Kant on the existence and uniqueness of the best possible world

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1. *Introduction*. Leibniz famously defended the doctrine that the actual word is the best possible world, and that it was selected from all possible worlds by an omniscient, omnipotent, and maximally benevolent God. The claim that the actual world is the best possible world presupposes the existence and uniqueness of the best possible world, i.e. it presupposes that among the possible worlds there is one (existence), and only one (uniqueness), best possible world. Leibniz does not provide – at least not in the texts I know – much of an argument for the idea that there is a unique best possible world. Leibniz’s doctrines imply that God would choose only what is best and that he would not be able to choose between two equally good worlds. This suggests the following possible Leibnizian argument for the thesis that there is a unique best possible world: there is a world, and since God would choose only what is best and he would not choose between two equally good worlds, there is a unique best possible world. Something like that, for instance, can be extracted from *The Confession of a Philosopher* (CP 101).[[1]](#footnote-1)

But such an argument – as Leibniz himself says of the argument he is discussing in the passage from the *Confession* – would proceed from the effect and be *a posteriori* (CP 101). In previous work I have pointed out why this is not sufficient for Leibniz, and why it would have been important for Leibniz to provide an *a priori* explanation for the uniqueness of the best possible world, i.e. an explanation proceeding from the cause of possible worlds (Rodriguez-Pereyra 2014: 102). Here I shall limit myself to observe that the argument adumbrated in the previous paragraph is meant to establish *that* there is a unique best possible world, as opposed to be meant to establish *why* there is a unique best possible world. This is important, since according to Leibniz’s Principle of Sufficient Reason every truth must have a reason why it is so and not otherwise (PE 210, 217).

In the 1750s Optimism, the Leibnizian doctrine that the actual world is the best possible world, popularised by Pope in 1733 in his *Essay on Man*, was a hot topic. 1755 was an important year for the debate on Optimism. It was the year of the tremendous earthquake in Lisbon, which produced several tens of thousands of deaths, and provoked Voltaire to attack the doctrine of Optimism in his poem on the Lisbon disaster. It was also the year when the Prussian Academy awarded its prize for an essay on the topic of the relationship between Pope’s proposition ‘Whatever is, is right’ and the system of Optimism, or of the choice of the best (the prize had been advertised in 1753). The winning entry was by Adolf Friedrich Reinhard, a follower of Crusius who became professor of law at the University of Bützow, and also a judge, but who also wrote on metaphysical topics.[[2]](#footnote-2) 1759 was another important year for the debate on Optimism, since that is the year of the publication of Voltaire’s *Candide*, whose full title was *Candide, ou L’Optimisme*. And 1759 was the year when Kant wrote and published a brief essay defending Optimism, *Attempt at some Reflections on Optimism*. In his little opuscule Kant is concerned almost exclusively with the proposition that there is one and only one best possible world, i.e. with existence and uniqueness of the best possible world.

In my view, Kant’s little essay is a reply to Reinhard. My reason for taking Kant’s essay to be a reply to Reinhard’s is that Kant responds to objections made by Reinhard, and Reinhard, other than Leibniz, is the only person cited by Kant in his essay. Although not conclusive evidence for my claim, this is highly suggestive of it. But note that taking Kant’s essay to be a reply to Reinhard is not to take Kant’s essay to be a reply *only* to Reinhard, and so what I am claiming is compatible with Kant’s own claim, made in a letter to Lindner, that in his essay he was replying to Crusius (see AK 10: 22–23/TP lvi).

What are the objections made by Reinhard to which Kant responds in his essay? Among many other interesting points about Pope and Leibniz, Reinhard makes the important point that Leibniz’s system presupposes that there is a unique best possible world and argues that such a supposition cannot be upheld. Reinhard says for instance:

I have made see, I believe, clearly enough, that the ideas we have of perfection, do not allow us to think that only one world is, all things considered, the most perfect of all possible; and that would suffice for overthrowing the System of Optimism, which could not subsist [consister] without such supposition. (1755: 35; see also 1755: 29).[[3]](#footnote-3)

What are Reinhard’s reasons for doubting the existence and uniqueness of the best possible world? His main point is that there could be two different possible worlds that are equally perfect, since different possible worlds contain different realities and they might sum up to the same total degree of perfection (1755: 32). If that were the case, there might be two or more best possible worlds, i.e. two or more equally good worlds that are better than all the others. In that case there would be no unique best possible world. But he also claims that there is no greatest degree of perfection, since every degree of perfection, being finite, can be augmented. This suggests that there is no best possible world because there is always a better one (1755: 34). Thus this second claim is concerned with the existence rather than the uniqueness of a best possible world, but neither does Reinhard put the matter so clearly, nor does he press on the issue.[[4]](#footnote-4)

Kant is clearer than Reinhard in identifying and stating the arguments against the existence and uniqueness of the best possible world.[[5]](#footnote-5) He argues that there is a unique best possible world, since it is not the case that either every possible world is worse than another or there are two or more equally good possible worlds that are better than all the rest. This argument, if it works, gives a reason, perhaps *the* reason, *why* there is a unique best possible world. Kant had argued for the Principle of Sufficient Reason in his *Nova Dilucidatio* of 1755, and in that work he distinguished between reasons *that* and reasons *why*. A reason *why* something is the case renders intelligible that which is the case, while a reason *that* something is the case is a reason that lets us know that it is the case (ND 1: 392/TP 12).[[6]](#footnote-6)

Although it is not clear why, Kant was later dissatisfied with his essay (see TP lvi–lvii, Z 6). In what follows, I shall reconstruct, discuss and evaluate Kant’s argument. My evaluation will be negative, and so I think Kant had reasons to be dissatisfied with his essay. I like the idea that perhaps some of the criticisms I shall make to his argument were Kant’s own.

2. *A best possible world*. Kant first argues for the thesis that there is a possible world than which no better possible world can be thought. This is what he says:

If no world can be thought, beyond which a still better world cannot be thought,[[7]](#footnote-7) the Supreme Understanding could not possibly have cognition of all possible worlds. Now, this latter claim is false, so the former claim must be false as well. The correctness of the major premise becomes apparent in the following way: if I can assert of any particular idea whatever, which can be made of a world, that the representation of a still better world is possible, then the same thing can also be said of all the ideas of worlds in the Divine Understanding. Therefore, there are possible worlds which are better than all[[8]](#footnote-8) those known by God, and God has not had knowledge of all possible worlds. I imagine that the minor premise will be admitted by every orthodox believer. My conclusion is that it is false to assert that no world can be thought, beyond which a still better world cannot be thought. Or, to express the same idea differently: there is a possible world, beyond which no better world can be thought. Admittedly, it does not, of course, follow from this that one among all the possible worlds must be the most perfect, for if two or more such possible worlds were equal in respect of perfection, then, although no world could be thought which was better than either of the two, neither of them would be the best, for they would both have the same degree of goodness (VBO 2:30/TP 71–2).

