

The Moving Spotlight

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In this paper we examine moving spotlight theories of time: theories according to which there are past and future events and an objective present moment. In Section 1, we briefly discuss the origins of the view. In Section 2, we describe the traditional moving spotlight view, which we understand as an ‘enriched’ B-theory of time, and raise some problems for that view. In the next two sections, we describe versions of the moving spotlight view that we think are better and which solve those problems. In Section 3, we describe a version of the view that combines *permanentism* – the thesis that all things always exist – with *propositional temporalism*, the thesis that some propositions are sometimes true and sometimes false. In Section 4, we discuss a version of the view that is like an ‘enriched’ presentism. We conclude with some brief thoughts on issues that remain outstanding.

1. Origins

The moving spotlight theory plausibly has its origins in the work of J. M. E. McTaggart (1866-1925), whose famous ‘argument for the unreality of time’ (McTaggart’s 1908, 1927) begins with the distinction between two ways of conceiving of the time series: as an ‘A-series’ in which all the events that ever occur are ordered as more or less past, present, and future; and as a ‘B-series’ in which events are ordered simply as before and after. (There has been a great deal of discussion both about exactly how to interpret McTaggart’s argument, and whether some version of it succeeds: see e.g. Cameron 2015, Deasy 2018, and Thomson 2001). McTaggart’s view of events as forming an ‘A-series’ closely resembles the sort of theory that later became known as the ‘moving spotlight theory’, according to which there are past and future events and an objective present moment. However, the name ‘moving

spotlight theory' for such theories must be credited to C. D. Broad (1887-1971), who writes that

We are naturally tempted to regard the history of the world as existing eternally in a certain order of events. Along this, and in a fixed direction, we imagine the characteristic of presentness as moving, somewhat like the spot of light from a policeman's bull's-eye traversing the fronts of the houses in a street. What is illuminated is the present, what has been illuminated is the past, and what has not yet been illuminated is the future (Broad 1923, 59).

On the view that Broad describes, the property of events of *being present* is like a moving spotlight cast along a row of houses: it is possessed by one event after another, along the (otherwise unchanging) temporal dimension of reality, such that the events that possess it are objectively present, the events that did possess it (such as Caesar's crossing the Rubicon) are objectively past, and the events that will possess it (such as the 2050 World Cup) are objectively future.

2. The Moving Spotlight Theory as an Enriched B-theory

The traditional version of the moving spotlight theory emerged in the latter half of the twentieth century in the context of debates between 'presentists' and 'eternalists', and was conceived as a sort of 'enriched' B-theory. The recipe for the view is as follows: first, begin with the B-theoretic or 'tenseless' view of time as defended by philosophers like Quine (1964) and Sider (2001), according to which there is a concrete spacetime manifold occupied by objects and events, and instants of time are *hypersurfaces*: maximal, three-dimensional regions of spacetime. On this view, objects persist over time by occupying a single temporally-extended region of spacetime, and have (instantaneous and extended) temporal parts which possess monadic properties such as *sitting* or *being red*.

Given the B-theory, a present utterance of the sentence ‘You are sitting’ expresses the proposition that you have a temporal part located at this time which is sitting. And that proposition is *eternal*, i.e. if it is true, it is always true. But if propositions about the possession of properties by objects are eternal, how do things change? For B-theorists, *de re* change (i.e. change in how particular things are) involves objects possessing certain patterns of instantiation of eternal properties. For example, Caesar changes with respect to crossing the Rubicon because some but not all his temporal parts eternally possess the property of *crossing the Rubicon*. *De dicto* change, on the other hand – i.e. change in purely qualitative matters – can be expressed on the B-theory in terms of variation across time, for example, in terms of eternal facts such as that there are dodos located at some but not all times. Finally, change in which time is present is handled by treating presentness as a relative property, so that e.g. for any given time t , an utterance at t of the sentence ‘ t is present’ expresses the (eternal) truth that t is present relative to t . For B-theorists, every time is present relative to itself, but no time is objectively present: presentness is always a merely relative matter.

