

Review of *Possible Worlds*

Josh Parsons

September 5, 2006

John Divers, *Possible Worlds*, Routledge (2002)
xvi+380 pages

This book is a survey, fortified by original material, of metaphysical theories of modality set in terms of possible worlds. Those theories include what Divers calls “genuine realism”, or “GR” — this is David Lewis’s “genuine modal realism” — and what Divers calls “actualist realism”, or “AR” — this seems to be the same as what Lewis called “ersatz modal realism”, which has also become widely known as “ersatzism”. Two important kinds of theory are not included: those that treat modality by means not involving possible worlds at all (for example, modalism, various kind of non-cognitivism, and Quinean eliminativism about modality); and those that, while treating modality by talking about possible worlds, go on to deny that there are any possible worlds in one way or another (for example, Rosen’s fictionalism, and Divers’ own agnosticism about possible worlds). These get a short discussion towards the end of the introductory part of the book (sections 2.4–2.6), and Divers is planning to write a companion volume covering them.

The first three chapters set up the concepts of modality and of possible worlds, introduce Divers’ taxonomy of genuine and actualist realism, and discuss aspects of the possible worlds theory of modality that might be supposed to be neutral between the genuine and actualist families of theories. These are followed by six chapters on genuine realism, and six on actualist realism.

Divers’ conclusion is characteristically nuanced. Genuine realism emerges as the overall winner, at least from the battle between the options surveyed in the book. (Divers suggests that some form of modal anti-realism might be a better opponent for the genuine realist than actualist realism was, though). He does

not, however, endorse Lewis's argument that "ersatzism" (i.e. actualist realism) is either circular or unintelligible. If that argument were sound, it would furnish us with a knockdown refutation of all known forms of actualist realism. Divers' genuine realist is not interested in such an easy victory. Instead genuine realism wins on points — it is less susceptible to paradoxes of cardinality, and though its ontology sounds crazy on first hearing, it is no less ontologically expansive than the supposedly "safe and sane" ontology of actualist realism.

A central part of Divers' overall argument thus occurs on page 244 where he outlines what he sees as the general structure of the paradox arguments against actualist realism — the PW-paradox, as he calls it. The key premise is the principle that, for any maximal consistent set of propositions, there is a proposition corresponding to every subset of that set. Call this (P). It follows, via Cantor's Theorem, that there are more propositions in total than there are in a maximal consistent set of propositions. But, since, for every proposition p , either p or its negation is in each maximal consistent set, each maximal consistent set has no fewer members than there are propositions. Contradiction!

I'm less convinced than Divers that this kind of argument could be a crucial argument against actualist realism. Why should anyone believe the principle that is being shown to lead to contradiction? In a footnote, Divers suggests for each subset of some maximal consistent set, we consider the proposition saying that *that subset* is a set. That gives us as many intuitively unique propositions as there are subsets of the maximal consistent set. But this type of reasoning is bound to lead to trouble — it seems that for any set whatever, one can form the proposition saying that that set is a set, and it seems intuitive that the propositions corresponding to different sets are different propositions. So there are as many propositions as there are sets — too many for there to be maximal consistent sets.

It's up to the theorist of propositions to tell us what to reject here, of course, but at least we shouldn't get too friendly with the idea that there's a unique proposition about every set. And of course the problem here is a problem about *sets*, not a problem about propositions or modality. Sets are weird, and part of that weirdness is that it can be dangerous to suppose that there's a proposition about each set, (or a world in which just the members of that set exist, or a property of being a set with just those members).

In short, the general form of the PW-paradox is just a set-theoretic paradox in modal clothing. It's hardly the fault of actualist realism that such things are possible to concoct. To be fair, Divers also considers more concrete instances of

the PW-paradox applied to specific types of actualist realism. But he gives no more convincing reason to embrace (P) than in the footnote, nor any reason to suppose that all forms of actualist realism must suffer from this problem.

The great strength of the book is its treatment of genuine realism. As Divers endorses genuine realism himself (at least for the purposes of the book) a comparison with Lewis's *On the Plurality of Worlds* is inevitable. Divers' volume is nicely complementary to Lewis's — reviewing parts of the literature that have developed since 1986, and taking a less polemical stance towards theories other than genuine realism.