Kant’s intended conclusion in this part of the argument is that there is at least one possible world such that no other possible world is better than it or, equivalently, that it is not the case that for every possible world there is a possible world better than it. But he never states the thesis in this way. Instead he says that his conclusion is that it is false that no world can be thought beyond which a still better world cannot be thought or, equivalently, that there is a possible world beyond which no better world can be thought. But this seems not to be the same as what I take to be his intended conclusion, since it seems that even if there is a possible world beyond which no better world can be thought, it might still be the case that there is no possible world such that no other possible world is better than it. In effect, that there is a limit to the thinkable goodness of possible worlds does not seem to guarantee that there is a limit to the goodness of possible worlds: one would still need to rule out the possibility of worlds whose goodness is unthinkable.

But why think that his intended conclusion was the one I have attributed to him, rather than the one he explicitly stated? The evidence that what I have attributed to him is his intended conclusion is the last sentence of the quoted passage, where Kant concedes that it does not follow from what he has concluded that a possible world beyond which no better world can be thought must be the best one (“the most perfect”), for if there were two worlds which are worse than no one, neither of them would be the best. That is, he sees his argument so far as incomplete because it does not allow him to conclude that there is one and only one best possible world, not because it does not allow him to conclude that there is one and only one possible world beyond which no better world can be thought. I take this to be evidence that his intended conclusion in this part of the argument is that there is at least one possible world such that no other possible world is better than it, that is, there is at least one best possible world, and this is how I interpret him.

But if so, is the gap between his stated and his intended conclusion salvageable? Note that what Kant gets committed to by what he says is that there is at least one possible world beyond which no better world can be thought *by God*. Now, if Kant is taking God as someone who can represent perfectly everything that is possible – and surely such capacity for perfect representation is included in God’s traditional characterization as omniscient – then if there is at least one possible world beyond which no better world can be thought by God, there is at least one possible world such that no other world is better than it. This is what allows Kant to cross the bridge between his stated and his intended conclusion.[[9]](#footnote-9)

But let us examine Kant’s argument in more detail. The general structure of the argument is a *modus tollens* and can be stated as follows:[[10]](#footnote-10)

1. If no possible world can be thought beyond which a better possible world cannot be thought, God does not have knowledge of all possible worlds (“If no world can be thought, beyond which a still better world cannot be thought, the Supreme Understanding could not possibly have cognition of all possible worlds”).
2. God has knowledge of all possible worlds (“Now, this latter claim is false”).
3. Therefore, there is at least one possible world beyond which no better possible world can be thought (“My conclusion is that it is false to assert that no world can be thought, beyond which a still better world cannot be thought. Or, to express the same idea differently: there is a possible world, beyond which no better world can be thought”).

Kant does little by way of supporting the second premise: “I imagine that the minor premise will be admitted by every orthodox believer” is all he says. I shall say a little more about premise (2) later on, but the action is not in that part of the argument, since premise (2) can be granted in the context of an argument that does not question that there is such thing as all possible worlds and that God is omniscient.

The premise that needs attention is premise (1), and Kant does say more about it. Kant says the following to support it: “… if I can assert of any particular idea whatever, which can be made of a world, that the representation of a still better world is possible, then the same thing can also be said of all the ideas of worlds in the Divine Understanding. Therefore, there are possible worlds which are better than those known by God, and God has not had knowledge of all possible worlds”. For this to support premise (1), asserting of an idea of a possible world that the representation of a better world is possible must be connected with the possibility of thinking of a world better than the one represented by the idea in question. I think the connection is very simple. I take it that Kant is assuming that to represent a possible world is to think of a possible world, and so for the idea of a possible world to be such that the representation of a still better world is possible is for it to be possible to think of a world better than that represented by the idea in question. So, to say that I can assert of any particular idea whatever, which can be made of a world, that the representation of a still better world is possible, is to say that for every possible world represented by any idea whatever it is possible to think of a better possible world. Since it is clearly being assumed that every possible world has an idea, to say that I can assert of any particular idea whatever, which can be made of a world, that the representation of a still better world is possible, is to say that for every possible world it is possible to think of a better possible world. In other words, it is to say that no possible world can be thought beyond which a better possible world cannot be thought. Thus this is how I reconstruct Kant’s argument in support of premise (1):

1. If no possible world can be thought beyond which a better possible world cannot be thought, no possible world represented in the Divine Understanding is such that a better possible world cannot be thought (“… if I can assert of any particular idea whatever, which can be made of a world, that the representation of a still better world is possible, then the same thing can also be said of all the ideas of worlds in the Divine Understanding”).
2. If no possible world represented in the Divine Understanding is such that a better possible world cannot be thought, there are possible worlds which are better than all those known by God (“Therefore, there are possible worlds which are better than all those known by God”).
3. If there are possible worlds which are better than all those known by God, God does not have knowledge of all possible worlds (“… and God has not had knowledge of all possible worlds”).

(1) Therefore, if no possible world can be thought beyond which a better possible world cannot be thought, God does not have knowledge of all possible worlds (“If no world can be thought, beyond which a still better world cannot be imagined, the Supreme Understanding could not possibly have cognition of all possible worlds”).

Note that in his text Kant does not explicitly derive that God does not have knowledge of all possible worlds from the claim that there are possible worlds which are better than those known by God. Instead, what he says is compatible with deriving the conjunction of both claims from the idea that no world represented in the Divine Understanding is such that a better world cannot be thought. But since one of the conjuncts seems to be a consequence of the other, and the text does not rule out a reading in which the second conjunct is derived from the first, I have decided to represent the structure of Kant’s argument in this way. I shall come back to this at the end of the section.

What to make of Kant’s argument? The argument is valid, since it is based on the transitivity of the conditional (clearly, the conditionals in Kant’s argument are stronger than the material conditional). Premise (4) is plausible, since the worlds represented in the Divine Understanding are worlds that can be thought of (by God), and so if no world can be thought beyond which a better world cannot be thought, no world represented in the Divine Understanding is such that a better world cannot be thought. There are problems, however, with premises (5) and (6).

Consider the consequent of premise (5): there are possible worlds which are better than all those known by God. It is plausible that this means that there is at least one possible world not known by God which is better than every possible world known by God. But then premise (5) is false, since it is possible that for every world God knows, there is a better world that is also known by God. But perhaps what the consequent of (5) means is simply that for every possible world known by God, there is at least one possible world better than it, where this is meant to be consistent with God knowing all those worlds. Admittedly, this is a less plausible reading of the consequent of (5), but I would not exclude it as a possibly intended reading. Thus, the consequent of (5) can mean either (a) or (b):

1. For every possible world known by God, there is at least one possible world better than it.
2. There is at least one possible world not known by God which is better than every possible world known by God.

If the intended interpretation of the consequent of premise (5) is (a), premise (5) is plausible. For, plausibly assuming that every world known by God is represented in the Divine Understanding, if no world represented in the Divine Understanding is such that a better world cannot be thought, for every world known by God there is at least one world better than it. But nothing here entails that God does not know all possible worlds. Indeed, that for every world known by God, there is at least one world better than it, is consistent with God knowing all worlds, since, for instance, it is possible that God knows all the worlds in an infinite lineal series of possible worlds ordered according to the better-than relation. So, if the intended consequent of premise (5) is (a), and therefore the intended antecedent of premise (6) is (a), premise (6) is false.