If the B-theory is true then every truth is eternal, and therefore a complete description of reality will not include any *temporary* truths, i.e. propositions that are not always true and not always false. Some B-theorists express this characteristic of their view by saying that given the B-theory, it is possible to provide a complete ‘tenseless’ description of reality: a description of reality in a language that is entirely free of linguistic tense and nevertheless leaves nothing out. This ‘tenseless’ description would tell us, among other things, which objects and events (eternally) exist; what their (eternal) location is in four-dimensional spacetime; and what (eternal) properties they instantiate. And it would not privilege any particular temporal perspective on reality: all times and events, and all temporal perspectives, would be on a par.

Of course, B-theorists do not deny that from our current perspective, we can use the sentence ‘Caesar crossed the Rubicon in the past’ to express a truth. But for the B-theorist, this is just to say that Caesar’s crossing the Rubicon is (eternally) before this time, and that is just to say that a certain spatiotemporal relation (eternally) holds between that event and this time. The pastness of Caesar’s crossing the Rubicon, and indeed the ‘beforeness’ of that event compared to this time, are merely artefacts of our temporal perspective on reality. According to the B-theory, it is part of your current perspective on reality that your reading this chapter is present, and it is part of Caesar’s perspective on reality as he crosses the Rubicon that his crossing the Rubicon is present. But there is nothing special about either perspective: neither is correct to the exclusion of the other. They are just different ways of looking at the same facts, in the way that if we were on opposite sides of a room looking at a table in the center, we might truly say from our perspective that the vase is to the left of the fruit bowl, whereas you might truly say from your perspective that the vase is to the right of the fruit bowl. Neither claim is right or wrong, they are just different ways of looking at the same facts: facts that don’t involve leftness or rightness, which are features of perspectives on reality, and not of reality itself. If the B-theory is true, being past, present, and future are like being on the left or right: reality doesn’t furnish us with such facts, our perspective on reality does, and there is no ultimately right or wrong perspective.

The traditional version of the moving spotlight theory takes the B-theory as described above, and supplements it with an additional fundamental property of monadic *presentness*.¹ This property may be possessed by a time (i.e. hypersurface), so that objects and events are present by being located in a region that overlaps that time; or it may be that some time is present by virtue of containing objects that possess fundamental presentness. The key point is that unlike B-theorists, traditional moving spotlightists hold that whether something is

¹ By ‘monadic presentness’ we mean presentness *full stop*, i.e. presentness not relative to anything.

present is *not* a merely relative matter, but an objective matter settled by the distribution of the property of fundamental presentness.

For example, given that we are objectively present and Caesar is not, we are simply right that we are present, and Caesar is simply wrong that he is present. Of course, a defender of the traditional moving spotlight theory can agree with B-theorists that *from Caesar's perspective*, he is present and we are not, and *from our perspective*, we are present and he is not. But they will also add that our perspective is objectively correct: we, and not Caesar, are seeing reality the way it really is. This is analogous to thinking that there is an objective spatial orientation to reality which places some things objectively to the left of others: from your perspective the vase is to the right of the fruit bowl, and from our perspective the vase is to the left of the fruit bowl, but our perspective is *right* (let us suppose): the vase *really* is, as a result of the objective spatial orientation facts, to the left of the fruit bowl.

Since according to the B-theory whether something is present is a merely relative matter, given the B-theory, all facts about presentness are eternal. But that can't be the case if there is a fundamental monadic property of presentness, since then it would be the case that this time is *always* objectively present. In short, traditional moving spotlightists need a way to ensure that the 'spotlight' of presentness 'moves'. They do this by accepting 'fundamental tense', i.e. that expressions like 'It was the case that' express temporary (i.e. changing) fundamental properties. For example, suppose that this time possesses fundamental presentness. According to traditional moving spotlightists, the proposition that this time possesses fundamental presentness has the temporary fundamental property of *having been false*: a property it has, but once lacked. Hence, traditional moving spotlight theorists reject the B-theoretic view that every proposition is eternal: some propositions about fundamental presentness, such as that this time is present, are true but not always true.

