

*The Images of Time*. By ROBIN LE POIDEVIN.

Can we learn anything about the metaphysical nature of time from considering our mental representation of it? Le Poidevin sets out to show that we can. The book falls into three parts. Part I: Aspects of Time and Representation begins with a useful introductory chapter summarising the argument of the book. Chapter 2 clarifies how Le Poidevin understands the notion of representation and the importance of truth and causation in an account of it. He introduces and defends what he calls the *Causal Truth-Maker Principle* (CTMP), namely that perceptual beliefs that qualify for the title 'knowledge' are caused by their truth-makers. For any perceptual belief that counts as knowledge, there is some causally active aspect of the world that makes the belief true. This is central to much of the argument throughout the book and sets up the specific problem for the philosophy of time, for, according to Le Poidevin, certain accounts of the truth-makers of our perceptual beliefs about time appear not to satisfy CTMP. Le Poidevin's project is to find an account of truth-makers for perceptual beliefs that does satisfy CTMP, since this is a virtue insofar as CTMP is independently attractive. In chapter 3, Le Poidevin distinguishes egocentric from objective forms of representation. Egocentric representations are perspectival, whereas objective representations are from no perspective. This reflects the metaphysical debate between A- and B-theories of time, where the B-theory takes the difference between past, present and future to be entirely perspectival and mind-dependent, whereas the A-theory does not.

Part II: Memory and Perception consists of three chapters. The central question of chapter 4 is whether the link between our episodic memory and the past tells us anything about the nature of time. Le Poidevin argues for what he calls the *Inherited Ground and Content Principle*, namely that the content and well-groundedness of an episodic memory is determined by the original experience. This implies the *Truth-Maker Connection*: the truth-maker of the memory is necessarily connected to that of the original experience. Le Poidevin takes these principles to motivate the B-theory of time. For this theory allows that my episodic memory that *I fell out of a punt* is made true (at least in part)

by the same thing that made true and caused the original experiential belief that *I am falling out of a punt*, namely the event of my falling out of a punt. This account meets required logical and epistemic standards: it explains the transtemporal entailments that hold between, e.g., the present truth that *It was that p* and the past truth that *It's now that p*; and it shows how memory can be a source of knowledge of the past. Le Poidevin argues that the A-theory of time has trouble satisfying these standards. According to it, facts change from time to time. What makes true the perceptual belief that *I am falling out of a punt* is not the very same thing that makes true the memory belief that *I fell out of a punt*. For what makes true the present memory belief must be something present and, since the original event is past, it is not available to act as a truthmaker for anything. (Le Poidevin claims that this argument is independent of which version of the A-theory is adopted but, so far as I can see, this argument challenges only those versions of the A-theory that deny the existence of past events, such as presentism.) As well as there being no obvious explanation for transtemporal entailments on this view, the most serious consequence that Le Poidevin draws is that whatever present truth-maker is proposed for a memory belief, it cannot be taken to be the cause of the original experiential belief. The link between the truth-maker of the memory and the original experience seems to have been broken; the content of the memory belief is not determined by the original experience and the memory belief looks to be ungrounded.

Le Poidevin's use of CTMP adds a novel epistemic dimension to the more straightforward truth-maker problem for presentism. However, it seems to me that presentists can respond to this apparent tension with CTMP. What the presentist offers is a different story about truth-makers for past-tensed truths. It cannot be an objection to presentism that it does this: it's part and parcel of the view and is the basis for the difference between it and the B-theory. That past events are the truth-makers for past-tensed truths about them is precisely what presentism denies, so it would beg the question against presentism to insist that this condition is met. If CTMP required this for our memory beliefs, it would be open for presentists simply to reject it. But it doesn't. CTMP applies only

