



## **In Defence of Fictionalism about Possible Worlds**

Peter Menzies; Philip Pettit

*Analysis*, Vol. 54, No. 1. (Jan., 1994), pp. 27-36.

Stable URL:

<http://links.jstor.org/sici?sici=0003-2638%28199401%2954%3A1%3C27%3AIDOFAP%3E2.0.CO%3B2-M>

*Analysis* is currently published by The Analysis Committee.

---

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at <http://www.jstor.org/about/terms.html>. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at <http://www.jstor.org/journals/anacom.html>.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

---

JSTOR is an independent not-for-profit organization dedicated to creating and preserving a digital archive of scholarly journals. For more information regarding JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

# *In Defence of Fictionalism about Possible Worlds*

PETER MENZIES & PHILIP PETTIT

## *1. Introduction*

If you utter the sentence ‘There were blue swans on the lake’ in telling a story, you are not understood as committing yourself to the existence of blue swans. Rather your utterance is considered as an elliptical expression of the sentence ‘In the story, there were blue swans on the lake’. Clearly, quantification within the scope of such a story operator does not carry serious ontological commitment. By analogy, Gideon Rosen [9] suggests that talk about possible worlds should be understood as talk within the scope of a story operator. Thus, if you assert ‘There are possible worlds at which blue swans exist’, Rosen holds that your assertion is best understood along the lines of ‘According to the fiction of many possible worlds, there are worlds at which blue swans exist’.

Under Rosen’s theory, the fiction is that there are possible worlds in the sense envisaged in Lewis’s [5] modal realism and we shall go along here with this general conception of modal fictionalism.<sup>1</sup> There is more to Rosen’s theory, however, than that conception of the fiction involved in modal talk. Specifically – and, as we shall see, contentiously – he advocates a simple *prefixing strategy* for fictionalizing Lewis’s possible worlds analyses of modal propositions. Let  $P$  be any modal proposition and let  $P^*$  be the possible worlds translation of  $P$  (the translation that Lewis would endorse). Then, Rosen argues, the fictionalist should endorse the following translational schema:

- (1)  $P$  iff according to the hypothesis of the plurality of worlds (PW),  $P^*$ .

Some examples of this fictionalist schema of translation are: necessarily  $p$  iff according to PW, at all worlds,  $p$ ; and possibly  $p$  iff according to PW, at some world,  $p$ .

For all the appeal of this prefixing strategy of translation, its ultimate tenability has been questioned by Stuart Brock [2] and, in a later article in ANALYSIS [10], by Rosen himself.<sup>2</sup> Independently of each other, they have advanced a common objection which shows that the prefixing strategy cannot serve fictionalist purposes. Our aim in this paper is to demonstrate

<sup>1</sup> For a different version of fictionalism see D.M. Armstrong’s [1]. For discussion of this kind of fictionalism see Lewis [6] and Rosen [10].

<sup>2</sup> In response to this objection, Rosen has suggested that we may wish to reconsider the merits of Lewis’s modal realism.

that, while that is so, it does not mean that the fictionalist cause is lost. There are variants on the prefixing strategy that get around the objection and that ought, on reflection, to be more appealing for the fictionalist.

In the next section we present the objection to the fictionalist, prefixing proposal and in the section after that we try to show how it can be met, indicating possibilities for revising the proposal so as to render it proof against the objection. The two remaining sections offer support for this revisionary approach. In the fourth section, we argue that it is not *ad hoc* and in a brief, final section we address a difficulty that it may seem to leave hanging.<sup>3</sup>

## 2. *The Objection to Modal Fictionalism*

In presenting the objection, we shall follow Rosen's [10] formulation of it. Rosen motivates the objection by considering the way in which iterated modalities are represented within Lewis's realist theory of possible worlds.<sup>4</sup> Taking the modalities to be logical modalities that conform to the modal logic S5, we know it is true that:

- (2) Necessarily, it is contingent that kangaroos exist.

In Lewis's realist theory of possible worlds this proposition has the same content as:

- (3) For all worlds  $w$ , at  $w$  there is a world  $w'$  at which kangaroos exist and a world  $w''$  at which kangaroos do not exist.

