

Ontological Omniscience in Lewisian Modal Realism

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Abstract

A simple argument against Lewisian modal realism as portrayed in *On the Plurality of Worlds* arises from its treatment of doxastic modalities. It is easily shown that if it is true, it is impossible to doubt the theory on ontological grounds, or, that, if it is possible to maintain doubt about modal realism's existential postulate, it has to be false. The argument hinges on the fact that modal realism's main ontological hypothesis, if true, is necessarily true.

1 The Argument from Doubt

The central thesis of Lewis's (1986) modal realism, to which I will refer as the existential claim (EC), is the conjunction of the following theses

MR1 there are at least two worlds¹

MR2 all worlds are concrete particulars

MR3 any two (non-identical) worlds are spatiotemporally and causally isolated from one another.

EC is a necessary condition for modal realism: if it were false, modal realism could not be true.² However, it is also a thesis that philosophers have found

¹Of course, Lewis's full theory postulates more than two worlds. Yet for present purposes the weak formulation of EC in terms of MR1 suffices, as questions of plenitude, mereological composition etc. do not play any role.

²After all, Lewis insists that his 'modal realism is simply the thesis that there are other worlds, and individuals inhabiting these worlds; and that these are of a certain nature, and suited to play certain theoretical roles. It is an existential claim, not unlike the claim I would be making if I said that there were Loch Ness monsters [...]. It is not a thesis about our semantic competence, or about the nature of truth, or about bivalence, or about the limits of our knowledge. For me, the question is of the existence of objects – not the objectivity of a subject matter' (Lewis: 1986, viii).

particularly hard to accept — the mainstream position in contemporary modal metaphysics seems to be that the existential claim is false, and the theory continues to be a matter of debate. Lewis himself devoted a section of his (1986) to this (now proverbial) incredulous stare (cf. Lewis (1986, ch. 2.8)), and also other passages (Lewis: 1986, viii,4) suggest that Lewis considered it possible that someone should fail to believe EC.

Lewis's main aim in his (1986) defense of his theory is to show that his proposed understanding of possible worlds does not lead to more problems than competing proposals in any of those areas where possible worlds are employed as analytical tools. One of those areas is the analysis of doxastic content (cf. 1986: 27-50). Evaluation of belief ascriptions is a matter of quantification over worlds. Generally, a subclass³ of the worlds suffices to supply the doxastic content a believer has at a specific time. The general restrictions on accessibility are given as follows:

[T]he content of someones system of belief about the world (encompassing both belief that qualifies as knowledge and belief that fails to qualify) is given by his class of doxastically accessible worlds. World [w] is one of those iff he believes nothing, either explicitly or implicitly, to rule out the hypothesis that [w] is the world where he lives. (1986, 27)^{4,5}

Yet, by way of *reductio ad absurdum* it can be shown that if EC is true at any world (as Lewis claims it to be at our world, @), it is necessarily true: Assuming EC to be true at @⁶, then there is a concrete world w non-identical to and causally as well as spatiotemporally isolated from @. Now assume that, at some w', EC is false. Then there is no concrete world non-identical to and causally as well as spatiotemporally isolated from w. But we have already assumed that @ exists, and thus obtain a contradiction. Therefore, if there is one world where EC holds, it holds at all the worlds there are, and thus it is a necessary truth of modal realism.⁷ Now consider someone who believes that EC is false. The class of worlds that are not ruled out by his system of beliefs

³The terminology is Lewis's own; 'class' just means 'totality', and no suggestion that the worlds do not form a set is intended (cf. Lewis (1986, 104)).

⁴Moreover, Lewis refines this definitions by incorporating *de se*-beliefs, viz. beliefs irreducibly about oneself (cf. Lewis (1979)). A believer's doxastic content is now given in terms of his doxastic alternatives, i.e. counterparts 'who might, for all he believes, be himself. Individual X is one of them iff nothing that the believer believes, either explicitly or implicitly, rules out the hypothesis that he himself is X' (Lewis: 1986, 29). Belief about the world is now analyzed as a believer's alternatives inhabiting worlds where the believed proposition holds and thus 'as a special case of egocentric belief' (Lewis: 1986, 29). Where the egocentricity of beliefs does not play any decisive role, I feel free to stick to the simpler phrasing in terms of accessible worlds instead of alternatives.

⁵This analysis is based on Hintikka and Stalnaker (see Lewis 1986: 27-9 for references).

⁶Or any other world, for that matter. All that is needed is the assumption that some world exists, which is uncontentious here, since obviously, modal realism would be false if no world at all existed (cf. Lewis (1979, 84)).