But if the intended interpretation of the consequent of premise (5) is (b), premise (6) is true. However, if the intended interpretation of the consequent of premise (5) is (b), premise (5) is false, for that no world represented in the Divine Understanding is such that a better world cannot be thought is consistent with there being no worlds not known by God, since it is possible that for every world God represents, he thinks of, and knows, a world better than it.

Thus either interpretation of the consequent of premise (5) falsifies one of premises (5) and (6). If so, the argument for premise (1) must have at least one false premise.

But this is not the end of the matter. For perhaps Kant thought that if no possible world can be thought beyond which a better possible world cannot be thought, the notion of possible world is indefinitely extensible, in the sense that for any possible worlds it is possible by reference to one, some, or all of them to identify a further possible world that is not one of them.[[11]](#footnote-11) The idea behind Kant’s argument would be, on this interpretation, that for any possible worlds there will be a possible world that (a) is not one of them and (b) is better than all of them. I think the text affords little if any evidence that this is what Kant had in mind. But for the sake of completeness, I shall discuss whether Kant could provide an argument for premise (1) based on the indefinite extensibility of the notion of possible world.

One way in which the idea of the indefinite extensibility of the notion of possible world can be cashed out is as the idea that there is no single entity, whether it is a set, a sum, or what not, that contains or collects all the possible worlds. Another way in which the indefinite extensibility of the notion of possible world can be cashed out is as the idea that there is no such thing as all possible worlds. The former idea is weaker than the latter, for even if there is no entity that contains or collects all possible worlds, there might still be such a thing as all possible worlds, while if there is no such a thing as all possible worlds, there is no entity that contains or collects all possible worlds.

Could Kant have used the weaker idea of indefinite extensibility, the idea that there is no entity containing or collecting all possible worlds to produce an argument for premise (1)? In that case, premise (1) would say that if no possible world can be thought beyond which a better possible world cannot be thought (because there is no entity containing or collecting all possible worlds, because for any collection of possible worlds there is a world outside the collection which is better than all the worlds in the collection), God does not have knowledge of all the possible worlds. But this is false, for God’s omniscience would make him know all possible worlds, even if they are not contained or collected in any single entity.

Thus the argument for premise (1) so interpreted must fail somewhere. Premise (4) on this reading means that if no possible world can be thought beyond which a better possible world cannot be thought (because there is no entity containing or collecting all possible worlds, because for any collection of possible worlds there is a world outside the collection which is better than all the worlds in the collection), then no possible world represented in the Divine Understanding is such that a better possible world cannot be thought. I think this may be granted. But premises (5) and (6) keep their original meaning, and so the problem with the argument is the same as before: if the consequent of premise (5) is read as (a), premise (5) is plausible but premise (6) is false, and if the consequent of premise (5) is read as (b), premise (6) is true but premise (5) is false; so the argument for premise (1) must have a false premise. Thus, assuming that there is no entity containing or collecting all possible worlds does not make a difference to the cogency of Kant’s argument.

Could Kant have used the stronger idea of indefinite extensibility, the idea that there is no such thing as all possible worlds, to produce an argument for premise (1)? In that case, premise (1) would say that if no possible world can be thought beyond which a better possible world cannot be thought (because there is no such thing as all possible worlds, because for any possible worlds there is a possible world that is not one of them and is better than all of them), God does not have knowledge of all the possible worlds. This is true, for if there is no such thing as all possible worlds, there is no such thing as knowledge of all possible worlds (cf. Levey 2016: 423). How could Kant’s argument support this thesis?

Premise (4) would be claiming that if no possible world can be thought beyond which a better possible world cannot be thought (because there is no such thing as all possible worlds, because for any possible worlds there is a possible world that is not one of them and is better than all of them), no possible world represented in the Divine Understanding is such that a better possible world cannot be thought. Again, I think this may be granted.

What about premise (5)? If (b) is the intended interpretation of its consequent, premise (5) is false if there is no such thing as all possible worlds. For that there is no such thing as all possible worlds, and therefore that there is no such thing as knowledge of all possible worlds, does not entail that there are worlds God does not know. Indeed, that there is no such thing as all possible worlds is compatible with God knowing any worlds there are. Thus if (b) is its intended interpretation, premise (5) is false, since it does not follow from the fact that no world represented in the Divine Understanding is such that a better possible world cannot be thought that there is at least one world not known by God, and therefore it does not follow from it that there is at least one world not known by God which is better than any world known by God.

What if the intended interpretation of the consequent of (5) is (a)? If no possible world represented in the Divine Understanding is such that a better possible world cannot be thought, for every possible world represented in the Divine Understanding, and so for every possible world known by God, there is at least one possible world better than it, even if there is no such thing as all possible worlds. Thus if (a) is the intended interpretation of the consequent of premise (5), premise (5) is true, even if there is no such thing as all possible worlds.

Now, if there is no such thing as all possible worlds, God does not have knowledge of all possible worlds. Then the consequent of premise (6) is true if there is no such thing as all possible worlds. Thus, if there is no such thing as all possible worlds (because for any possible worlds there is a possible world that is not one of them and is better than all of them), and the intended interpretation of the consequent of premise (5) is (a), premise (6) has both a true antecedent and a true consequent. Now, it is plausible to suppose that if the notion of possible world is indefinitely extensible, it is necessarily so. And if the way to cash out the indefinite extensibility of possible world is via the idea that there is no such thing as all possible worlds, then it is necessary that there is no such thing as all possible worlds. But then, if it is necessary that there is no such thing as all possible worlds, premise (6) has both a necessarily true antecedent and a necessarily true consequent when the consequent of premise (5) is interpreted as (a). Does this make premise (6) true on this interpretation? I doubt it. Even so, I think this is a powerful argument for premise (1).

But there are two problems with attributing this argument to Kant. First, it is very unlikely that this is what Kant had in mind. For if he had something like this in mind, it is not clear why he did a detour via (5) and (6) to reach (1), when he could have more simply argued that if no possible world can be thought beyond which a better possible world cannot be thought, because there is no such thing as all possible worlds (because for any possible worlds there is a possible world that is not one of them and is better than all of them), then God does not have knowledge of all possible worlds, since if there is no such thing as all possible worlds, there is no such thing as knowledge of all possible worlds.

Second, even if the above is a powerful argument for premise (1), with premise (1) so interpreted the argument from (1) and (2) to (3) is invalid. For on this interpretation premise (1) says that if no possible world can be thought beyond which a better possible world cannot be thought (because there is no such thing as all possible worlds, because for any possible worlds there is a possible world that is not one of them and is better than all of them), God does not have knowledge of all the possible worlds. As we saw, Kant supports premise (2) by appeal to orthodox belief. But what orthodox belief dictates is God’s omniscience, and God’s omniscience is compatible with him not knowing all possible worlds because there is no such thing as all possible worlds (cf. Levey 2016: 423). God’s omniscience requires that there are no possible worlds God does not know. Thus premise (2) must be understood as meaning that there are no possible worlds God does not know. But the consequent of (1), on this interpretation, is not incompatible with there being no possible worlds God does not know. Thus, premise (2) is not the negation of the consequent of premise (1). Therefore, using the idea that there is no such thing as all possible worlds to establish premise (1) renders the argument from (1) and (2) to (3) invalid.

Thus either one of the premises (5) and (6) is false, or the argument from premises (1) and (2) to (3) is invalid. Either way Kant cannot derive his intended conclusion.