Rosen observes that this implies:

- (4) For all worlds  $w$ , at  $w$  there are several (at least two) worlds.

He remarks that this is, in any case, an independently plausible thesis within Lewis's theory. Given (4), we can now append the prefix 'According to the hypothesis of the plurality of worlds (PW)' to the proposition thus:

- (5) According to PW, for all worlds  $w$ , at  $w$  there are several worlds.

And (5), by the prefixing schema of translation, is equivalent to:

- (6) Necessarily, there are several worlds.

In virtue of the modal principle that the necessarily  $p$  implies  $p$ , it follows that:

<sup>3</sup> While we believe that fictionalism is a promising approach, and in particular an approach that can survive the Brock-Rosen objection, we do not pretend to say enough in this short paper to motivate it. For the record, we believe that a response-dependent conception of modality can provide the motivation required. For an exploration of a response-dependent conception of modality see Menzies [7]. For a general discussion of response-dependence, see Pettit [8], Johnston [3] and [4].

<sup>4</sup> Brock (1993) also justifies the vital steps in his argument against fictionalism by considering the nature of the accessibility relation used in analyses of iterated modality.

(7) There are several worlds.

It seems, then, that the fictionalist's acceptance of a number of unexceptional principles forces him to accept (7). And (7) is not a proposition that any fictionalist about possible worlds can dream of accepting.

### 3. *An Answer to the Objection*

This objection is decisive against the letter of the Rosen proposal. If fictionalism involves the prefixing proposal described in (1), then fictionalism fails. It is self-defeating, because the translations which it allows entail that there are several worlds, contrary to the motivating thought behind the proposal – contrary to the thought that the modal realist is mistaken in thinking that there are any worlds other than the actual one. But is the objection a telling assault on the spirit, as distinct from the letter, of the fictionalist proposal? We think not.

The fictionalist idea is that all references to possible worlds should be governed by a fictionalizing operator, like 'according to PW'. The objection presented shows nothing more than that under Rosen's prefixing strategy of translating modal talk – under his interpretation of the fictionalist idea – some references to possible worlds fail to be appropriately qualified. Consider (5): 'According to PW, for all worlds  $w$ , at  $w$  there are several worlds'. The universal quantification in 'for all worlds,  $w$ , at  $w$ ...' is clearly subjected to the fictional operator, so that we are left in no doubt but that the worlds envisaged are just the fictional worlds postulated by PW, the hypothesis of possible worlds. But the existential quantification in 'at  $w$  there are several worlds' fails to be governed by any fictional operator. That appears precisely in the fact that the translation to ordinary modal talk in which the operator is dropped – the translation legitimated by the prefixing schema – leaves us with the existential claim intact. (5) leads us to (6): 'It is necessary that there are several worlds'.

An analogy may help to bring out the inadequacy in the prefixing strategy, to which the objection points. Imagine that a fictional story is told about a real person, Mary, and that we are informed that according to the story, Mary resents her husband. Does this remark entail that Mary has a husband in real life? It may or it may not, depending on whether the reference to her husband, like the reference to Mary, is supposed to pick out a real-life person who figures in the story – depending on whether the reference escapes the fictional operator at the beginning of the claim. An analogous ambiguity affects (5): 'According to PW, for all worlds  $w$ , at  $w$  there are several worlds'. Does this remark entail that there are several worlds? That should depend on whether the reference to the several worlds in the existential quantification is meant to pick out entities that also figure

outside the fictional context: it should depend on whether the reference to those worlds is governed by the fictional operator. The trouble with the prefixing strategy of translation is that, in allowing us to deduce from (5) that necessarily there are several worlds, it enforces the wrong resolution of the ambiguity; it leaves the reference to those worlds outside the scope of the fictional operator.

The fictionalist who sees the problem raised in the objection should react, we think, by amending the original prefixing proposal so that the embedded existential quantification is explicitly governed, equally with the initial quantification, by the fictional operator. The problem with the prefixing proposal, which the objection brings out, is that the fictionalist prefix leaves the relevant sort of embedded quantification stranded, without any fictionalist flagging. Thus we should look for an amendment of the proposal which keeps every such embedded quantifier over possible worlds flagged by the fictional operator.

