetheless that one thing is perfectly clear: the correct solution to this paradox cannot be one which implies that you act wrongly if, say, you press the pedal at 21 metres.

In this case, it seems, a perfectly benevolent agent might choose to press the brake pedal at a non-best distance. And so, by analogy, it seems that, in Case 3, an omnibeing might choose to create a non-best world. We conclude, therefore, that Principle 2* is also implausible, and hence that the "weakly best" version of the Argument from Inferiority also fails.

4. CONCLUSION

Where does this leave the Argument from Inferiority? 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.

Secondly, she might try quite a different tack. Think again of the car example just discussed. It is plausible that there is *some* distance d – say, $d = 50$ metres – such that you ought not to press the brake pedal at distance d. As we have seen, the reason that this is so cannot be that d is not the best (since there is no best); rather, it must be that d is not *good enough* – i.e., d 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 of the Argument from Inferiority might say something similar in respect of Case 3: she might argue that even if the goodness of possible worlds increases infinitely, it is clear that the actual world is not good enough, in this sense.

In any case, however, neither of these strategies, even if successful, will undermine the central claim for which we have argued here: the theistic doctrine according to which our world was created by an omni-being is

not undermined by the mere fact (if a fact it be) that this is not the best of all possible worlds.

NOTES

[1] This idea is most notably endorsed by Leibniz (1951), and Plato (2000, 30a).

[2] For a similar formulation, see Leibniz (1951, 377).

[3] A referee for *Synthese* points out two ways of interpreting the phrase, "world w_1 is better than world w_2". According to the first, it means "w_1 is morally better than w_2". According to second, it means "w_1 is greater than w_2", as in Anselm's locution in his Ontological Argument: "God is a being of which none greater can be conceived". As the reader will see, our focus is on the first interpretation. The referee contends, however, that, if the second interpretation is what the proponent of the Argument from Inferiority intends, then many theists might be in trouble. For, the referee claims, Anselm and other proponents of the Ontological Argument assume that there is a greatest possible being (i.e., God), and so it is hard to see how they might consistently deny that there is a greatest possible world. We have two objections to this point. First, the aim of the argument from inferiority is to disprove the existence of a *morally* perfect creator of this world. Therefore, the relevant sense of "better than" is not the second but the first. Second, even if Anselm's interpretation of "better than" is relevant, proponents of the ontological argument need not commit to the claim that there is a best possible *world*. For, according to Anselm, although the class of possible beings must have a greatest member, the same does not hold for other classes of things. Gaunilo, a contemporary of Anselm, famously contended that if the Ontological Argument were successful, then we could also prove the existence of the greatest possible island. In responding to Gaunilo's point Anselm argued that it does not follow that there is a best possible island because, unlike the maximal qualities that God has, the qualities that make for greatness in islands – e.g., number of palm trees, smoothness of sands, amount of coconuts etc., – have no intrinsic maximum. That is, Anselm said, no matter how great an island is there is always a greater possible island. Anselm and proponents of the Ontological Argument may say the same for possible worlds: it does not follow that there is a best possible world, because the qualities that make for greatness in worlds have no intrinsic maximum. It is plausible, therefore, that our argument withstands even if we adopt the "greater than" reading of "better than".

[4] See also Plantinga (1973, 539).

[5] Nonetheless, the two arguments are clearly related. See, for example, Forrest (1981).

[6] A common response to the Argument from Evil – the so-called Free-will Defence – says that God could not ensure that there was no evil unless He created a world without human free-will, and any such world would therefore be worse than this one.

[7] We assume that goodness is not reducible simply to the absence of evil; hence, that things might have been better does not imply that there might have been less evil.

[8] This formal apparatus is borrowed from social choice theory. For a good introduction see Sen (1970).

[9] Premise (2c) is similar to one discussed by Adams (1972, 317): "If a perfectly good moral agent created any world at all, it would have to be the very best world that he could create".

[10] Notice that this principle concerns only what ought *not* to be done – i.e., which worlds ought *not* to be created. We might also define principles concerning what *ought* to be

done: for example, such a principle might say that, if a world is best, then it ought to be created (by an omni-being). However, no such principle could support the Argument from Inferiority. For, although such a principle might imply that an omni-being ought to create some possible world other than ours (since that other world is best), this is perfectly consistent with an omni-being's creating our world.

[11] Notice that the second principle may presuppose another of the omni-being's essential properties: namely, her omnipotence. If the omni-being were not "all-powerful" then she might be unable to avoid creating a world that is not strictly best, in which case the principle would violate "ought implies can".

[12] Here we treat statements of the form "i ought to create x" as synonymous with statements of the form "it ought to be the case that i creates x"

[13] Assume, for contradiction, that $|B_S(W, \succeq)| \geq 2$. Then there must exist some $w, w' \in B_s(W, \succeq)$ such that $w \neq w'$. Definition 1 implies $\forall x \in W(x \neq w \succeq w \succeq x)$; hence, $w \succeq w'$. But Definition 1 also implies that $\forall x \in W(x \neq w' \Rightarrow x \not\succeq w')$; hence, $w \not\succeq w'$. So we have a contradiction: $w \succeq w'$ and $w \not\succeq w'$. Our assumption must, therefore, be false; $|B_S(W, \succeq)|$ must be less than 2.

[14] Notice that, while a strictly best world must also be weakly best, the converse does not hold; that is, necessarily, $B_s(W, \succeq) \subseteq B_w(W, \succeq)$, but possibly $B_w(W, \succeq) \not\subseteq B_s(W, \succeq)$.

[15] Assume, for contradiction, that $\succ$ is transitive. It follows that $w_1 \succ w_i \Rightarrow (w_i \succ w_{i+1})w_1 \succ w_{i+1})$. But we are given that $w_i \succ w_{i+1}$, where $0 < i < n$. Hence, $w_1 \succ w_i \Rightarrow w_1 \succ w_{i+1}$, where $0 < i < n$. But $w_1 \succ w_2$. Therefore, by induction, we have $w_1 \succ w_i$, where $2 \leq i \leq n$. And this implies that $w_1 \succ w_n$. But we are given that $w_n \succ w_1$. So we have a contradiction (since $w_1 \succ w_n \Rightarrow w_n \not\succeq w_1 \Rightarrow w_n \not\succ w_1$).

[16] More weakly, it may be required that $\succ$ is "acyclical". But that might seem *ad hoc*, given the nature of the counter-example. For a defence of the position that the "better than" relation must be transitive, see Broome (1991, 11–12).

REFERENCES

Adams, Robert Merihew: 1972, 'Must God Create the Best?', *The Philosophical Review* **81**, 317–332.

Broome, John: 1991, *Weighing Goods*, Blackwell.

Forrest, Peter: 1981, 'The Problem of Evil: Two Neglected Defenses', *Sophia* **20**, 49–54.

Leibniz, G. W.: 1951, *Theodicy: Essays on the Weakness of God, the Freedom of Man, and the Origin of Evil*, Routledge and Kegan Paul.

Plantinga, Alvin: 1973, 'Which World Could God Have Created?', *Journal of Philosophy* **LXX**.

Plantinga, Alvin: 1974, *The Nature of Necessity*, Clarendon Press.

Plato: 2000, *Timaeus*, Hackett.

Sen, Amartya: 1970, *Collective Choice and Social Welfare*, Holden Day.

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