As I noted above, Kant’s text can be read as deriving the conjunctive claim that there are possible worlds which are better than those known by God and God does not have knowledge of all possible worlds from the idea that no world represented in the Divine Understanding is such that a better world cannot be thought. But this reading is subject to similar difficulties to those affecting my preferred reading. Under the alternative reading, there would be no premise (6) and premise (5) would read as follows:

(5\*) If no possible world represented in the Divine Understanding is such that a better possible world cannot be thought, there are possible worlds which are better than all those known by God and God does not have knowledge of all possible worlds (“Therefore, there are possible worlds which are better than those known by God, and God has not had knowledge of all possible worlds”).

The first conjunct of the consequent of (5\*) can be interpreted as (a) or (b). But if there is such a thing as all possible worlds, then no matter how it gets interpreted, (5\*) is false, since that no world represented in the Divine Understanding is such that a better world cannot be thought is consistent with God knowing all possible worlds. If there is no such a thing as all possible worlds, if the first conjunct of (5\*) is interpreted as (b), premise (5\*) is false, since it does not follow from the fact that no possible world represented in the Divine Understanding is such that a better possible world cannot be thought that there is at least one possible world not known by God which is better than any possible world known by God. If there is no such a thing as all possible worlds, if the first conjunct of (5\*) is interpreted as (a), premise (5\*) is true, but then the problem is that the argument from (1) and (2) to (3) is invalid, for the reasons already given. Thus not even on this alternative reading can Kant derive his intended conclusion.

3. *Potential infinite*. Note that I have been implicitly assuming that the series of ever-better possible worlds, if there is one, is actually infinite. But there is some evidence that in the opuscule on Optimism Kant thought that every multiplicity is at most potentially infinite. Indeed, he says: “Multiplicity [as such] is finite, though additions can nonetheless be made to it in thought without its thereby ceasing to be finite” (VBO 2: 32/TP 74). Taking this seriously means that the collection of ever-better possible worlds is not actually infinite, but at most potentially so, that is, it is necessary that for every possible world *x* it is possible that there is a possible world *y* such that *y* is better than *x*, and it is not possible that for every possible world *x* there is a possible world *y* such that *y* is better than *x*.[[12]](#footnote-12) Thus, the collection of ever-better possible worlds is not actually infinite, since there must be at least one possible world such that there is no better world than it – but it is possible that there is a world better than it.

Even if Kant thought that every multiplicity is at most potentially infinite, I can see no evidence in the passage quoted at the beginning of Section 2 that he is thinking of the infinite as potential infinite. On the contrary, the passage strongly suggests that he is thinking of the multiplicity of possible worlds in terms of the actual infinite. Indeed, if possible worlds are representations in the divine mind, and the divine mind includes actual representations of everything that is possible, the multiplicity of possible worlds must be an actual infinite multiplicity within the divine mind. Thus, I think that the argument we have discussed was conducted in terms of the actual infinite.

But, for the sake of completeness, let us consider what would happen to the argument if it were formulated in terms of the potential infinite. In that case, the consequent of premise (5) would be ambiguous between the following two readings:

1. For every possible world known by God, it is possible that there is at least one possible world better than it.
2. It is possible that there is at least one possible world not known by God which is better than every possible world known by God.

But the argument faces problems similar to the ones we saw before. For if the intended consequent of premise (5) is (c), premise (5) is plausible. But, obviously, nothing here entails that God does not know all possible worlds. So, if the intended consequent of premise (5) is (c), and therefore the intended antecedent of premise (6) is (c), premise (6) is false. Of course, it will be replied that if the argument is rephrased in terms of the potential infinite, the consequent of premise (6), and therefore the consequent of (1), will be not that God does not know all the possible worlds, but that it is not necessarily the case that God knows all the possible worlds. Fair enough; but even so, if the intended consequent of premise (5) is (c), premise (6) is false. For (c) is consistent with God necessarily knowing all the possible worlds. That is, that it is possible that there is at least one possible world better than any world known by God does not require that God does not possibly know that better world. Even that it is *necessarily* possible that there is at least one possible world better than any world known by God does not require that God does not possibly know that better world, and so it does not require that it is not necessarily the case that God knows all the possible worlds.

But if the intended interpretation of the consequent of premise (5) is (d), premise (6) is true, at least when its consequent is understood to mean that it is not necessarily the case that God knows all the possible worlds. However, if the intended interpretation of the consequent of premise (5) is (d), premise (5) is false, for that no world represented in the Divine Understanding is such that a better world cannot be thought is consistent with it being necessary that God knows all possible worlds.

Thus, reformulating the argument in terms of the potential infinite makes no difference to the cogency of Kant’s argument.

4. *A unique best possible world*. At the end of the passage quoted in Section 2 Kant says that it does not follow from what he has argued that one among all the possible worlds must be the most perfect, for his argument has left open the possibility that two or more possible worlds could be equally perfect. To prove that this is not possible Kant says he will offer a reflection that seems new to him.

Let me summarise the beginning of his reflection. He starts by saying that the absolute perfection of a thing is its degree of reality (cf. Reinhard (1755: 23) for whom perfection is the sum of reality found in a being). And he asserts that realities can never be distinguished from each other as realities.[[13]](#footnote-13) For if things differ from each other, they differ in virtue of something which is present in one thing and not in the other. But the characteristic marks of realities are positive. Thus if two realities were to differ from each other as realities, there would be something negative in one of them that made possible their distinction, but then those realities would not have been compared as realities. Thus, Kant concludes, realities differ from each other only in virtue of the negations, absences, and limits attaching to one of them, that is, realities differ from one another not in respect of their quality but in respect of their magnitude or degree (VBO 2: 31/TP 72–3). Then Kant says the following:[[14]](#footnote-14)

Therefore, if things differ from one another, they always do so only through the degree of their reality, and different things can never have the same degree of reality. Hence, two different worlds can never have the same degree of reality either; that is to say, two equally good, equally perfect worlds are not possible. Mr. Reinhard says in his prize essay on Optimism: one world could well have precisely the sum of realities, albeit of a different kind, as the other, and then there would be different worlds and yet of equal perfection. But he is mistaken in thinking that realities of equal degree could be distinguished from each other with respect to their quality (*qualitate*). For, to say it again, suppose they could, there would then be something in one that is not in the other, they would thus differ from each other through the determinations *A* and *not A*, one of which is always a genuine negation, and consequently they would differ from each other through their limits and degree, but not through their quality [Beschaffenheit]; for negations can never be counted among the qualities [Qualitäten] of a reality, but they limit it and determine its degree. This consideration is abstract and may well need some clarifications, which I reserve, however, for another occasion. (VBO 2: 31).

Thus Kant gives first an argument that it is not possible that there are two equally perfect possible worlds, and then considers and replies to an objection. Since Kant does not modalise all of the relevant statements, his argument will not support his thesis that it is not possible that there are two equally perfect possible worlds; so let us ignore the way in which he actually formulates the conclusion of his argument and let us use as the conclusion of his argument the thesis that there are no possible worlds that are equally perfect. His argument is based on the equation of perfection with degree of reality and the claim that no things can have the same degree of reality. It can be formulated thus:

(7) The perfection of a thing is its degree of reality.