How to implement this policy for the sustained flagging of world-quantifiers? One way would be to link the embedded quantifier by anaphoric back-reference to the initial universal quantifier, and thereby to the fictional operator governing that quantifier. The embedded quantifier in (5) bears on 'several worlds' and the idea here is that it should be made clear that the worlds in question are a sub-set of the worlds that are universally quantified over at the beginning of the sentence and that are governed by the fictional operator. We should recast (5) as follows.

(5\*) According to PW, for all possible worlds  $w$ , at  $w$  there are several of *those* worlds.

The 'those' in (5\*) refers back anaphorically to the worlds mentioned in the initial quantification, worlds that are explicitly presented as fictional entities. Thus the effect of this recasting of (5) is to make clear that the worlds existentially quantified over – the several worlds at  $w$  – are not novel referents: they are not worlds distinct from the fictional worlds initially introduced. This effect is reflected in the fact that (5\*), unlike the original (5), does not enable us to deduce (6): 'Necessarily, there are several worlds'. All that it can lead us towards is a proposition that the fictionalist will find harmless, given that it is interpreted in suitable context:

(6\*) Necessarily, there are several of *those* worlds.

What effect will this *prefixing-cum-anaphora* proposal have in general on the mapping between ordinary modal discourse and possible worlds talk? The prefixing proposal allows translation whenever the realist allows it; when the realist maps a modal proposition  $P$  onto a possible worlds proposition  $P^*$ , the fictionalist will map it onto the prefixed version of  $P^*$ . The prefixing-cum-anaphora proposal would restrict this schema by link-

ing  $P$ , not with the prefixed version of  $P^*$ , but with the prefixed version in which embedded world-quantification is always anaphorically marked. For the fictionalist who holds by this proposal the assertion of  $P$  will not be tantamount to the fictionalized assertion of  $P^*$  but rather to the fictionalized assertion of something more carefully qualified.

In mentioning the prefixing-cum-anaphora proposal, we do not mean to suggest that it is the only satisfactory amendment available. Another way of implementing the policy for the sustained flagging of quantifiers might be to use subscripts to index all the world-quantifiers that are meant to be fictionalized. The effect of the indexing would be to have us read ‘for all worlds’ as ‘for all posited-in-the-PW-hypothesis worlds’ and ‘there are worlds’ as ‘there are posited-in-the-PW-hypothesis worlds’. Instead of recasting (5) as  $(5^*)$ , we would recast it as follows:

$(5^{**})$  According to PW, for all PW-worlds  $w$ , at  $w$  there are several PW-worlds.

In the prefixing-cum-anaphora proposal, embedded world-quantifiers are not directly governed by the fictional operator but the worlds they govern are anaphorically identified by reference back to a quantifier that is. In this *prefixing-cum-indexing* proposal, all world-quantifiers would be explicitly brought under the scope of the fictional operator. The idea is that in representing what the hypothesis posits, good book-keeping requires that we should always identify the posits explicitly; in particular, we should distinguish them from entities that we representers independently endorse and introduce on our own account into the discourse. There is no suggestion, of course, that the PW hypothesis is so self-reflective that it posits only PW-worlds: only worlds that it represents within itself as worlds of its invention. What the PW hypothesis posits is possible worlds *simpliciter*. The index serves to emphasize the fact that if we refer to these worlds outside the possible worlds story, still we do not commit ourselves to their reality except in the story.

This proposal has an advantage lacking in the other. It points us explicitly towards a difference between two effects of the fictional operator: first, its effect in fictionalizing the claim that is made in the proposition that it precedes; and second, the effect, present in our examples, of fictionalizing certain of the entities about which the claim is made, viz. possible worlds. That the claim is fictionalized is clear in the prefixed stipulation that it is ‘according to PW’. That the worlds involved in the claim are fictionalized is clear in the indexed stipulation that they are PW-worlds: worlds-*posited-in-the-PW-hypothesis*. But we do not mean to explore the idea further in the present context; we mention it only by way of indicating that there are a number of ways in which we might think of revising the original, prefixing proposal in order to save modal fictionalism.