to perceptual beliefs. (If CTMP were meant as a general principle, then this would have to be argued for. It isn't obvious, for instance, how it would accommodate our knowledge of general truths or of the future, and whether that story would sound as compelling for these cases as it does for perceptual beliefs.) Since Le Poidevin does not think episodic memory beliefs are perceptual beliefs, CTMP does not apply to memory beliefs. Presentists, then, can happily accept CTMP, since perceptual beliefs are present-tensed. So, nothing requires the truth-makers for memory beliefs to be a cause of those beliefs. Nor does anything require, if we are not to beg the question against presentism, that the truth-makers for past-tensed truths (memory beliefs) be the same as the truth-makers for present-tensed truths (experiential beliefs), let alone be the cause of those experiential beliefs. Given this, what is left for presentism to show is how to link the original experiential belief to the current memory belief, something that, schematically at least, looks relatively straightforward. For the event of falling out of a punt makes true and causes the experiential belief that I am falling out of a punt. What makes true the later memory belief that I fell out of a punt is the fact that I fell out. (Whatever that amounts to can be left open for these purposes, so long as there is an account that can explain transtemporal entailment, which I think there is.) And, ignoring the fact that causation is a much more complex affair, the link between the experiential and memory beliefs can be secured by the fact that had the experiential belief never existed, the current memory belief wouldn't have either, which is the very same thing the B-theory would have to say. Thus, in any important sense in which memory beliefs require a grounding in experiential beliefs, presentism can accommodate it.

In chapter 5, Le Poidevin turns his attention from memory to perception. How can we explain the fact that what we perceive, we perceive as present? And what explains our perception of succession? The A-theory seems to have an explanation built into its metaphysics, but whether or not it does, Le Poidevin gives an account of why we perceive events as present that does not require those events to be present in the A-theorist's sense, and of how we are able to perceive succession,

even though time itself does not flow. Le Poidevin draws on causal and psychological mechanisms, together with certain contingent physical facts, to give a plausible account. Again, both A- and B-theorists can learn much from this discussion. Le Poidevin, however, whilst acknowledging that his account is available to the A-theory argues further that it makes the A-theory *de trop*. This is not warranted. Even if it is not the metaphysics of the A-theory (which I don't think it is) but Le Poidevin's account that explains these features of perception, that doesn't count against the A-theory unless the only reason for adopting the A-theory is to account for these features of perception. Since there are other reasons for adopting the A-theory, Le Poidevin's account favours neither A- nor B-theories. Indeed, if Le Poidevin's account is compatible with presentism, then, insofar as we are interested in an account of perception, it isn't obvious why it should not be just as much the B-theory's superfluous commitment to the existence of the past and future that is called into question.

Chapter 6 extends the discussion of perception to include precedence and duration. If we perceive them, then how can this be reconciled with CTMP, given that, for them to be causes of the beliefs they make true, they must be locatable at specific instants, which they evidently are not. One way to resolve the apparent difficulty is to hold that precedence and duration are mind-dependent, something that Le Poidevin discusses in detail and rejects. His solution is to revise CTMP and include not just causal explanation but what he calls 'chronometric' explanation: explanation in terms of the temporal structure of events (analogous to Graham Nerlich's endorsement of geometrical explanation as a genuine non-causal form of explanation concerning motion through space). This transforms CTMP to the *Explanatory Truth-Maker Principle* (ETMP): Perceptual beliefs that qualify for the title 'knowledge' have truth-makers that figure in a full explanation of the acquisition of those beliefs. Le Poidevin argues that this revision of CTMP does not undermine his previous arguments against the A-theory, but since I have argued that CTMP sits happily with the A-theory,

ETMP is equally acceptable to it. And just as well, because Le Poidevin's proposal for a distinctive chronometric form of explanation looks attractive and deserves further attention.

The final three chapters comprise Part III: Art and Fiction. Chapter 7 discusses whether and how static images are able to represent time, change and motion. It focuses on the claim that paintings cannot represent change but only instants of time and Gombrich's counter claim that thinking this rests on two mistakes, namely that change is a series of instantaneous states and that perception of change is a series of perceptions of instantaneous states. Le Poidevin shows, in a compelling way, how static images can represent and even depict change, whether or not these assumptions are involved. Chapters 8 and 9 concern the representation of time in fictional narratives, chapter 8 focussing on whether fictions can represent the tensed aspect of time, and chapter 9 on the extent to which they can represent time's topological structure. I shall not attempt to summarise the intricacies involved in the representation of metaphysics in fiction, only to say that Le Poidevin has made a good start on what promises to be a fruitful area of research.

The real strength of this book does not so much lie in its attempt to support the B-theory over the A-theory of time, since I am not convinced that the positive account of temporal representation put forward is something that the A-theory (properly formulated) cannot happily adopt, and so I do not think that the considerations of this book can be used to decide the issue between A- and B-theories. Rather, drawing from a broad range of philosophical areas, as well as from psychology, its value lies in its being a clear and engaging account of the nature of temporal representation, from which both A- and B-theorists can learn a great deal. Each part of this book has given me new ideas for future work, and I'd expect that anyone working in the area would find it equally rewarding.