However, they don't reject the B-theoretic view in its entirety: according to the traditional moving spotlight theory, sentences such as 'Caesar crossed the Rubicon in the past' and 'There used to be dodos' do not express claims about fundamental presentness, and therefore express the eternal facts which B-theorists take them to express (see Sider 2011: 260). Only facts such as that a certain time possesses fundamental presentness, and facts about what is present which depend on such facts, are taken to be genuinely temporary. In other words, according to the traditional moving spotlight theory, the B-theorist's 'tenseless' description of reality is not so much false as *incomplete*: it needs to be supplemented with the relevant 'tensed' (i.e. temporary) facts about fundamental presentness.

There are many objections one could raise against the traditional moving spotlight theory: here are two. (We do not address the objection that the view is vulnerable to McTaggart's argument against the A-series, as we think it is obvious that it isn't.) The first is that the view seems unmotivated from both an A-theoretic *and* a B-theoretic perspective. It seems unmotivated from an A-theoretic perspective because, as we saw above, it involves agreeing with the B-theory that e.g. a present utterance of the sentence 'Caesar crossed the Rubicon in the past' expresses the eternal fact that there is a temporal part of Caesar located at a time before this time which is crossing the Rubicon, and a present utterance of the sentence 'There used to be dodos' expresses the eternal fact that there are dodos located at a time before this time. But for A-theorists, for whom change essentially involves *temporary* truths, this implies that ordinary objects like Caesar do not really change, but merely vary across time. And from a B-theoretic perspective, the addition of the property of fundamental presentness (along with fundamental properties of propositions like *having been true*) to an otherwise simple and elegant theory seems wholly unmotivated: why complicate things when we can make do with merely relative presentness?

The second objection to the traditional moving spotlight theory is the ‘epistemic’ objection that it entails that we do not know we are present. There are a number of different ways of framing this objection, depending on how one conceives of what is required for knowledge (see e.g. Cameron 2015, Deasy & Tallant 2020, and Russell 2017). For example, suppose that in order to know we are present, it must be that we couldn’t easily have falsely believed we are present (i.e. that knowledge requires *safe belief*: see e.g. Sosa 1999). But if the traditional moving spotlight theory is true, we *could* easily have falsely believed we are present, since on that view, it could easily have been that some other time is present (after all, many other times were present), in which case, we would have falsely believed we are present. So, given the traditional moving spotlight theory, we cannot know we are present. But of course, we *do* know we are present, so (the objection goes) the traditional moving spotlight theory must be false.

We think that moving spotlight theorists can resist these objections, but only by thinking differently about the moving spotlight theory. In the next couple of sections, we describe two recent (and, we think, improved) versions of the view.

3. The Moving Spotlight Theory as Permanentist Temporalism

Some philosophers of time begin with two primary commitments: first, to what Williamson (2013) calls ‘permanentism’, and second, to ‘propositional temporalism’ (see Richard 1981). In this section, we begin by briefly describing these views and some of the reasons they are accepted. Then we describe how a version of the moving spotlight theory distinct from the traditional version of the view can be built around them.

Permanentism is the view that (always) everything exists eternally. For example, it is a consequence of permanentism that since it *was* the case that there are dodos, *there is* something that *was* a dodo. However, permanentism is silent on the question of whether

anything that *was* a dodo *is* a dodo. (Permanentism implies that anything that did or will exist exists, but not that everything that did or will exist is still exactly the way it was or will be.) Philosophers who accept permanentism typically do so for one of at least two reasons: either because they accept Williamson's (2013) abductive argument for *necessitism* (the view that necessarily, everything exists of necessity) and the principle *perpetuity* that what is necessarily the case is always the case (see Dorr & Goodman 2020); or, because they accept the 'eternalist' view that 'the past and future are real', and take permanentism to be a natural consequence of that view.