(8) No two things have the same degree of reality.

(9) Therefore, no two possible worlds are equally perfect.

Kant asserts (7) in the part of the text I summarised and he asserts (8) and (9) in the passage quoted above. This argument makes clear the correct interpretation of Kant’s assertion that the perfection of a thing is its degree of reality. This must be understood as meaning that the degree of reality of a thing is how perfect that thing is. That is, the degree of reality of a thing is its degree of perfection. This entails that if two things are equally perfect, they have the same degree of reality. But even interpreting premise (7) in this way the argument remains invalid and needs at least two additional premises. One is the additional intermediate conclusion, which follows from (7) and (8), that no two things are equally perfect. The other one is the premise that possible worlds are things. These two premises would allow Kant to derive the conclusion that no two possible worlds are equally perfect. But one should grant these premises to Kant and assume them as implicit in his argument, which is what I shall do.

Even with these extra premises, there is still a problem. For premise (8) is in need of support. Indeed, why could it not happen that two things have different perfections but which add up to the same degree of perfection? This is basically Reinhard’s point. Indeed, Reinhard points out that there could be two worlds which have different realities but which add up to the same degree of reality, and such worlds would be equally perfect (1755: 32). Kant has an answer to Reinhard’s point. His answer is that Reinhard’s point presupposes that realities of equal degree can differ with respect to their quality, but if this were the case, there would then be something in one that is not in the other, and so something in one of them would be a negation, but negations are not qualities of a reality but rather determine its degree, consequently realities would differ not with respect to their quality but with respect to their degree. Thus Kant is arguing a point he made before, namely that realities differ only with respect to their degree, and therefore there are no two realities of equal degree.

A crucial point in Kant’s reply is the idea that negations are never qualities of a reality but instead they determine its degree. Kant himself acknowledges that this may well need clarification, but he does not provide it. The claim that negations are not qualities of a reality, which is entailed by his assertion that all the characteristics of realities are positive, seems to conflict with his claim that things in general, and realities in particular, differ from each other through a negation that is in one but not in the other. But as Kant explains in his *Attempt to introduce the Concept of negative Magnitudes into Philosophy*, negations are lacks, and they do not require a positive ground in the thing of which they are negations, but merely the lack of such a ground (VBnG 2: 178/TP 217). Thus the sense in which a negation is in a thing is that the thing lacks that of which the negation is a negation. So the claim that realities differ from each other through a negation that is in one but not in the other does not conflict with the assertion that all the characteristics of realities are positive. Negations are not qualities of realities because they are lacks of qualities, but by being lacks of qualities they limit those realities – they mark what does not belong to those realities – and thereby determine their degrees – they fix how much reality they contain.[[15]](#footnote-15)

I hope this clarifies a bit the claim that negations are never qualities of a reality but instead they determine its degree. But there is a problem with Kant’s reply that is independent of the precise meaning of this point. This is that establishing that there are no two realities of equal degree is not sufficient for establishing that no two things can have the same degree of reality. For two things – let them be two possible worlds – could have the same total degree of reality even if the realities of one were of different degree from the realities of the other; such worlds would be equally perfect. To give a simple example: imagine a world having two realities, one of degree 3 and one of degree 6, and another world having two realities, one of degree 4 and one of degree 5. The degree of reality of both these worlds is 9. Since they have the same degree of reality, they have the same degree of perfection, and therefore they are equally perfect in the relevant sense: neither is more perfect than the other. But nothing Kant says in his essay rules out the possibility of two possible worlds having the same degree of perfection by one of them having realities of a different degree than those of the other. Therefore Kant has not established premise (8) and thus he has not established that there are no possible worlds that are equally perfect.[[16]](#footnote-16)

5. *Perfectly similar worlds*. There is another problem with premise (8), a problem Kant does not consider. For premise (8), together with the implicit premise that possible worlds are things, rules out worlds that are perfectly similar, since such worlds would have the same degree of reality. But mightn’t there be two perfectly similar worlds? Kant seems to have a reason why not. For he says that “if things differ from each other, they differ in virtue of something which is present in one thing and not in the other” (VBO 2: 31/TP 72). If this is meant to rule out perfectly similar worlds, it must mean that there will always be some difference – other than one depending on their numerical identities – between two worlds.

But this answer commits Kant to some version of the Principle of Identity of Indiscernibles. And this is problematic since in the *Nova Dilucidatio* of 1755 Kant rejected the Principle of Identity of Indiscernibles (ND 1: 409–10/TP 35–36). Indeed, he also rejected it, for appearances, in 1781 in the *Critique of Pure Reason* (A 264/B320).[[17]](#footnote-17) Did Kant change his mind about this principle around 1759 and then change it again at some point before 1781? Or did he not realise in the essay on Optimism that he was committing himself to something he was not entitled? Or is there no incompatibility between what Kant rejected in 1755 and what he accepted in 1759?

Now, what Kant rejected in the *Nova Dilucidatio* was the proposition that there are no perfectly similar *substances*, while what he seems to be committing himself to in the essay on Optimism is the proposition that there are no perfectly similar *possible worlds*. Thus, one might think, there is no contradiction between what he rejects in 1755 and what he commits himself to in 1759. But I do not think this is the proper answer to my questions above. For in the essay on Optimism his use of ‘things’ (‘Dinge’), when he says that ‘if things differ from each other, they differ in virtue of something which is present in one thing and not in the other’, seems to be very general and include not only worlds but also substances and realities.

Even so, I think there is no contradiction between the *Nova Dilucidatio* and the *Attempt at some Reflections on Optimism* on this issue. In the *Nova Dilucidatio* Kant says:

The complete identity of two things requires[[18]](#footnote-18) the identity of all their characteristic marks or determinations, both internal and external. Is there anyone who has excluded place from this complete determination? Accordingly, no matter how great the agreement of things in respect of their internal characteristic marks, things which are distinguished at least in virtue of place are not one and the same thing at all. (ND 1: 409/TP 35).[[19]](#footnote-19)

Thus, what Kant is rejecting in the *Nova Dilucidatio* is the version of the Principle of Identity of Indiscernibles according to which there are no two things that are *internally* perfectly similar – that is, he rejects the principle that no two things share all their *internal* characteristics. But he requires for the identity of two things the complete identity of *all* their characteristics, both internal and external. This is why two things can differ with respect to place only.

But this seems to entail that there can be equally perfect worlds, which is what he is arguing against in the essay on Optimism. For if two things can differ with respect to place only, then there can be equally perfect things, since two things that differ only with respect to place are equally perfect. But then two worlds that differ only in that in them things otherwise perfectly similar occupy different places would be equally perfect. That is, consider a world *W* where there are two things *A* and *B* that are otherwise perfectly similar and that differ only with respect to place. Now consider a world *W\** whose only difference with *W* is that in *W\** the thing *A* occupies the place *B* occupies in *W* and *B* occupies the place *A* occupies in *W*. Such worlds *W* and *W\** would be equally perfect. But what Kant says in the *Nova Dilucidatio* entails that such pairs of worlds are not possible:

Let *A* occupy the place of *B*. Since *A* does not differ from *B* at all in respect of internal characteristic marks, it follows that in occupying its place, it will be identical with it in all respects, and what was previously called *A* will now have to be called *B*; and that which bore the name *B* beforehand will now, having been transferred to the place of *A*, have to be called *A*. For this difference of characteristics indicates a difference only of places. (ND 1: 409/TP 35–6).[[20]](#footnote-20)

Clearly Kant is not saying that a thing *A*, internally perfectly similar to a thing *B*, cannot move into *B*’s place. Apart from the obvious absurdity of such a claim, moving into *B*’s place would not make *A* have all the same internal and external characteristics, since it would still keep historical properties, like *having been located at place P*, which *B* would not have.

