



## IT ISN'T SO, BUT COULD IT BE?

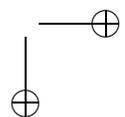
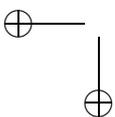
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### *Abstract*

In his paper “Could Everything Be True?”, Graham Priest argued against *trivialism*, the thesis that everything is true. Priest was aiming to show that it is not so easy to dismiss trivialism, but that in the end it fails. This paper focuses on a different but related thesis, namely that trivialism is *possible*. The possibility of trivialism is indicated by a more general thesis, namely that *anything is possible*, which is known as *possibilism*. Some of Priest’s arguments indicate that he takes his arguments to refute the latter claim as well. This paper begins by surveying the advantages of possibilism. It then turns to argue that Priest’s arguments fail against possibilism, and that trivialism, along with everything else, is possible. Finally, the explanatory advantages for modal semantics are briefly sketched.

### 1. *Introduction*

This paper contributes to a defence of the thesis of *possibilism*. Possibilism is the thesis that *anything is possible*. Possibilism is in opposition to the thesis of *necessitarianism*, namely that *there is at least one necessary truth*. Possibilism was named and defended first by Naess (1972), and later by Mortensen (1989). The present paper discusses the bearing on possibilism and necessitarianism of arguments due to Graham Priest (2000). Priest’s arguments were aimed *prima facie* at a different thesis, the thesis that *everything is true*, which he called *trivialism*. However, as we will see, possibilism and trivialism are closely connected, especially given Priest’s way of framing his attack on trivialism. Thus the present paper principally aims to identify Priest’s arguments against trivialism, show how they represent a threat to possibilism, and demonstrate that they are unsuccessful. Before coming to that, however, it will be necessary to survey existing arguments in favour of possibilism, to establish its initial plausibility. In the final section of the paper, it will be seen that this perspective leads to a certain simplification of the semantics of non-normal modal logics.



## 2. Necessitarianism and Possibilism

The arguments for possibilism turn on a systematic attack on the opposition view, necessitarianism. The concept of "necessary" which applies here is somewhat loosely characterised as a group of notions around the ideas of logical necessity, metaphysical necessity, model-theoretic necessity, analyticity, and the like. It is not claimed here that these notions are all reducible to a single core. It is also not being claimed, as Quine would, that there are no coherent concepts at all in the vicinity. Rather it is proposed that various arguments against these notions have varying weights, depending on where they are directed. All the same, it is contended that they all have epistemological drawbacks.

The attack against necessitarianism comes from two broad directions: epistemological and ontological. Of these, the former carries the greater weight. We first survey the epistemological problem, then rehearse ontological arguments.

Arne Naess (1972) seems to have derived his view in turn from Popper's (1963) attack on what Popper called "conventionalism". According to Popper, conventionalism is the *practice* or *strategy* of defending a theory come what may against contrary empirical evidence or strong counter-arguments. Popper diagnosed the error as placing *conceptual restrictions* on theory-revision. Against this strategy, Popper and Naess argued that even concepts may need to be revised, and that a criticism which proceeds from a weaker conceptual base, one with fewer restrictions, is stronger since there are fewer ways to escape from it. Conversely, a criticism proceeding from unnecessarily strong conceptual principles is actually weaker, in that it is easier to find places to reject. Now it is well known that when it came down to it, Popper was willing to exempt the principles of logic from his rejection of conventionalism. Similarly to Quine, Popper ultimately found classical two-valued logic to be the correct logic. This introduces an *ad hoc* character into Popper's otherwise estimable methodological position. In contrast, Mortensen and Burgess (1989) argued that this was less than wholly general, and that a fallibilist like Popper ought to be saying that not even logic is exempt from revision; that is, that the set of specifically logical truths is null.