Propositional temporalism is the view that some propositions are sometimes true and sometimes false, or in other words, that there are temporary propositions (see e.g. Brogaard 2012). For example, taken at face-value, the fact that you were standing and are now sitting implies propositional temporalism, since it implies that the fact that you are sitting used to be false. To some philosophers (such as the authors of this article), propositional temporalism seems obviously true: they hold that if there is no change in what is true *simpliciter*, there is no change at all (see Prior 2003 [1968]). However, some philosophers like Frege (1917, 1979) and Russell (1915) reject propositional temporalism in favour of *propositional eternalism*, the view that every proposition is, if true, eternally true. What about the fact that I was sitting and am now standing? Typically, a propositional eternalist (such as a B-theorist) will respond that the relevant fact is the eternal fact that I am sitting at a certain time t (where t is before this time) and standing at this time, even if we tend to express this fact in natural languages such as English without explicitly mentioning times (see Quine 1964).

Most philosophers who accept both permanentism and propositional temporalism also accept the Lewisian (1994) view that everything supervenes on the fundamental, in the sense that every fact is entailed by the fundamental facts about what there is and how things are. But if everything supervenes on the fundamental, then given temporalism and perpetuity,

there must be at least one temporary fundamental property. Therefore, such philosophers face an important question: exactly *which* fundamental properties are temporary?

There are two fairly natural answers to this question in the context of permanentist propositional temporalism: either that some of the fundamental physical properties (e.g. mass and charge) are temporary, or that there is a unique temporary fundamental property distinct from the fundamental physical properties. Call this latter thesis *spotlight*. Natural temporal analogues of theories of modality defended by Williamson (2013) and Dorr (Unpublished MS) seem to constitute theories of the former kind: for example, on a natural temporal analogue of Williamson's theory, I always exist, but I am only temporarily *concrete*, and therefore only temporarily have mass. (Bacon 2018, on the other hand, defends a theory of time that combines permanentist propositional temporalism with the supervenience of everything on the fundamental, but on which perpetuity is false and all fundamental properties are eternal.) It is theories that combine permanentist propositional temporalism with spotlight, however, that most closely resemble the traditional moving spotlight theory described in the previous section. From the rest of this section, we will use 'MST' to refer to such theories, on the understanding that this is not intended as a definition of the name 'moving spotlight theory'.

It is natural for MSTists to identify the unique temporary fundamental property with the property of times of *being present*, as traditional moving spotlightists do. For instance, according to Deasy's (2022) version of MST, there is exactly one temporary fundamental property ('fundamental presentness'), and it is a monadic property of spacetime points. Deasy then defines 'the present time' as the set of all and only the things that possess fundamental presentness (which is assumed to form a hypersurface), and 'non-present time' as a set of spacetime points forming a hypersurface h parallel to the present time. That is one – but not

the only – way to answer an immediate question facing MSTists, namely, that of what exactly possesses the unique temporary fundamental property.

Another question facing MSTists is whether ordinary predicates like ‘is sitting’ and ‘is standing’ express eternal or temporary properties. As we saw in the previous section, traditional moving spotlightists – despite their apparent commitment to propositional temporalism – agree with B-theorists that such predicates express eternal properties. However, given a commitment to there being at least one temporary fundamental property, it would be strange to say the least for MSTists to think that ordinary thought and speech about e.g. sitting and standing expresses eternal truths. Why think that only facts such as that this time is present genuinely change? After all, this is exactly what generates the objection to the traditional moving spotlight that it is unmotivated from an A-theoretic perspective. The question is how to secure the desirable result that ordinary thought and speech about e.g. sitting and standing expresses temporary truths in the context of spotlight.

One way (but not the only way) to do it is to argue that given spotlight, ordinary predicates like ‘is sitting’ and ‘is standing’ express the properties of bearing the eternal *sitting-at* and *standing-at* relations to the (temporarily) present time respectively, so that the sentence ‘You are sitting’, for example, expresses the proposition that you are sitting-at a present time (see Deasy 2015, 2022). And given that which time is present changes (since fundamental presentness is a temporary property), and you do not bear the sitting-at relation to *every* time, it follows that that proposition is after all temporary. More generally, on this version of MST, changes in the distribution of fundamental presentness entail all sorts of other changes: for example, if to be *concrete* is to be *concrete-at a present time*, it follows that although Caesar was concrete, he is no longer (despite occupying multiple spacetime regions). This also provides MSTists with a response to the epistemic objection (see Deasy 2015): if to *believe that p* is to *believe that p-at a present time*, then the property of *believing*

that one is present is a temporary property; and if it is, then we couldn't easily have believed falsely that we are present, because in the relevantly 'close' possible situations in which we are not present, we do not believe we are present.