We hope that drawing attention to the prefixing-cum-anaphora and the prefixing-cum-indexing proposals is sufficient to show that the objection discussed in the last section does not necessarily deal a death blow to modal fictionalism. It certainly shows that the simple prefixing proposal advanced in Rosen [9] is a self-defeating theory. But it does not show that the proposal cannot be amended, and amended in the full spirit of fictionalism, so as to avoid the sort of difficulty raised.

#### 4. *Why the Answer is Not Ad Hoc.*

The original prefixing proposal has a natural and attractive aspect that is lacking in either of the amendments described; it offers itself as the obvious way to go in formulating a fictionalist theory of modality. This means that the amendments are liable to look like *ad hoc* revisions introduced in order to save a degenerating research program. Thus we need to say a little more by way of showing that the prefixing proposal is motivated by a mistake – a mistake, even by the lights of the fictionalist – and that the amendments are well conceived.

We think that there is an interesting mistake at the source of the simple proposal and that the amendments begin to look attractive, once this is noticed. In possible worlds talk there is an important ambiguity about the modifier ‘at  $w$ ’ and the mistake consists in assuming that one particular way of resolving it is going to be appropriate in all contexts.

In Lewis’s realist theory of modality, a sentence like (8) will be translated as (9):

(8) Necessarily, it is possible that blue swans exist.

(9) For all worlds  $w$ , at  $w$  there is a world  $w'$  at which blue swans exist.

Notice now that the at-modifier appears two times in the possible worlds translation (9): once linked with the universal quantifier corresponding to the initial necessity operator and once linked with the existential quantifier corresponding to the embedded possibility operator. On Lewis’s theory, so it turns out, the two occurrences of the modifier must be understood in different ways.

Lewis’s writings leave no doubt about the way he thinks that the innermost occurrence of the modifier should be interpreted. He says that the modifier, at least in this kind of occurrence, works by restricting the domains of the quantifiers within its scope, in much the same way that the restricting modifier ‘In Australia’ does. ‘In Australia, all swans are black’ is to be understood as meaning that, under the restriction of the quantifier to things in Australia, all swans are black. Just so ‘At world  $w$ , all swans are blue’ is to be understood as meaning that, under the restriction of the quantifier to things in world  $w$ , all swans are blue ([5], p. 5).

Evidently, the outermost occurrence of the *at*-modifier in (9) cannot be read in this way: since there are no worlds within worlds, it cannot be true, in the required sense, that at each world – including worlds like ours in which blue swans are lacking – there is a possible world at which blue swans exist. Although Lewis does not, as far as we know, address the issue in his writings, it is clear that he must understand this occurrence of the modifier in a relational way. Under one possible relational reading, it would be true *at w* that, say, there is a world at which blue swans exist just in case *w* has the relational property of being a member of a set of worlds one of which contains blue swans.

It will be useful to have distinctive ways of marking the two readings of the modifier. Let us say that it is true *at<sub>1</sub> w* that *p* just when *p* holds true of *w* in virtue of how things are within *w*. And let us say that it is true *at<sub>2</sub> w* that *p* just when *p* holds true of *w* in virtue of the relations of *w* to other things – in particular, to other worlds.

With this distinction in hand, we can now present our diagnosis of the mistake at the root of the simple prefixing proposal. We hold that what makes the prefixing proposal look natural and attractive is the beguiling but mistaken assumption that all *at*-contexts are of the *at<sub>1</sub>* rather than the *at<sub>2</sub>* kind. With contexts of the first kind, the prefixing proposal does everything necessary to catch the fictionalist idea. With contexts of the second kind, it does not.

It should be clear why the prefixing proposal serves fictionalism adequately for contexts of the *at<sub>1</sub>* kind. Consider a proposition of the form ‘According to PW, for all worlds *w*, *at<sub>1</sub> w* there is...’. In such a context the embedded, existential quantification is restricted to items that figure in the selected world *w*. But that world falls explicitly within the scope of the fictional operator ‘according to PW’. And so it is clear that whatever is existentially quantified over falls itself within the scope of that operator too. If translation back into ordinary modal discourse appears to reveal a non-fictional commitment, therefore, then that commitment should be taken seriously; the appearance is not to be explained away by any confusion about the scope of the original fictional operator.

