

# Review of: "A Priori Arguments for Determinism/Universal Necessity – and the Leibnizian Theodicy"

Minseong Kim

**Potential competing interests:** No potential competing interests to declare.

Let " $w_0$  rigidly designates the actual world" be denoted as  $p_2'$  [premise (2) in the World-Argument]. Then the key point of this paper is that  $\Box p_2' \rightarrow (\forall p(p \rightarrow \Box p))$  when combined with other 'reasonable' premises. Therefore, for the Leibnizian dictum that all truths are 'morally' necessary, all we need is that  $w_0$  being the actual world is a necessary truth - the rest follows.

I am not sure if I interpreted the Leibnizian interpretation ('master argument') of the World-Argument (in the paper) correctly, but this is how I understood it.

Premise 1  $\forall p(p \rightarrow T(p, @))$  is to be understood in the world we live in. In our world,  $p$  being true means  $T(p, @)$ , where  $@$  is the actual world - obviously true. In fact, each potential world may misunderstand itself to be the actual world - in such a case, Premise 1 holds in other worlds as well.

Premise 2 is  $\Box(@ = w_0)$ , where  $w_0$  is the rigid designator for the actual world. The indexical theory of actuality is used to support it. In general, the context (that 'this' world is the actual world) that the premise is being evaluated on suggests the necessary truth of the premise. From this point of view, Premise 2 is straightforward.

Another way of evaluating Premise 2 comes from the Leibnizian view:  $World_{w_0}$  being the actual world is 'morally' necessary, with  $\Box$  understood as Leibnizian 'moral' necessity - God selected the actual world to be the best, so the actual world being some particular world must be morally necessary.

Premise 3 is  $\forall p(T(p, w_0) \rightarrow \Box T(p, w_0))$ . In the standard reading of  $\Box$ , this encodes the idea that other non-actual and potential worlds correctly understand truth of  $p$  in  $w_0$ . This may carry to the Leibnizian view, though re-interpreted in name of moral necessity.

Premise 4  $p_4$  is  $\forall p(\Box(T(p, @) \rightarrow p))$ . As with Premise 1 and 2, this is to be interpreted in the context of the world we live in. In the actual world, the context is straightforward such that Premise 4 is necessarily true.

If we think of premises as being evaluated in the actual world, Premise 1,3,4 are largely acceptable, if not obviously true. But Premise 2 stands out - in the actual world, we know that other potential worlds may not conceive  $w_0$  as the actual world. By contrast, Premise 1 and 4 are acceptable if every potential world misunderstands itself to be the actual world even if it is not. Premise 3, again, is about all worlds correctly understanding what is true in  $w_0$ . Thus, Premise 2 requires

an additional justification, which may come from the Leibnizian view of □.

That said, some common issues in formal (logic) discussions of theology may be pointed out (and this is not about flaws of the paper) - 1) God-like property versus God, 2) the question of 'best' in ontological arguments. Consider the first argument in the paper - the argument from divine omniscience. The real problem with the argument, as discussed for other arguments, is that we 'sort of' assume away existence of God. An atheist can say: God does not exist - therefore premises cannot even be written down. To avoid this issue, there is literature of ontological arguments that utilize God-like properties to prove existence of God. Whether this tactic works remains unclear.

In ontological arguments, words like 'best,' 'greatest,' 'maximal' are often invoked in some form or another. The main problem there is: whenever there cannot be 'best' or 'greatest' beings or properties, these invocations are invalid. While we may imagine God to be the greatest being, this may make no sense if nature always allows us to imagine something potentially feasible that is greater than all known things. The world right now may not be the best world and may be made better by moving into alternative worlds without sacrificing the future.

And this is often not explicitly stated, but we are somewhat being dragged into the question of infinity (or maybe more precisely, convexity) and its philosophical nature. In old-fashioned theoretical economics, (quasi-)convexity assumptions are used as to find an optimum outcome, and in this sense we may be able to define what outcome is greatest. If we can impose similar assumptions in philosophy, then ontological arguments may have more chance of acceptance. This has relevance for Premise 2 of the Leibnizian version of the World-Argument, because it matters whether the best potential world can ever make sense. If this holds, then both Premise 2 and ontological arguments gain more credibility. I always thought infinity or convexity is the key issue, but many papers discussing logical examinations of theological arguments seem to dig into other issues more in depth, possibly because the convexity point is too obvious.

[I thank Qeios (artificial intelligence?) for inviting me to review this paper.]