Here a cautionary note must be injected. Popper was a fallibilist, a distinguished tradition deriving from Peirce. Fallibilism is notoriously difficult to state, and this paper does not attempt to solve that particular puzzle; nonetheless it amounts to something like the claim that no theory is rationally unrevisable under the pressure of empirical science, that all theories can fail for good reasons. It would seem, then, that a fallibilist ought not to make an exception in the case of logic. However, Susan Haack (1979) argued persuasively that fallibilism must be regarded as compatible with necessitarianism. This is surely correct: after all, not even possibilism should be regarded as

unrevisable. Thus, fallibilism should not claim to have the force of *apriori* disproof over necessitarianism.

But the epistemological argument against necessitarianism need not claim to have the force of *apriori* disproof, any more than any other scientific hypothesis. The argument is rather: Are there any reasons to believe the alternative? If not, possibilism has the virtue of the generality and economy of *epistemic monism*. This term, introduced in Mortensen (1989), refers to a wholly general method for establishing truths, namely the scientific method of empirical theory-choice using experiment and observation. There is no need to cater for the knowledge-base of an entirely distinctive set of necessary truths. The problem here is not that necessary truths could not be shown to be true by ordinary scientific means, for they obviously can. The problem is how one would come to know *that they are necessary* (in any of the various senses of that term).

Perhaps this is to be done in the ordinary way of scientific theory-construction, by including a postulate of the form  $\Box A$  in a theory and appealing to its explanatory power? But it must be apparent at this point that, as Naess argues, *one adds nothing to the explanation of what hits our sensory surfaces, by putting a necessity box in front of any theoretical postulate*. "B because A" may be sensible, but "B because  $\Box A$ " gains nothing as an explanation, and even more obviously "A because  $\Box A$ " adds nothing also. We have no reason to use such statements in our theories. In sum, epistemic best practice indicates to us that we have no reason to believe in necessary truths, and the virtues of a uniform epistemic method are then overwhelmingly attractive in favour of possibilism and against necessitarianism.

So much for epistemology. But there are ontological currents as well. The main tide of ontological arguments against necessitarianism is the challenge to show how various accounts of the necessary could support a principled distinction between two fundamentally different kinds of truth, the necessary and the contingent; and to do it in such a way that the extension of each is non-null. In these waters, arguments tend to drift apart as different accounts of necessity are canvassed. So take for example the well-known empiricist reduction of necessity to *analyticity*, truth by meaning. This was a brilliant innovation in the theory of necessity, because it held out a plausible epistemology, namely knowledge of the meaning-conventions of words, which seems unproblematic or at least less problematic. But, as Hilary Putnam (1978) pointed out, there remains a gap: *how could it be that having a certain meaning would be enough to ensure truth, without the world playing a role?* That is not generally the way of it with a truth-making world. Indeed, if the world played no determinative role, what sense is there in describing it as *true*? As Putnam put it, you can't make something true by a convention unless it's already true. In passing, it should not be thought that these arguments depend on Quine's repudiation of the concept of analyticity: they

are intended to apply to the *extension* of that concept without drawing its meaningfulness into question. In any case, as we have already noted, Quine retained for himself a core of logical truth, classical logic.

Or take a different account of necessity which has appealed to many, namely *model-theoretic necessitarianism*. Here the idea is that necessity is truth in all models (such as sets of consistent and complete worlds). Unfortunately, this does not survive long either, though for other reasons. It is too easy to construct models in which putative necessary truths fail. This must of course be accompanied by a survey of the numerous semantical studies which have produced counter-models, and this must be regarded as having considerable complexities when dealing with principles like the Law of Non-Contradiction  $\sim(A \& \sim A)$ , let alone the Law of Propositional Identity  $A \rightarrow A$ . These arguments are surveyed in Mortensen (1989). However, these arguments can be encapsulated briefly by noting that there is a general theorem covering all cases, due to Meyer-Routley (1977, 2004): *any sentential formula can be refuted in some two-valued model*. That is, model-theoretic necessitarianism must be accompanied by an argument to select out and privilege a distinguished subset of models, when it is conceded that the additional models exist. This is invariably not attempted. Again, the only fully general position is that which allows the widest class of models. But this yields the conclusion, not that there is no coherent concept of necessity here, but that its extension is zero.