Suppose, then, that we believe that ‘According to PW, for all worlds *w*, *at<sub>1</sub> w* there are numbers’. By the fictionalist schema of translation, that yields ‘Necessarily there are numbers’. We should therefore be prepared to take on that commitment. Is there anything to worry about here? Not that we can see. There might be if an analogous line of argument forced us to a similar commitment on the reality of worlds. But no such argument is on offer. The only proposition that might take us to a commitment to worlds is ‘According to PW, for all worlds *w*, *at<sub>1</sub> w* there are several possible worlds’. And that is simple false: *at<sub>1</sub> w* there is just one world, for the scope



of the quantification is restricted to items in  $w$ . What is true, of course, is: ‘According to PW, for all worlds  $w$ ,  $at_1 w$  there is only one world’. But that need not raise a problem. It means that necessarily – necessarily, understood in terms of  $at_1$ -contexts – there is only one world. And the fictionalist may be quite happy to live with that.<sup>5</sup>

These considerations should suffice to show that if all  $at$ -contexts were of the first  $at_1$ -kind, then the prefixing proposal would do perfectly well to give expression to the fictionalist idea. But there are also  $at_2$ -contexts and the proposal clearly fails to discharge its intended task in this sort of case. Consider a proposition like ‘According to PW, for all worlds  $w$ ,  $at_2 w$  there is...’. In this case the domain of quantification for the embedded, existential quantifier is not restricted to items in the selected world  $w$ , for what holds – and therefore what exists –  $at_2 w$  is determined by the items to which  $w$  is related in a certain way, not by what is to be found within  $w$  itself.

Take the natural  $at_2$ -version of proposition (5): ‘According to PW, for all worlds  $w$ ,  $at_2 w$  there are several worlds’. The fact that  $w$  itself falls clearly within the scope of the fictional operator does nothing in this case to ensure that that operator governs the domain of the embedded, existential quantification. And so the simple prefixing idea does not serve to capture the fictionalist thought, that all references to possible worlds are fictionalized. It allows a translation into modal discourse under which we discover that if we endorse the fictionally governed proposition, then we are committed to (6): ‘Necessarily, there are several worlds’.

We surmise that the prefixing proposal looks like a natural and attractive way of expressing the fictionalist idea, only because it is assumed that all  $at$ -contexts are of the  $at_1$  rather than the  $at_2$  kind. Once we recognize that  $at$ -contexts come in both forms, then it becomes clear that the fictionalist idea must involve something more than what the simple prefixing proposal represents. It must involve a more consistent flagging of world-quantifiers than that proposal puts in place.

We saw in the last section that it may involve something of the kind that is illustrated by the prefixing-cum-anaphora and the prefixing-cum-indexing proposals. We now see that it may also involve something a little more nuanced: simple prefixing for  $at_1$ -contexts and a version of one of the other approaches for  $at_2$ -contexts.<sup>6</sup> There are a number of possibilities for the

<sup>5</sup> Notice two things. First, the fictionalist who goes along with one of the amended strategies described in the last section will not be given the resources to endorse this result; see the footnote following. Second, whatever holds of the fictionalist, Lewis must certainly live with the corresponding non-fictionalist claim: the claim that necessarily – where, crucially, this ‘necessarily’ is understood in terms of  $at_1$ -contexts – there is only one world.

fictionalist to explore. The demise of the simple prefixing proposal does not sound the death-knell for the larger programme.

### 5. *A Last Difficulty Confronted*<sup>7</sup>

We have shown that fictionalism can make room, if room is desired, for an ontologically non-committal – and therefore suitably fictionalist – form of (6): the claim that necessarily, there are several worlds. But have we left room for the fictionalist to assert in a different, literal key that actually that claim is false: to assert in literal mode that possibly there are not several worlds, that possibly, PW is false? It seems not, since the fictionalist cashes all modal claims in terms of PW and, according to PW, for all worlds  $w$ , at  $w$  there are several worlds. The fictionalist's literal assertion involves a modal operator – *possibly*, PW is false – that he cannot apparently discharge by appeal to the fiction of a plurality of worlds

If the fictionalist is right in thinking that the content of modal talk is tantamount to possible worlds talk within the scope of a fictional operator, then the claim that possibly, PW is false represents a very special sort of modal claim. It is the claim in which the fictionalist marks the contrast between his position and that of modal realism, distancing himself from the very hypothesis implicated in the analysis of modal talk – talking about it, rather than within it – and relating the hypothesis to the actual world. The claim is, as we might put it, a modal dangler: a *sui generis* claim that does no general work but that is an essential part of the fictionalist position.