A final question for MSTists is whether they have to accept that tense operators like 'It was the case that' express fundamental properties, as on the traditional moving spotlight theory, or whether they can provide a reductive analysis of such properties (note that if they can't, then spotlight can't be true in all generality). In short, do MSTists need to accept 'fundamental tense' in order to secure change in which time is present? Deasy (2015, 2022) argues that they do not. For instance, Deasy (2022) defends a view inspired by Parsons (2002) which combines MST as described above with a 'modal analysis' of expressions like 'It was the case that' and 'It will be the case'.² To focus on the former expression, Deasy argues that what *was* the case is what is necessitated by the combination of some eternal fact with the proposition that some (objectively) past time is (objectively) present, so that 'It was the case that p ' is equivalent to 'There is a time t earlier than the present time, such that p is necessitated by some eternal fact and the proposition that t is the present time'. For example, on this analysis, the fact that there *were* dodos is equivalent to the fact that there is an eternal truth – such as that there are dodos located at a time t – which when combined with the proposition that a certain time t^* (which is in fact past) is present, necessitates that there *are* dodos.

Given the analysis of the tense operators defended by Deasy (2022), MSTists can maintain that all temporary truths – including all truths about what *was* and *will be* the case – supervene on the eternal fundamental truths plus some temporary fundamental truth about the distribution of fundamental presentness. But is e.g. the fact that this time is present *really*

² The 'modal analysis' is so called because it involves analysing tense in terms of necessitation, i.e. metaphysically necessary implication.

temporary on this sort of view? According to Deasy, it is, since given the ‘modal analysis’, the fact that there is a time earlier than the present time entails that the fact that this time is present is sometimes false. And what else could reasonably be required for this time to be temporary than that propositions such as that this time is present are sometimes false? But some philosophers argue that more (or something else) is required for there to be genuine change in which time is present (see e.g. Fine 2005 and Cameron 2015, Ch.2).

4. The Moving Spotlight Theory as Enriched Presentism

Cameron (2015) argues that instead of thinking of the moving spotlight theory as an enriched B-theory (as in Section 2), we should think of it as an enriched *presentism* (see e.g. Prior 1967). The presentist eschews past and future times like 49BCE or 2034CE (at least, *qua* hyperplanes), and past and future entities like Caesar or the founder of the first lunar colony, and past and future states of affairs like Caesar’s crossing the Rubicon and the opening of the first lunar colony. Reality, for the presentist, consists entirely of present goings on: all that there is, *simpliciter*, is what there is *now*, and the only ways things are, *simpliciter*, is the way things are now. But of course, how things are changes: the presentist’s view of reality is of things constantly changing, including coming into and going out of existence: reality always consists entirely of a moment of time, here for an instant and then gone, replaced by a new instant. Presentism upholds propositional temporalism, of course, since there are very many propositions that are true sometimes but not always (such as that Caesar is crossing the Rubicon, or that you are reading this sentence), but (on its most natural reading, at least) it denies permanentism, for Caesar existed but no longer does, and the first lunar colony will exist but does not yet.

Presentism’s rejection of past and future entities leads to three familiar problems. First, we seem to be able to have *de re* thoughts about such things. We can believe, for

example, that Caesar – *that very person* – was a great leader, in which case, don't we need Caesar to exist to be the subject of that thought: to be the thing that is thought *about*? Second, we seem to be able to stand in relations to such things. Our love for our relatives, for example, appears to survive their death: in which case, don't we need those now sadly merely past entities to exist as the relata of our love? Third, those attracted to the view that truths require truthmakers might see the need for the existence of past and future objects to make true the true claims about what did and will happen (see Crisp 2007).

