REPLIES TO THE CRITICS*

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MENZEL'S COMMENTARY

Menzel's commentary is a tightly focused, extended argument and it may be summarized as follows: (a) though Zalta gathers a range of phenomena under a small set of concepts, unfortunately, the framework is a possibilist one; (b) Zalta justifies possibilism by arguing that it provides the simplest and most natural explanation and analysis of such phenomena as ordinary modal discourse; but (c) by taking the modal operator as primitive, Zalta doesn't really offer any genuine analysis or explanation of modal discourse and so cannot establish the superiority of his possibilism.

With respect to (a), Menzel correctly points out that the theory's possibilism derives not from its commitment to abstract objects, but rather from its commitment to objects \( x \) that possibly exist but which don't in fact exist (i.e., to objects that satisfy the condition: \( \Diamond E!x \land \neg E!x \)). The theory doesn't explicitly assert that there are any of these objects, but when one adds ordinary modal intuitions such as 'There might have been something which is \( F \)' (i.e., \( \Diamond \exists xFx \)), the Barcan formula guarantees that there is something which might have been \( F \) (i.e., \( \exists x \Diamond Fx \)). If \( F \) is an existence-entailing property such as being a million-carat diamond or a talking donkey, it follows that there are things might have existed (though which in fact don't exist).

While this shows that the theory is committed to possible objects, it is important to point out that there is a way to interpret the formalism that results in a theory that satisfies the demands of actualism! I sketched this interpretation on pp. 102—3 of the book, by suggesting that we read the predicate '\( E! \)' as 'being concrete' (instead of 'exists'), and that we read the quantifier '\( \exists \)' as 'there exists'. Under such an interpretation, the theory is committed neither to nonexistent objects nor...
unactualized possibles, even when we add ordinary modal intuitions. Recently, Bernard Linsky and I have investigated this interpretation in greater detail, and we’ve used it to defend the simplest quantified modal logic (a logic that includes the Barcan formulas). So there is some question about whether the formalism must be interpreted as possibilist, and I refer readers interested in the question to our forthcoming paper.¹

With respect to (c). I think Menzel has a point. Given that I take the modal operator as primitive, there is clearly a sense in which I cannot analyze or explain intuitive uses of ‘necessarily’ in ordinary modal discourse. But there are other senses of ‘analyze’ and ‘explain’ for which it could be said that the theory does analyze and explain modal notions. For one thing, the primitive modal operator is governed by a set of axioms. By characterizing the modal operator’s logical behavior, these axioms to some extent explain it. But more importantly, there is kind of analysis provided by the theorem that necessarily true propositions are true in all possible worlds. As Menzel points out, I define the notion of possible world in terms of the modal operator and define the notion of truth at a world in terms of encoding, and then derive certain theorems of world theory in the logic of encoding in a simple and direct manner. One such theorem establishes the equivalence of necessary truth (for propositions) and truth in all worlds. Its alternative form establishes the equivalence of possible truth and truth in some world. These equivalences allow us to move from Menzel’s sentence (1’) to his sentence (10’). Of course Menzel is correct that (10’) contains numerous primitive modal operators. But surely there is some kind of analysis of modality that is offered by the equivalence of (1’) and (10’). (1’) after all is just about ordinary objects and their modal properties. But (10’) shows this to be equivalent to a complex web of statements asserting: that there are possible worlds, that they have modal properties of a certain sort, that they encode propositional properties of a certain sort, that there are objects at those worlds, that those objects exemplify certain properties at those worlds, etc. This may not be an analysis or explanation of modality in Lewis’ sense, but it certainly does provide a much more fine-grained picture of modal reality than (1’) does. And that constitutes some kind of analysis I would think.

Moreover, this picture has virtues that actualist pictures of modal