The Images of Time. An Essay on Temporal Representation. By ROBIN LE POIDEVIN. Oxford U.P. 2007. £,27.50 (hbk), pp. 193. WE experience time in different ways, and we construct different kinds of representation of time. What kinds of representation are there and how do they work? In particular, how do we integrate temporal features of the world into our understanding of the mechanisms underlying representations in the media of perception, memory, art, and narrative? Le Poidevin's well-written and carefully argued book is an exploration of these questions. Although interesting in its own right, Le Poidevin pursues this question as a means of exploring another pressing issue, namely the metaphysics of time. The central posit of the book is that we can learn a lot about time from ordinary representations of time, and accordingly the book is an exploration of what representations of time can tell us about the metaphysical structure of time itself. This viewpoint is justified by the adoption of a causal theory of representation, the claim that representations are causally linked to what they represent, and that this is what determines both their content and their epistemic status. The central metaphysical concern of the book is the reality of the passage of time. Does time in reality pass, and can events therefore be

located in the past, present, or future, or does time not pass and nothing in reality changes its position in time? In McTaggart's terms, this is the distinction between the *A-theory* and the *B-theory* of time.

The first kind representation that Le Poidevin discusses is episodic memory: memory which arises from perceptual experience of an event. A careful and detailed analysis of the memory of an experience of an event leads him to the conclusion that what would seem to be the natural metaphysical account of what memory represents, the A-theory, does not sit well with a causal theory of representation, and that only the B-theory can satisfactorily account for the epistemology of episodic memory. At first this seems to be a surprising conclusion. We seem to be constantly aware of the passage of time, and perceptual experiences seem to be tied to the notion of a 'now'; therefore a theory that denies the passage of time appears to be rather implausible. Le Poidevin argues that this impression is mistaken and that a careful analysis of our perception of change shows that presentness and the passage of time are human projections onto the world rather than something that the world forces upon us, and embeds this insight into a wider view about the perception of precedence and duration. This view, which is based on a refinement of the causal view of representation, is designed to strike a subtle balance between 'Augustinian' subjectivism on the one hand, which Le Poidevin rejects, and blunt objectivism on the other hand. The upshot of this view is a qualified answer to the old Aristotelian enigma of whether there was no time if there was no soul: if we are talking about A-theory position, yes; if order and duration are concerned, then no.

After this discussion of memory and perception, Le Poidevin turns to representation in art. First in line is pictorial representation, in particular Lessing's claim that painting is an 'art of space' and as such incapable of directly representing change. An in-depth discussion of Gombrich's criticism of Lessing eventually leads Le Poidevin to the conclu-

sion that what lies at the heart of Lessing's claim is a mistaken theory of pictorial representation (namely the view that pictures only represent what they depict), and once this view is given up there is no reason to believe that pictures cannot represent change. Next comes a discussion of fictional narratives, and with it a return to the issue of the two competing theories of time. Many stories involve statements about what will happen within the fiction, but is there really such a thing as a fictional future? A consideration of different theories of truth in fiction, in particular possible world accounts and pretence theories, lead Le Poidevin to the conclusion that the only tenable option is to treat fictions as tenseless, which, again, is an argument in favour of the B-theory.

In sum, this is an original and exciting in-depth exploration of a topic that has not hitherto received systematic study, namely the connections between the metaphysics of time and issues in the philosophy of mind and aesthetics. Needless to say, a short review cannot convey the force of the arguments in this book, and many interesting points have to go unmentioned. I can only encourage readers to find out for themselves what it has to offer. There is one aspect of the book, however, which raises further questions. Although the conclusion of the book highlights the importance of physics to the analytical philosophy of time, physics, and science more generally, is absent from the discussion. But time plays a crucial role in virtually every scientific discipline, and scientists produce countless representations of time and change. These can take many different forms. Some, like graphs and diagrams, or in recent days even movies, are visual, while others, in particular mathematical representations, are abstract. How do these representations work and what do they tell us about the nature of time? How do they compare to representations of time in art? And are the lessons to be learned about the nature of time the same, or is the conception of time suggested by scientific representations fundamentally different from

the insights gained from studying artistic and mental representations? Recent work in art history has moved to efface the timehonoured distinction between artistic and scientific representations, seeing visual representations of both kinds as belonging to what James Elkins-a leading theorist in this field—has called 'the domain of images'. If this is a step in the right direction, then this suggests that scientific and artistic representations, at least in the domain of the visual. favour the same metaphysical view of time. But what about abstract scientific representations? There is no obvious analogy to be drawn between these on the one hand and artistic and mental representation on the other since the underlying representational mechanisms seem to be entirely different. Nevertheless, one could explore the question of whether or not the conclusions reached actually pull in the same direction. And indeed they seem to. Many physicists, most notably Einstein himself, thought that there was no place for a moving 'now' in modern physics, and it is one of the wellknown consequences of the Special Theory of Relativity that it seems to undercut the distinction between past, present, and future because it makes them relative to a frame of reference. Prima facie, this does not sit well with the A-theory, and it seems to be grist to the mill of those who favour the B-theory.

I hope that these brief remarks will motivate the claim that future investigations into the nature of time might benefit from bringing together the study of mental and artistic representation as pursued in this book, and the study of scientific representations as carried out by art historians and philosophers of physics. This said, this book has much to recommend it and Le Poidevin's enthusiasm for exploring the implications of perception, memory, fiction, and pictorial representation for a philosophy of time is definitely contagious.

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