These epistemological and ontological considerations are powerfully inclining, I suggest. But it must be conceded that the *intuitions* are ravaged by the denial of the necessity of such propositions as that *at least one thing is true*, or that *not everything is both true and false*, or simply that *not everything is true*. Something has to be done to pump up contrary intuitions, if anyone is to be persuaded. This brings me to the main topic of this paper.

### 3. Possibilism and Trivialism

To recall, trivialism is the thesis that everything is true, so named by Graham Priest in "Could Everything Be True?" (2000). The name derives from the usual definition of a theory's being *trivial* if it contains every proposition, which is useful in disputes over the classical principle *Ex Contradictione Quodlibet* (from a contradiction everything can be deduced).

Priest characteristically sets himself to imagine the unimaginable, by taking trivialism seriously enough to need refuting. He aims to defend the thesis that not everything is true. Clearly, those of us who are not deranged agree that not everything is true. But it proves surprisingly difficult to justify that belief, as Priest ably demonstrates. Nevertheless, in the end the weight of argument is definitely favourable. We will review these arguments presently.

Given the main argument of Priest's paper, then, its *title* is misleading. For the title asks a different question: *is it possible that* everything is true, or perhaps is it *impossible*? Now of course philosophers sometimes ask whether something is so by asking whether it could be so: we're knee-jerk *apriorists* after all. And in this context few would be misled by Priest's title. Nonetheless, there are important issues under the surface here.

Possibilism has close connections with trivialism, in that if possibilism is true then it would seem that trivialism is possible (even if untrue). It might be thought that this is too much to conclude. After all, the truth of possibilism would seem to require only that there be, for each proposition, a world in which it is true. It is a further step to say that there is a single trivial world, one in which every proposition is true. The former might be called the "distributive" version of possibilism, and the latter the "collective" version. The distinction is conceivable enough, it relies on a traditional difference in two ways of taking the universal quantifier, which was applied in the analysis of the traditional fallacies of composition and division. Still, this objection can be sidestepped, I suggest. Trivialism would seem to be a meaningful position. That is one of the parameters of this discussion, as Priest would agree: it can be expressed in the logic of propositional quantifiers as  $(\forall A)A$ . Consequently, if *anything* (distributively) is possible, then trivialism is possible. That is, *everything* (collectively) is possible.

At any rate, whatever is right here, we can certainly say that if possibilism is true, then the answer to the *title* of Priest's paper is *yes*. If, on the other hand, Priest's arguments have the force of necessity, then one should conclude that what Priest is arguing against is not just false but impossible. If anything is impossible, then its negation is a necessary truth. That is, if possibilism is false then the answer to the *title* of Priest's paper is *no*.

Priest evidently takes at least some of his argumentation to have necessary force. For example, he writes:

"It is easy enough to show that trivialism is not true — indeed necessarily so. For it is either true or it is not. But if it is true, it follows that it is not true (everything follows). Hence, in either case, it is not true" (P190)

Priest comments that this would not show that there is something true which is rejected by the trivialist, because trivialism rejects nothing. Yet Priest himself is not trivialist, and he evidently regards this argument as successfully establishing the necessary falsehood, the impossibility, of trivialism. But does it?

Mortensen (1989) in defending possibilism maintained the possibility of trivialism. Any argument that trivialism is impossible will be either invalid

or question-begging. Consider for example Priest's own argument. It is of the form " $A \vee \sim A, A \rightarrow \sim A$ . Hence  $\sim A$ ." Now suppose we try to strengthen the conclusion to:  $\Box \sim A$ . But that would not follow if the premisses as given are not necessary truths: the form " $A \vee B, A \rightarrow B$ . Hence  $\Box B$ " is generally invalid if the premisses are contingently true. So one would at least need to strengthen one or both of the premisses to the stronger necessary form. But why should one accept that? It would be blatantly question-begging.