The survey style however, hides the fact that Divers' genuine realism is a slightly different beast from Lewis's. Divers thinks of realism (both actualist and genuine) as providing a systematic “applied semantics” of modality, into which different metaphysics (either genuine realist, or differing versions of actualist) can be plugged. This is rather different from Lewis's “metaphysics first” approach, which starts from the metaphysics of genuine realism, and then offers Quinean paraphrases of ordinary language modal idioms into the extensional language in which that metaphysics is expressed. Lewis once offered a systematic paraphrase of modal logic into extensional language, in “Counterpart Theory and Modal Logic”, but that was properly speaking a work of apologetics, designed to show advocates of model-theoretic semantics that the genuine realist did not lack any expressive power. It certainly was not Lewis's intention to propose an analysis of modal language via modal logic.

By contrast, Divers does assign more of a role to modal logic, and to systematic treatments of modal language. Most obviously, this comes up in his discussion of whether counterpart theory can serve as an applied semantics (pages 142–144) for quantified modal logic. Divers' method here consists in asking whether a formalised version of counterpart theory would validate certain controversial principles of modal logic. We are presumed to have an independent grasp of the meaning of those principles, and some intuitions about them.

But it is not clear to me that we do. What we have intuitions about are ordinary language modal idioms and arguments. To bring those to bear on modal logic, we first need a translation system to formalise ordinary language modality. There are several such systems, geared towards different modal logics, and in some cases, whether a modal principle seems intuitively valid will hinge on the translation scheme. This is especially true in the case of principles that are connected with the role of quantification in modal logic. For example, if you read the atomic for-

mula $\Box Fx$ as “ x couldn’t have failed to be F ”, you’ll look with less favour on the Barcan formula, $(\forall x)(\Box Fx) \rightarrow \Box(\forall x)(Fx)$ and with more favour on its converse than if you read that formula as “it is necessarily the case that x is F ”. Lewis’s recommendation, of course, is that we translate ordinary language modal idioms directly into the language of counterpart theory, and avoid this whole morass.

Another place this issue turns up is Divers’ discussion of “extraordinary” or “advanced” modalising, which takes place in pages 47–50. The problem here is that Lewis’s systematic paraphrase gives odd results when applied to genuine realism itself. Take the thesis that “possibly there is a plurality of worlds” — this comes out false when transformed using the paraphrase. Divers’ solution is to give a transformation that works by cases — if we are modalising normally, use the Lewis paraphrase, if in an “extraordinary” context, use the following analysis of modality: “ A is possible iff A ”; “ A is necessary iff A ”; “ A is contingent iff A and not A ”. This gives reasonable answers to modal questions about possible worlds. But it strikes me as ad hoc, and not what Lewis should do. Elsewhere, where Lewis hits well-known difficulties with systematic treatments of modal language, he is ready to drop the systematicity (for example, pages 11–12 of *Plurality*). It is even more comfortable to do that here — Lewis should say that his metaphysics is expressed in a non-modal language, and there is simply nothing to say about whether it is possible that there be a plurality of worlds. The facts of genuine modal realism themselves are neither necessary nor contingent.

Divers is mistaken, then, I think, as a matter of Lewis-exegesis (and he does claim to be speaking on behalf of Lewis, at least in the discussion of advanced modalising). But that need not be a bad thing; afterall, it would be valuable to have a version of genuine realism about possible worlds developed outside of the Lewis framework, and construed that way his work on genuine realism as applied semantics, and on advanced modalising is a success. His clear separation of the metaphysical and semantic tasks opens the door to theories (such as fictionalism, error theory and agnosticism) that, in one sense or another, preserve the semantics while rejecting the metaphysics. I look forward to hearing more about those.

All quibbles aside, *Possible Worlds* is an excellent, useful book, if somewhat densely written, and I would heartily recommend it both to specialists, and to anyone who might someday need to know what’s what in the philosophy of modality. The well-constructed index is a valuable tool (and a necessary one, given Divers’ *penchant* for introducing his own technical terms). I would also encourage readers to read the endnotes (there are 62 pages of these, and they often contain substantial

arguments).

University of California, Davis

References

Divers, J. (2002). *Possible Worlds*. London: Routledge.