Kant is making a point about whether the world could have been exactly as it is except that *A* would have occupied *B*’s place and *vice versa*. And what Kant says in this passage suggests that for him there is no pair of worlds like *W* and *W\**. What he is saying is that in a world like *W\** the characteristics of *A*(*B*), both internal and external, would be exactly the same as the characteristics of *B*(*A*) in a world like *W*, and so, in fact, what occupies in *W\** the place of *A* in *W* is *A* and similarly what occupies in *W\** the place of *B* in *W* is *B*.

Why is it that in a world like *W\** the characteristics of *A*(*B*), both internal and external, would be exactly the same as the characteristics of *B*(*A*) in a world like *W*? *A*(*B*) in *W\** occupies the place *B*(*A*) occupies in *W*, and so *A*(*B*) has in *W\** the external characteristics that depend on place that *B*(*A*) has in *W*. But since *A* and *B* differ only with respect to place in *W*, all their internal characteristics, and those external ones that do not depend on place, remain the same in *W\**. Therefore in *W\** the characteristics of *A*(*B*), both internal and external, are exactly the same as the characteristics of *B*(*A*) in *W*.

And if this is the case, Kant argues in the passage quoted above, what occupies in *W\** the place of *A* in *W* is *A* and similarly what occupies in *W\** the place of *B* in *W* is *B*. But if this is the case, it is plausible to argue, there is absolutely no difference between *W* and *W\**, and so *W* and *W\** are one and the same world rather than two perfectly similar worlds.

Thus, in general, no other possible world is generated just by permuting the spatial locations of things that differ only with respect to place in a given world. A similar consideration would lead to the conclusion that no other possible world is generated just by permuting the temporal locations of things that differ only with respect to time in a given world. And I think it is plausible to suppose that Kant would want to generalise this conclusion to all external characteristics (supposing he would admit external characteristics not depending on space and time). That is, no other possible world is generated just by permuting the external characteristics of things that are internally perfectly similar in a given world. Now, if possible worlds can only differ with respect to the characteristics things have in them and not with respect to the things that exist in them, what Kant is saying entails that there are no perfectly similar worlds.

Kant did not consider, in the essay on Optimism, the possibility of an objection to premise (8) based on the possibility of perfectly similar worlds, which have the same degree of reality. Nevertheless, what Kant says in the *Nova Dilucidatio* puts him in a position to defend premise (8) from such an objection, since it puts him in a position to reject, given certain assumptions, perfectly similar worlds. What I have done here is to explain such a potential rebuttal. But it is really interesting that what puts him in a position to reject perfectly similar worlds are the considerations he made in the course of rejecting the Principle of Identity of Indiscernibles!

But we should assess Kant’s potential rebuttal: is it successful? There are two problems with it. First, it depends on his claim that *A*, which does not differ internally from *B*, could not occupy *B*’s place in an otherwise perfectly similar world, since in that case it would not differ at all from *B*, neither internally nor externally. And Kant seems to base this point on his claim that the identity of two things requires the identity of all their characteristics, both internal and external. But this consists of *at least one* *non sequitur*.

Kant’s claim that the identity of two things requires the identity of all their characteristics entails that the identity of all their characteristics is necessary for the identity of *A* and *B*, not that it is sufficient for their identity. But when he argues that *A*, which does not differ internally from *B*, could not occupy *B*’s place, since in that case it would not differ at all from *B*, neither internally nor externally, Kant seems to be assuming that the identity of all their characteristics is sufficient for the identity of *A* and *B*. If Kant was indeed arguing like this, he committed a *non sequitur*.

But perhaps Kant was not basing his point about *A* and *B* on his claim that the identity of two things requires the identity of all their characteristics. Perhaps Kant was independently assuming that the identity of all their characteristics is sufficient for the identity of *A* and *B*. This is indeed a possibility left open by the text. But there is another *non sequitur* (which would still be there anyway). This is that even if the identity of all their characteristics is sufficient for the identity of *A* and *B*, it does not follow from there that *A*, which happens not to be identical to *B*, could not have had all of the characteristics of *B*. In making this transition Kant seems to have invalidly jumped from the proposition that if *x* and *y* have all their characteristics in common then *x* and *y* are numerically identical to the proposition that having the characteristics *y* has is necessarily (or at least counterfactually) sufficient for being *y*.[[21]](#footnote-21)

The second problem with Kant’s potential rebuttal is that it works only if one assumes that possible worlds can only differ with respect to the characteristics things have in them and not with respect to the things that exist in them. If there are possible worlds such that no thing exists in both of them, then Kant’s considerations in the *Nova Dilucidatio* do not touch the possibility of two worlds such that no things exist in both of them but such that to every thing in either of them there corresponds an internally perfectly similar thing in the other. Such worlds would be perfectly similar in the sense that matters. More importantly, they would be equally perfect. For the perfection of a thing does not depend on external characteristics like time and place, and so internally perfect things are equally perfect. But then worlds such that to every thing in either of them there corresponds an internally perfectly similar thing in the other would be perfectly equal.

Thus, Kant did not consider an objection to premise (8) based on perfectly similar worlds. Had he considered it, he might have used material from the *Nova Dilucidatio* (material from his rejection of the Principle of Identity of Indiscernibles in that work!) to rebut it. But such a rebuttal would have been unsuccessful.

6. *The greatest degree of reality*. After having argued that there is one and only one best possible world, Kant considers an objection to his view. The objection is that, in the same way in which one can add units to a number without thereby ever producing the greatest number, one can add realities to the sum of realities in a world without thereby reaching the most perfect world (this is reminiscent of a point by Reinhard (1755: 34)). If so, there is no best possible world, since for every possible world there is a better one, in the same way that for every number there is a greater one. This is Kant’s reply to the objection:

No greatest number is possible at all, but a greatest degree of reality is possible, and it is to be found in God. Let us examine the first reason why, in the argument under consideration, the concept of number is erroneously employed. The concept of a greatest finite number is the abstract concept of multiplicity as such. Multiplicity is finite, though additions can nonetheless be made to it in thought without it thereby ceasing to be finite. In this case, therefore, the finitude of the magnitude does not impose any determinate limits, but only such as are general. For this reason, the predicate ‘greatest’ cannot belong to any such finite number, for no matter what determinate plurality one thinks, every such finite number can be increased by addition without its finitude being thereby diminished. The degree of reality of a world is, on the other hand, something which is completely determinate. The limits which are set upon the greatest possible perfection of a world are not merely general but fixed by a degree which must, of necessity, be lacking to it. Independence, self-sufficiency, presence in all places, the power to create, and so on, are perfections which no world can possess. This present case is not like that of mathematical infinity, where the finite is connected, in accordance with the law of continuity, with the infinite by means of a constantly continued and ever possible augmentation. In this present case, the disparity between infinite reality and finite reality is fixed by means of a determinate magnitude, which constitutes their difference. The world, which finds itself at that point on the scale of beings which marks the start of the chasm containing the measureless degrees of perfection which elevate the Eternal Being above every creature – this world, I repeat, is, of all which is finite, the most perfect. (VBO 2: 32–33/TP 74).

