

## ***Time, Language, and Ontology: The World from the B-Theoretic Perspective***

M. JOSHUA MOZERSKY

Oxford: Oxford University Press, 2015; 193 pp.; £50.00 (hardback)

A-theorists argue that both our ontology and our language are fundamentally tensed, and thus not all times exist equally, either denying the reality of the future or restricting reality to the present. B-theorists, by contrast, maintain that all times exist equally (a position called eternalism) and offer a tenseless account of language. These theories combine an ontological view of the nature of time with a semantic account of tensed language. In *Time, Language, and Ontology* Joshua Mozerky presents and defends a B-theory of time by arguing that eternalism is more plausible than its rivals, while developing a tenseless semantics that is compatible with the need for tensed language.

Chapters 2 and 3 constitute a defense of eternalism. The argument is largely negative; eternalism is shown to be the best view of time by the failure of its rivals to account for three *desiderata* that any theory of time must accommodate: (a) there are true propositions about the past and future, and our views about which such propositions are true and false should be preserved; (b) true propositions have truthmakers, and these should not be made obscure or mysterious; and (c) propositions about various times are bound by truth-value links. The truth-value links are semantic principles that relate propositions that differ only in tense, for example, 'Socrates is sitting' entails 'it was the case that Socrates will sit' and 'it will be the case that Socrates sat'. The empty future and branching future models (chapter 2) take the past and present to be real while the future is either empty or consists in multiple possible 'branches' one of which will be actualized, respectively. Both models fail to accommodate instances of the truth-value links about their own theories. That is, because future times either don't exist (empty futurist) or only exist as abstract ersatz or concrete branches that suffer branch 'attrition' (branching futurist) the truthmakers necessary to ground the truth of sentences like 'the universe will be larger than it is now' don't exist *now*. Therefore, the ontological commitments of these models are not coherently expressible by the models themselves, unless they resort to positing unfamiliar and implausible truthmakers. Presentism (chapter 3), the view that only the present is real, is similarly unable to ground truths about the past and future without recourse to implausible metaphysical principles. Finally, Mozerky considers the hybrid 'moving spotlight' theory (chapter 3) which takes all times to be real but one is singled out as the present as if by a spotlight. But then a time *t* is not always present so *t* is both absolutely present and absolutely non-present; to avoid the contradiction presentness must be taken as a primitive. Eternalism faces none of these problems, and is therefore superior. It should be noted that Mozerky takes the three *desiderata* to be highly plausible, however, the appeal to truthmakers in (b) is a highly contentious assumption (see, for example, Merricks (2007), and the papers in Beebe and Dodd (2005)).

Chapter 4 defends a tenseless account of language using the temporally invariant B-relations of 'is earlier than', 'is later than', and 'is simultaneous with' to provide tenseless truth conditions for tensed sentences. Mozerky revives Smart's 'date

theory' where an utterance in 2015 by a person P of (i) 'it is now 2015' has as a truth condition (ii) When P says in 2015 'it is now 2015' her utterance is true iff 2015 is simultaneous with 2015, which is tenseless. But 'it is now 2015' and '2015 is at 2015', despite expressing the same proposition, differ in cognitive significance, since something being 'now' can cause us to act in a way that a tautology can't. There is something about our experience of the present that the B-theory seems unable to capture. This is the subject of chapter 5. The cognitive difference between the two propositions is explained not by them having different semantic *content*, but by the *character* of the indexical 'now'. Our experience of time requires that we learn to use temporal indexicals in response to causal interactions with the world, but the content of what we learn is tenseless. 'Presentness' is a phenomenological feature of our experience, not a property of the world.

Having defended the ontological and semantic components of the B-theory, chapter 6 develops a relational account of temporal predication to show that the B-theory can account for genuine change ('the problem of temporary intrinsics'). Intrinsic properties expressed by apparently monadic predicates are in fact relations between objects and times, 'x is F at t', 'x is G at t', etc. Mozersky argues that this account is preferable to temporal parts theory, which retains the monadic character of temporal predications by positing different temporal parts instantiating different properties, because, first, 'x is F at t' just *appears* to be a relation. Furthermore, the intuitive strangeness of predications like 'Justice is green' can be explained because justice, as an abstract entity, is outside time, and therefore cannot stand in relations to times, whereas temporal parts theory must appeal to a further metaphysical principle to explain this (although a methodological concern here is that the plausibility of the relational account is motivated in large part by an implicit appeal to a substantive metaphysical view of abstracta).

In chapter 7 the B-theory is combined with endurantism (or three-dimensionalism) about object persistence. Mozersky uses the relational account of temporal predication to explain how objects persist through time without recourse to the traditional and obscure notion of being 'wholly present' at any time at which they exist. Rather, Mozersky's deflationary account takes it that for an object to be present at a time is just for that object to be related to that time, 'x is F at t', but it is *objects*, not parts of them, that are one of the *relata*; no appeal to 'whole presence' is needed. This is one of the major contributions of Mozersky's book; it opens up a conceptual space for a position that has hitherto been underappreciated. Most B-theorists adopt perdurantism (or four-dimensionalism) but there is a plausible and simple endurance theory available, so positing unfamiliar entities like temporal parts is unnecessary (although one may have the nagging suspicion that the 3D/4D debate is a mere terminological dispute amounting to the difference between synchronic and diachronic identity). Chapter 8 contains Mozersky's second major contribution, namely that the B-theorist need not reject temporal passage because the B-theoretic ordering of events by the semantically basic B-relations 'is earlier than', etc. suffice: first one thing happens, then another, and *this* is temporal passage; neither an objective A-series nor troublesome notions of temporal 'motion' are required.

While one may be left wanting more developed endurantist solutions to the paradoxes of composition and coincidence given in chapter 7, and a discussion of the B-theory and the free will/determinism debate (which is relegated to a single footnote), the *view from nowhen* (Mozersky's phrase) defended in the book is sophisticated, rigorous, and compelling. *Time, Language, and Ontology* will be of interest to both specialists and graduate students, and will serve nicely as an introduction to the debates between A- and B-theorists.

## References

Beebe, Helen, and Julian Dodd (eds.)

2005 *Truthmakers: The Contemporary Debate*. Oxford: Oxford University Press.

Merricks, Trenton

2007 *Truth and Ontology*. Oxford: Oxford University Press.

TIM JUVSHIK *McGill University*