⁷Compare Divers (Divers: 1999: 2002) on 'advanced modalizing' and 'extraordinary cases' of modalities. The necessity of EC is extraordinary in that it is true at all the worlds without exception, while it comes out false when evaluated on the domain of a single world (as whatever

gives the content of this agent's current beliefs. However, since EC is a necessary truth, all the worlds are ruled out. The agent believes he inhabits a world where EC is false, and therefore her class of accessible worlds, as well as his class of doxastic alternatives, has to be empty (cf. Lewis 1986: 29). In terms of this treatment doxastic content, the belief system of the sceptic about EC turns out to be trivial. However, this is surely false: Most (if not all) philosophers who deny EC do not believe also in its truth, so there is something they do not believe after all.⁸ We can therefore preliminarily conclude that if modal realism is true, its main thesis cannot reasonably (viz. non-trivially) be doubted, or, by contraposition, that if it is indeed possible for anyone to doubt it, modal realism has to be false.⁹

2 Problems of Omniscience in Modal Realism

Lewis was aware that his theory could easily be accused of not offering an adequate analysis of doxastic content, as his 'use of classes of possibilia to specify content is supposed to be discredited by the way it imputes logical omniscience' (Lewis: 1986, 34). Putting aside the question of whether the given argument is a case of logical omniscience, belief in necessary falsehoods in any case appears to be an everyday phenomenon, whereas worlds that are without any exception free from contradiction cannot, by themselves, correspond to such beliefs. For this reason, Lewis offers solutions to four such omniscience problems for his theory: (a) compartmentalized beliefs, (b) mistaken self-conception, (c) unawareness of co-reference, and (d) failure to notice subtle contradiction (Lewis: 1986, 27-36, esp. 35). Are any of these cases sufficiently similar to the problem of ontological omniscience to give Lewis a solution? Case (b) does obviously not apply¹⁰, but

exists at a world is part of that world, but no world is part of any other world). Its truth supervenes on the existence of the worlds in logical space, but it cannot be analysed in terms of existence at a world, i.e. parthood.

⁸We can weaken this case in at least two respects. First, we don't have to stipulate that anyone in the actual world believes in the falsity of EC; for the argument it suffices if we acknowledge that possibly someone has this particular belief. Secondly, and independent of where we locate this sceptic, the argument would still be valid if we replace belief in the falsity of EC with belief in its possible falsity.

⁹A different reading of this result is of course that, contrary to Lewis's own views on that matter, everyone is in fact implicitly convinced by modal realism. One might argue that this is a legitimate move because the given argument assumes that modal realism is correct, and that any rational agent should be convinced of its truth. I take this line of reasoning primarily to be refuted by reality - belief is (alas) not limited to rational let alone true opinions. Secondly, it should be pointed out that Lewis proposed his theory to be materially adequate, i.e. he was not concerned with idealized epitomes of rational believing but with doxastic commonplace phenomena, as the following discussion will show. Lastly, rational belief within the context of metaphysics is a matter of dispute, and it would be mere question-begging to presuppose the standard of the very theory currently under dispute.

¹⁰Case (b) deals with René, who believes to be an essentially immaterial being, which for Lewis amounts to belief in a necessary falsehood. Lewis resolves this issue by analysing René's belief in terms of his doxastic alternatives, none of which are proper counterparts of his, but all of which are immaterial objects. Thus, René can believe something seemingly impossible, but which simply amounts to a mistaken self-conception. Can a similar line of reasoning be

let's look at the remaining cases in turn.

Case (a) of apparently impossible beliefs concerns compartmentalized beliefs (or 'doublethink', as Lewis also calls it). Lewis's example is a cheerful hypochondriac, who on the one hand believes he be healthy but on the other that he is fatally ill. Does this entail that he has an inconsistent (and therefore trivial) belief set? No, because his thinking is compartmentalized into mutually exclusive belief sets, none of which are active at the same time. Returning to belief in the falsity of EC, it is obvious that this explaining away of seemingly impossible belief does not help. Doubt about EC is an instantaneous matter, and for this it is irrelevant whether the doubter has different beliefs at some other time. Lewis's doublethink-strategy provides no model of the possibility of someone failing to believe EC according to at least one of his belief systems. Similarly, Lewis's treatment of case (c) is not able to explain away the given case. It deals with Kripke's Pierre, who is acquainted with London via two different experiences, and who ends up believing 'Londres est jolie' and 'London is ugly'. He is unaware of the co-reference of 'London' and 'Londres' (understood as rigid designators); in fact, he believes they name two distinct cities, one of which is pretty and the other is not. According to Lewis, all of Pierre's alternatives are thus 'London'-acquainted with an ugly city, but 'Londres'-acquainted with a pretty one, yet never acquainted in both ways with one and the same. Again, the seeming contradiction vanishes. In EC, however, there is neither a problem of co-reference, nor of different ways of acquaintance, so that those aspects of Lewis's theory do not solve the given problem either.¹¹ The last case that Lewis discusses, (d), is about Duntz, who believes there is a barber who shaves all and only those who do not shave themselves. The existence of this barber would mean that it is true that someone has contradictory properties, hence that there exists an impossible object. EC on the other hand does not contain any such description. EC postulates not one, but at least two objects of a specific sort. Moreover, given that concreteness, 'worldness', and pair-wise isolation are logically compatible, EC does not claim that any postulated object has mutually exclusive properties. The Barber is a logical paradox, but the negation of EC simply is not. EC within modal realism is necessary — but since modal realism is not a logic (cf. fn. 1), neither it should be mistaken for a logical truth, nor its negation for a logical falsehood.