What Kant is saying is that there is a disanalogy between numbers and possible worlds. The reason why the perfection of worlds cannot be indefinitely increased is that there is a greatest perfection, which is found in God. Thus, although one can always add units to a number to get a greater number, one cannot always add perfections to a world, since some perfections, like independence, self-sufficiency, presence in all places, the power to create, and so on, cannot belong to a world – they can only belong to God. Thus, Kant thinks, there must be a world that is the most perfect of all.

But all this shows is that no world can be as perfect as God is, something those who doubt that there is a most perfect world need not reject. Indeed, even if there are some perfections that cannot be had by worlds, nothing Kant says shows that there are not infinitely many perfections that worlds can have, in which case it still needs to be shown that worlds cannot be ordered in a hierarchy such that for every world there is another world with one extra perfection. And note that such an infinite hierarchy could be such that the distance in perfection between any world and God is always greater than a certain fixed amount (in this case the limits set upon the most perfect possible world would be “fixed by a degree which must (….) be lacking to it”, though of course there would be no determinate magnitude which would constitute the difference between the perfection of God and that of the most perfect world, since in this case there would be no most perfect world). Thus Kant has not properly met the objection he was considering.

7. *Miscellanea*. Before concluding, let me briefly discuss three issues about Kant’s project in his opuscule. The first is whether, had his arguments been successful, he would have shown why there is one and only one best possible world. He considered two ways in which there would not be one and only one best possible world: (a) all the possible worlds forming a series in which each world is worse than another one and (b) there being two or more equally perfect possible worlds that are better than all the rest. If condition (a) obtains, then there is no best possible world; if condition (b) obtains, then there is no unique best possible world. On the face of it, there are two other ways in which there would be no best possible world. The first one is: (c) no possible world is better than any other – they are all equally good (or equally bad). This is a possibility Kant did not consider, but it is not difficult to imagine that he would have tried to rule this out by means of the same considerations with which he tried to rule out the possibility of there being two or more equally perfect possible worlds that are better than all the others. The second way in which there would be no best possible world is: (d) there are two or more groups of possible worlds, such that worlds from different groups are incommensurable from each other, i.e. worlds from different groups are neither better than, nor worse than, nor as good or as bad as, each other (it is left open whether for any or all of the groups there are any worlds that are the best in that group). Kant did not consider this possibility and I do not know what he would have said about it.

The second issue I will raise is whether Kant was aware that his arguments would provide reasons *why* there is one and only one best possible world rather than merely reasons *that* there is one and only one best possible world. Interestingly, Kant does not seem to see his arguments as giving a reason *why* there is one and only one best possible world. In effect, near the end of his essay on Optimism, he proposes another argument to arrive at ‘the same truth’, namely that there is a unique best possible world because God created a world and therefore this world must be the best one, since to have decided to create it he must have judged it to be the best one and God’s judgement never errs (VBO 2: 33–34/TP 75). He even recommends this argument. But this argument, which is similar to the argument that can be extracted from Leibniz’s *Confession of a Philosopher*, establishes (if it works) *that* there is a unique best possible world, but not *why* there is a unique best possible world; thus, it is likely that Kant did not see his arguments in the opuscule on Optimism as establishing *why* there is a unique best possible world, since otherwise he would likely have seen that the argument that there is a unique best possible world because God created a world and so God, who never errs, must have judged it to be the best, cannot really play the role of his other arguments in his essay.

The third issue I will raise is the relationship between the arguments in the opuscule on Optimism and what Kant briefly says about the existence and uniqueness of the best possible world in his later work *The only Possible Argument in support of a Demonstration of the Existence of God*, of 1763. As I interpret it, in this work Kant argues that since God contains the grounds of all possibility, there cannot be anything possible that does not harmonize with its ground. But if there were no unique best possible world – whether because there were no best possible world or because there were more than one best possible world – there would be a conflict between what possible worlds are like and the possibility of God, the most perfect being, rationally choosing and creating a world (EmB 2: 153–54/TP 193–94). Thus, Kant says, the possible worlds cannot contain any source of embarrassment to the rational choice of the Supreme Being (EmB 2: 153/TP 194). An analysis and assessment of this argument is out of the scope of this paper. But let me just say that although it is different from any of the arguments found in the opuscule on Optimism it seems to be, however, related to the argument from that opuscule that I considered in the previous paragraph since it seems to presupposes that God has chosen a possible world. Indeed, Kant explicitly says that when considering the question of the existence and uniqueness of a best possible world it is difficult, if not impossible, to arrive at an answer simply by considering possible things (EmB 2: 153/TP 193). The argument, like the one considered in the previous paragraph, seems to contain an empirical element, namely the existence of an actual world.

8. *Conclusion*. To conclude, Kant tries to show why there is a unique best possible world, but his arguments, as I have tried to show, do not seem to succeed.

One of the arguments against the claim that there is no best possible world is based on Kant’s idea that if there were no best possible world because for every world there is a better one, then God would not know all possible worlds. But this argument was shown either to be invalid or to have a premise that depends on an unsound argument. Later, in Section 6, I discussed Kant’s rejection of an objection to his claim that there must be some world that is the best possible one. The objection is that to any given world one can add more perfection and thereby get a better possible world. Kant’s reply is that one cannot always add perfections to a world, since some perfections can only belong to God. But that there are some perfections that can only belong to God does not mean that there are not infinitely many perfections that worlds can have and, if that is the case, it might well be that for each given world there is another one that differs from it only in having one more perfection, in which case there would be no best possible world. Thus Kant did not deal with the objection satisfactorily.

Kant also argues against the claim that there is no unique best possible world. Essential to Kant’s argument is the idea that there are no two realities of the same degree. But this leaves open the possibility that two worlds have the same total degree of reality even if the realities of one were of different degrees from the realities of the other. But such worlds would be equally perfect. And there is no reason why there could not be equally perfect worlds that are better than any other worlds. Thus Kant’s argument does not establish that there is a unique best possible world. I also argued that although Kant did not consider an objection based on perfectly similar worlds, he might have used material from the *Nova Dilucidatio* to rebut it, but such a rebuttal would have been unsuccessful.