This observation does not establish by itself that trivialism is possible, nor that possibilism is true. The main aim at present is different, namely to consider Priest's arguments. He canvasses three arguments against trivialism. It is therefore worthwhile to consider how well they fare against possibilism.

Priest's *first* argument is as follows. Surely there are some propositions that we have to admit there are no good reasons to believe. Therefore, any trivialist would have to admit that there are parts of their position which there is no good reason to believe. Thus the belief in question, which the trivialist has because they believe everything, is irrational. But Priest allows that the trivialist can reply that there is some reason to believe any proposition, or at any rate many propositions. Consider any identity statement, such as that you are a scrambled egg. It is a familiar argument that by making small enough changes we do not change the character of a thing. So what began as you remains as you even when every molecule of your body is replaced by scrambled egg. By Leibniz Law, furthermore, it then follows that any thing has any property, since any thing is identical with something which incontestably has that property.

This is the familiar reasoning of the Sorites paradox. There must be something wrong with the Sorites, for it is contrary to observation. It is notoriously difficult to say just exactly what is wrong with the Sorites; but there must be something fallacious about it, or it would be that hairy is bald. Thus, any defence of trivialism which relies on the Sorites is unbelievable. But note that here Priest was trying out an attack on trivialism and finding it wanting. Thus, the conclusion of his argument was not intended as a refutation of trivialism. In point of fact, it is easy to agree with Priest's premiss that there are some propositions that we have no reason to believe. For example, there is the *phenomenological absence* of an observation or sensation. In the absence of a sensation, we have no reason to believe its *Protokolsatz*. But none of this threatens the thesis that triviality is *possible*, in any case. Even if the argument succeeded as an objection to triviality, the conclusion that our own world is not trivial does not begin to show what another might be.

Priest's *second* argument against trivialism is that it implies the meaninglessness of public language. Public meanings are learned, and learning implies contrast, some descriptions accepted and some rejected. But trivialism prevents rejection, since for the trivialist nothing is rejected.

It is clear that this argument does not succeed as an objection to possibilism. If trivialism is merely possible, then the meaninglessness of public language does not follow. If *our* world has contrasts, which it surely does, then it is our world in which the contrasts that fix meaning and learning in *this* language abound. If the failure of public communication is merely possible but not actual, then nothing follows about the inability to learn language in *our* world.

Priest's *third* argument is to the effect that it is phenomenologically impossible to believe that everything is true. This is because to live we have to make *choices*. Choices are goal-directed, they imply rejection of other alternatives. Since trivialism cannot accommodate rejection, there are no real trivialists.

Indeed so, but this does not even show that trivialism is untrue, as Priest acknowledges, let alone that possibilism is untrue:

"This does not show that trivialism is untrue. As far as the above considerations go, it is quite possible (sic.) that everything is the case; but not for me — or for any other person." (P194)

It might be that the fact that there are no trivialists counts against trivialism, but it surely does not count against possibilism. We make our choices, our actions and our rejections in our world, and this world is not trivial. That is quite compatible with another world being trivial.

The failure of these arguments as objections to possibilism illustrates a more general point. Defences of necessitarianism typically try to reduce possibilism to a contradiction. But all such arguments eventually fail, because *possibilism is a consistent position*. The simplest way to see this is to consider the matrices below, which extend classical logic with possibility and necessity operators.

&	T	F	~	◇	□
T	T	F	F	T	F
F	F	F	T	T	F

It is obvious that this is consistent if classical logic is. Hence, no argument that seeks to render possibilism to be a contradiction succeeds: the matrices tell us which premisses are false or question-begging. For example, Graham Nerlich argued in conversation that possibilism is committed to the possibility of necessitarianism. This is true, and indeed we have already registered the point in connection with Haack in Section 2. The matrices validate  $\diamond\Box A$  for every proposition A. Necessitarianism is thus possible, it is a coherent position (or rather a group of positions for various accounts of the nature

of necessity). But the matrices also show that possibilism is not thereby reduced to triviality or inconsistency.