Lewis's response to belief in the barber is at first sight somewhat obscure:

applied to the doubters of modal realism? The answer is most certainly 'no', since it has nothing to do with belief about oneself. Even if it concreteness and pair wise isolation as demanded by EC are essential properties of the worlds, the doubter's doxastic alternatives are only those possibilities that correspond to the his opinions about himself. Wherever (and whatever) his alternatives may be, they all can only be at worlds where EC is true.

¹¹Considering Lewis's argument from paraphrase (Lewis: 1973, 84), according to which the worlds and their inhabitants just are what is meant by modal expressions as 'ways things could have been', we might say that a failure like Pierre's is indeed involved - the doubter is 'way'-acquainted with worlds, but, say, 'Lewis'-acquainted with them, too, and thus believes them to be different things. Yet, this again seems to rely on the claim that everybody is in fact implicitly convinced of modal realism, and this just is begging the question in the present context (cf. fn. 9).

Nobody could be in a position to say it truly and mean by it exactly what we (or Duntz) would mean; so none of the doxastic alternatives has the meaning exactly right. Note well that this is not the sort of case where Duntz has no idea what the sentence means [...]. No; he has a pretty good idea what the sentence means, even if his understanding is not quite good enough to enable him to notice the contradiction. (Lewis: 1986, 36)

But he qualifies this approach by diagnosing Duntz also with a case of doublethink. Depending on which assumption Duntz argues from, he reaches different conclusions, but, yet again, never at the same time or within the same belief set (cf. Lewis (1986, 36, fn. 27)). As we saw in the discussion of case (a), with respect to belief in EC's falsity, there is no doublethink involved. We are left with the suggestion that any putative sceptic does not fully understand what it would mean for EC to be false, and thus that everybody is in fact in no position to truly doubt EC, which I, again, take to be refuted by reality.¹²

3 Concluding Remarks

None of Lewis's strategies to analyse seemingly impossible beliefs as possible applies to doubt about EC and we are stuck with the result that belief in the falsity of EC is indeed impossible according to modal realism. The argument sheds light on an intrinsic error of modal realism: While Lewis is aware of doubt about his theory, as well as of problems of omniscience in a purely 'possibilist' setting, it seems that he never tried to put his theory to the test regarding those doubts. Should we take this as an argument in favour of admitting impossible worlds next to Lewis's possible ones? A world where the existential claim is false would *prima facie* supply the requisite doxastic content, and such a world is, as we have seen, impossible. But can there really be any such world, if EC is true? This is at least not obvious. If EC is true, its truth supervenes on the ontology of logical space, i.e. the plurality of (possible) worlds, and belief in its falsity does not change its domain of quantification. But what could 'impossible worlds' be in modal realism? Construing them as a subclass of the worlds destroys the major benefit of Lewis's theory, i.e. the non-circular analysis of modality, since the goings-on at just any world then have no say on whether something is possible.¹³ Yet if they are not proper worlds but a

¹²Cf. fn. 9 and 11. Admittedly, we can contrive a case where this seems to apply. Suppose that some putative doubter is an actualist, and he believes there is only one (viz. his actual) world. The maximal quantifier range he is able to recognize is therefore restricted to the actual world, and if he now believes to deny EC, his only accessible world is his own. On a thus restricted quantifier reading EC is indeed false, as at any world there exists no other world. But, as Lewis himself notes, this 'sceptic does not deny the EC at all (1986: 133-34). Therefore, he is irrelevant to the argument from doubt, since it demands proper disagreement with Lewis's ontological postulate. Furthermore, even if the presented case applies to some ostensible doubters, it does not follow that it applies to all doxastic agents (at all worlds), but exactly this would need to be shown in order to dismantle the given objection.

¹³Hence, the scare quotes.

class disjoint from the (possible) worlds, how can they falsify what is true of the class of worlds? However we flesh out the ontology of impossible ‘worlds’, they cannot falsify what is true of the ontology of possible worlds, since they are beyond the range of quantification stipulated by EC. Arbitrary truth-value assignments to sentences at impossible ‘worlds’ would help the modal realist here, and in theories that divorce truth and ontology, this is a legitimate move to make. Nevertheless, given that EC is primarily an ontological and only a fortiori a semantical claim, this goes against the grain for the modal realist. If truth supervenes on being (cf. Lewis (2003)), as in the case of an existential thesis like EC, I doubt that Lewisian modal realism can plausibly accommodate worlds that are impossible in the sense needed.¹⁴ It is unclear how modal realism can circumvent the ‘artefacts of unbelievability’ sketched in this paper without giving up its main tenets. As it stands, Lewisian possible worlds cannot serve as an ontological foundation for the semantics of doxastic modalities.

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¹⁴Cf. Lewis: ‘[W]orlds, as I understand them, are not like stories or story-tellers. They are like this world; and this world is no story, not even a true story’ (Lewis: 1986, 7)). It seems that a world where the existential claim is false would have to be a - false - story.