How to analyse the content of that claim? In particular, how to analyse it in a way that marks the peculiarity of the claim but that remains continuous with the fictionalist analysis of modal talk generally? The claim must have a truth condition that involves the entities posited in PW: otherwise it will not be continuous with modal talk generally. But, being the claim that PW is false, it cannot be true according to PW and so it cannot be made from within the PW perspective. The claim is made from a perspective outside PW in which we can talk about the actual world and about the other worlds posited in PW. What it does is spell out the lesson that there is one possible world – the actual world – at which PW is false: and so, that

<sup>6</sup> This more nuanced approach would allow the fictionalist to hold that necessarily – in the *at<sub>1</sub>*-sense – there is only one world. And some fictionalists may wish to maintain that thesis.

<sup>7</sup> Thanks to Stuart Brock for pressing it on us and thanks to him also for more general comments. The truth-conditions that we offer for dangling modal operators are a close cousin of conditions which he argues that the fictionalist ought to give for modal claims generally. His variation on fictionalism may offer further reason for thinking that while the Brock-Rosen objection knocks out the simple prefixing proposal, it does not deal a death-blow to fictionalism as such.

possibly, PW is false. The idea is not that according to PW there is a possible world at which PW is false. Rather it is that there is a world at which PW is false and that that world is a world posited by PW.

If this line of thought is right, then the appropriate truth-conditions for dangling modal operators are going to be the following. Possibly *P* if and only if '*P*' holds at the actual world or at one of the other worlds posited in PW. Necessarily *P* if and only if '*P*' holds at the actual world and at all of the other worlds posited in PW. Given these truth conditions, the fictionalist will say that possibly, PW is false, since PW is false at the actual world. However he will deny that necessarily, PW is false, since it is not false at all of the other worlds posited in PW: on the contrary, at those worlds it is true. On the other hand, as we would expect, he will say that necessarily, possibly PW is false, for at every PW world it is the case that PW is false at the actual world. The fictionalist, then, can have his cake and eat it. He can retain his analysis of modal talk and at the same time offer a suitable interpretation of dangling modal operators: an interpretation that is continuous with ordinary modal sense, that marks what is special about dangling claims, and that allows him to hold by the claims that naturally go with his position.

*Research School of Social Sciences  
Australian National University  
GPO Box 4, Canberra ACT 2601, Australia  
pcm305@coombs.anu.edu.au  
pnp@coombs.anu.edu.au*

### References

- [1] D. M. Armstrong, *A Combinatorial Theory of Possibility* (Cambridge: Cambridge University Press, 1989).
- [2] Stuart Brock, 'Modal Fictionalism: A Response to Rosen', *Mind* 102 (1993) 147–50.
- [3] Mark Johnston, 'Dispositional Theories of Value', *Proc. Aristotelian Society, Suppl. Vol. 63* (1989) 139–74.
- [4] Mark Johnston, 'Objectivity Refigured', in *Realism and Reason*, edited J. Haldane and C. Wright (Oxford: Oxford University Press, 1993).
- [5] David Lewis, *On the Plurality of Worlds* (Oxford: Blackwell, 1986).
- [6] David Lewis, 'Review of Armstrong's *A Combinatorial Theory of Possibility*', *Australasian Journal of Philosophy* 70 (1992) 211–24.
- [7] Peter Menzies, 'Modality and Response-Dependence', in *1992 ANU Metaphysics Conference Proceedings*, edited by B. Garrett and P. Menzies (Working Papers in Philosophy No 2, RSSS series, ANU), 73–106.
- [8] Philip Pettit, 'Realism and Response-Dependence', *Mind*, 100 (1991) 587–626.
- [9] Gideon Rosen, 'Modal Fictionalism', *Mind* 99 (1990) 327–54.
- [10] Gideon Rosen, 'A Problem for Fictionalism about Possible Worlds', *Analysis* 53 (1993) 71–81.