There may be, of course, attempts to demonstrate that something is necessary other than by showing that possibilism implies a contradiction. I suggest, though, that they will all need a premiss of the form "Necessarily A" somewhere along the way, and then one would be inclined to wonder why this confers some explanatory advantage over A by itself. To illustrate this point, consider the objection raised in conversation by John Bigelow, namely that some account should be taken of our strong intuition that the truths of logic and mathematics are distinctively susceptible of *apriori* proof. I agree that this intuition as a mental state needs accounting for. But how would one progress the explanation beyond the usual causal explanation in terms of the occurrences of preceding mental states, by adding in a premiss that one of the causes of our mental state is necessary? How could necessary truth improve the explanation of any mental state, intuition or not?

#### 4. *Non-normal Worlds*

The above matrices do not pop up out of nowhere. It is clear that they arise from the usual semantical assignment conditions for the modal connectives when applied to a model structure consisting of a single non-normal world. A single non-normal world may of course have all the so-called laws of logic holding true, such as  $A \rightarrow A$  and so on, but no necessitated statement holds true. It should be noted in passing here that the issue of the reality of worlds is not at issue: it is not intended to take sides on modal realism versus various *ersatz* reductions of worlds.

This serves to deflect the objection that the matrices are cut loose from the meaning-constraints of alethic modality. It is plausible that when studying modal logic one identifies commonality in the concept under study (necessity, possibility, conjunction *etc.*) with commonality in the assignment conditions, so that variation in the worlds of the model structure represents varying accounts of the *same concept*. But that is exactly so here, the assignment conditions for possibility and necessity are the same as in the non-normal modal logics, only the case where there are normal worlds is unsatisfied and thus idle. For the same reason, it is pointless to object that the semantics of all normal modal logics validates the rule of necessitation: every theorem is necessary. Of course that is so, but the rule would need to be independently motivated. Needless to say, it is part and parcel of possibilism that the rule of necessitation fails.

There is one more point about the explanatory advantage for semantics in allowing a trivial world. The semantics of *non-normal* modal logics is anomalous in the way it treats non-normal worlds. Non-normal worlds are

those (such as ours, if possibilism is right) at which all propositions of the form "Possibly A" hold. In standard modal semantics, this is regarded as *sui generis*, not arising from the accessibility relation in the way that other modal evaluations do. But that is *ad hoc*. Now there are two less *ad hoc* ways to produce or "explain" the above matrix. One could postulate a model structure in which our non-normal world had an infinite collection of accessible worlds, one for each proposition to hold in, so that  $\Diamond A$  held on our world, for each A. This would correspond to the "distributive" sense of possibilism that we identified at the beginning of Section 3, each proposition would be possible but there would be no sense in which they were possible together. However, it is clear that a formally simpler way to improve things is to allow a single trivial world. Then any world from which the trivial world is accessible, is automatically a non-normal world. In addition to being technically much simpler, this would correspond to the stronger "collective" sense of possibilism which was adopted for preference in Section 3, and which was in accordance with Priest's own understanding of trivialism. Furthermore, the usual *ad hoc* assignment to non-normal worlds disappears in favour of the truth of all the  $\Diamond A$  being assured by the accessibility relation in the usual way.

### 5. Conclusion

We see, then, that possibilism resists Priest's arguments against trivialism, initially threatening though they might have seemed. We also see that possibilism has independent strengths. It is a consistent position, and there is no good reason to believe in its rival, necessitarianism. In positive terms, it is simple and plausibly motivated, being the only epistemically and ontologically general thesis in the field. Anything is possible, even triviality.

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