In the last section I pointed out that Kant’s argument is incomplete in the sense that there are at least two other ways in which there would be no best possible world that Kant did not consider. In one case – the case in which there are incommensurable worlds – it is not at all clear what he would have said about it. I also pointed out that Kant does not seem to have seen his arguments as giving a reason *why* there is one and only one best possible world, since at the end of his little essay he fails to distinguish clearly between his argument and the Leibnizian argument that only establishes *that* there is a best possible world. I finished with a brief comparison between the Leibnizian argument Kant brings up near the end of his essay and the argument for the claim that there is a unique best possible world in *The only Possible Argument in support of a Demonstration of the Existence of God*.[[22]](#footnote-22)

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1. I have asserted previously that in that passage from the *Confession* Leibniz was actually arguing for the uniqueness of the best possible world (Rodriguez-Pereyra 2014: 102). I do not think so any more. However, from what Leibniz said in that passage one can extract such an argument for the uniqueness of the best possible world. [↑](#footnote-ref-1)
2. Reinhard’s prized piece is entitled ‘Le système de Mr Pope sur la perfection du monde, comparé à celui de Mr de Leibnitz, avec un examen de l'optimisme, pour satisfaire au problème proposé par l’Académie Royale des Sciences et Belles-Lettres de Berlin’. [↑](#footnote-ref-2)
3. This is my translation. [↑](#footnote-ref-3)
4. Blumenfeld (1975) discusses what Leibniz could say God would do if either of the existence or uniqueness conditions were not satisfied. [↑](#footnote-ref-4)
5. Roinila (2013: 383) speaks as if the arguments against the existence and uniqueness of the best possible world were Kant’s – my view is that, although Kant is clearer than Reinhard in formulating them, he took them from Reinhard. [↑](#footnote-ref-5)
6. For a discussion of Kant’s distinction between reasons *why* and reasons *that* in the *Nova Dilucidatio* see Schnieder 2017: 6–7. [↑](#footnote-ref-6)
7. The second occurrence of the word ‘thought’ is mine. The Walford translation has instead ‘imagined’ (TP 71). But the original text reads: “Wenn keine Welt gedacht werden kann, über die sich nicht noch eine bessere denken ließe…” (VBO 2: 30). Thus I see no reason for using the word ‘imagined’ rather than the word ‘thought’, and I see every reason for using the word ‘thought’ rather than the word ‘imagined’. [↑](#footnote-ref-7)
8. The Walford translation omits the word “all”, which appears in the original (“also sind bessere Welten möglich als *alle*, die so von Gott erkannt warden…”). [↑](#footnote-ref-8)
9. It is interesting to note that in some texts of the pre-critical period Kant is more or less explicit in identifying possibility with conceivability, e.g. *The only Possible Argument in support of a Demonstration of the Existence of God*, where Kant speaks of “inconceivability or impossibility” (EmB 2: 77/TP 123). [↑](#footnote-ref-9)
10. Ezequiel Zerbudis (Z 10, fn. 10) has recognized the *modus tollens* form of the argument. Cf. Fichant 2009: 175. [↑](#footnote-ref-10)
11. This definition of indefinite extensibility for possible worlds uses plural reference and is inspired in Levey 2016: 404. [↑](#footnote-ref-11)
12. This is inspired in Linnebo and Shapiro’s characterization of the potential infinity of natural numbers (Linnebo and Shapiro 2017: 8). Two comments on the characterization of the potential infinity of the collection of ever-better possible worlds in the text: (a) according to this characterization, an actual infinity of ever-better possible worlds is impossible. But I take Kant’s saying that multiplicity *as such* is finite to commit himself to the impossibility of actual infinities, though of course the matter of what the intended force of the ‘as such’ was is debatable; (b) the characterization in question is meant to capture the potential infinity of the collection of *ever-better* possible worlds, so the fact that such a characterization is compatible with an actual infinity of possible worlds provided it is not the case that each one of them is worse than some other one does not affect the correctness of the characterization. [↑](#footnote-ref-12)
13. The German reads: ‘Nun behaupte ich, daß Realität und Realität niemals als solche können unterschieden sein.’ (VBO 2: 31). The Walford translation has: ‘I now assert that reality and reality as such can never be distinguished from each other.’ (T 72). I find this less than absolutely clear since it can be read as suggesting that what can never be distinguished from each other are *reality* and *reality as such*. What the German text clearly indicates is that two realities can never be distinguished as such, i.e. as realities. This is confirmed by what Kant says later in the text, when he speaks of comparing realities *as* realities (‘als Realitäten’ VBO 2: 31). [↑](#footnote-ref-13)
14. The following passage is my translation, since the Walford translation, though actually favouring my interpretation of this passage, was too unfaithful to the original text on one point. I also consulted the Zerbudis Spanish translation, which is characteristically faithful to Kant’s text. [↑](#footnote-ref-14)
15. One should not confuse negations with negative characteristics. Indeed, in the *Attempt to introduce the Concept of negative Magnitudes into Philosophy* Kant is very explicit that negative magnitudes are not negations of magnitudes but they are instead something truly positive (VBnG 2: 169/TP 209). But the concept of negative magnitude, unlike the concept of negation, plays no role in the *Attempt at some Reflections on Optimism*. [↑](#footnote-ref-15)
16. Admittedly, my example assumes that the degree of reality of a world (or of a thing in general) is the sum of the degrees of its realities. There might be alternative models of how the degree of reality of a world is determined by the degrees of its realities. For instance, if the degree of a reality is always a prime number, and the degree of reality of a world is the multiplicative product of the degrees of its realities, no two worlds can have the same degree of reality, assuming that every two realities differ with respect to their degrees (I owe this example to Martin Pickup). But the simple additive model is the one that seems to be presupposed by Reinhard, and Kant does not question it. [↑](#footnote-ref-16)
17. Although what Kant rejects in the first *Critique* is a version of the Principle of Identity of Indiscernibles restricted to appearances, this by itself does not constitute a great difference between Kant’s positions about the Principle of Identity of Indiscernibles in the *Nova Dilucidatio* and the first *Critique*, since in both these works he takes difference of spatial position to ground numerical difference no matter how otherwise similar the numerically different things might be. Thus in both works he accepts that there can be things that differ only with respect to spatial position but are otherwise perfectly similar. But this is not the place for an exhaustive comparison of Kant’s thought on the Principle of Identity of Indiscernibles in the *Nova Dilucidatio* and the first *Critique*. [↑](#footnote-ref-17)
18. The word here is ‘requiritur’. The Walford translation has ‘demands’. This is not inappropriate, but I think ‘requires’ is more apt, especially given the point I shall make at the end of the section when assessing Kant’s potential rebuttal of the objection based on perfectly similar worlds. [↑](#footnote-ref-18)
19. Note that when in this passage Kant speaks about ‘things’ (“Ad perfectam duarum *rerum* identitatem…”) he is clearly speaking about physical substances, since he is speaking about things that differ in relation to place. [↑](#footnote-ref-19)
20. I have omitted from the translation a couple of uses of a Greek particle. This does not change the sense of the passage; on the contrary, it makes it even more transparent. [↑](#footnote-ref-20)
21. For a different objection to Kant’s argument see Southgate 2009: 411, fn. 22. [↑](#footnote-ref-21)
22. Thanks to Paul Audi, Ralf Bader, Earl Conee, Damiano Costa, Natalja Deng, Ghislain Guigon, John Heil, Nick Jones, John Komdat, Jessica Leech, Øystein Linnebo, Fraser MacBride, Adrian Moore, Kevin Mulligan, Martin Pickup, Jannai Shields, Peter Simons, Edward Wierenga, Alastair Wilson, Ezequiel Zerbudis, an anonymous referee, and audiences in Geneva and Rochester for comments on a previous version of this paper. [↑](#footnote-ref-22)