Motivated by such concerns, Cameron's moving spotlight view agrees with the presentist that the only way any things are, *simpliciter*, is the way things are now, but argues that among the way things are now is that Caesar is a certain way, and that the first lunar colony is a certain way, etc. This is not to say that Caesar and the first lunar colony are *present* entities after all: they are not, on Cameron's view, for they are located entirely in the past and future respectively. Rather, it is to say that mere past and mere future objects are nevertheless *now* some way, just as present entities are. So, instead of starting from the B-theoretic metaphysic and enriching it with an extra feature – objective presentness – Cameron's moving spotlight view starts from the presentist metaphysic and enriches it by including in the stock of things that are now some way or other entities that exist entirely in the past and future. On this view, real change permeates reality: it is not merely whether things are present that changes, but the ordinary features of things, for while it *was* the case that Caesar is 5'7'', this is the case no longer. Caesar is now some way – for every object that did, does, or will exist is now some way – but he is not 5'7''; and this is not to say merely that he is not 5'7'' *now* – how things are *now* is just how they are *simpliciter*, on Cameron's view, so Caesar is not 5'7'', end of story.

On Cameron's moving spotlight view, past and future objects are around to be thought about, to be loved (etc.), and to serve as truthmakers for claims about what did and

will happen. They can accomplish this last task because while it is true that the only way any object (past, present, or future) is is the way it is now, the way objects are now is rich enough that their present nature settles facts about their history and their future. The details needn't concern us here (see Cameron 2015, Ch.4), but an analogy might help. Just as a determinist about the laws of nature thinks that we can look at the present state of the world and the laws of nature and from this wind the clock backward or forward to work out how the world was or will be at any past or future time, so on Cameron's view, we can look at how any object is now and from that fact alone wind the clock backward or forward to work out how that object was or will be at any past or future time. Thus, objects can serve as truthmakers for historical or future truths: Caesar is not crossing the Rubicon, but how Caesar is *now* settles that he *did* cross the Rubicon.

While the advantage in having merely past things to make true historical truths might seem clear, a growing block theorist (such as Diekemper 2005) might object that it is a disadvantage to have merely future things, since contingent claims about the future are *open*: not yet true or false, but to be determined as the future unfolds. But Cameron (2015, Ch.5) argues (building on the work of Barnes and Cameron 2009) that the openness of the future is compatible with the existence of future entities that are now some way. If the future is open, on this view, it is because it is metaphysically unsettled just exactly how things are now. While the way things are now is rich enough to settle how they were and will be, the way they are now might not be fully *metaphysically* settled³, resulting in an unsettledness in how those things will be – an unsettledness that becomes more and more settled as time progresses and fewer and fewer facts remain open.

³ It is metaphysically unsettled whether p when it is not determinately true that p and not determinately true that not- p , and this is not a matter of imprecision in our language, or our ignorance of how things are, but it is a lack of determinacy in how reality is in and of itself. See, e.g., Barnes (2010).

Cameron's view obviously upholds propositional temporalism. What about permanentism? While an enriched B-theory version of the moving spotlight view is compatible with permanentism, Cameron rejects it, because of his adherence to the truthmaker principle. In fact, the truthmaker principle (or even the weaker principle that what is true supervenes on what exists), temporalism, and permanentism form an inconsistent triad: if everything always exists (permanentism), and what is true supervenes on what exists, then every truth is always true (contradicting temporalism). But Cameron's view upholds a weaker version of permanentism: every ordinary object that ever exists always exists, and it is only states of affairs involving those objects that exist sometimes but not always. Objects are eternal, but as those objects change, states of affairs involving those objects being some way come into and go out of existence. Obviously, one could have an enriched presentist version of the moving spotlight that upheld permanentism if one abandoned truthmaker theory and retreated to the weaker view (discussed in Section 3) that what is true supervenes both on what exists *and* how things fundamentally are.

While Caesar is now some way, he is not now – and therefore, on Cameron's view, is not in any sense whatsoever – crossing the Rubicon. Nor is he thinking 'I am crossing the Rubicon *now*', or indeed thinking anything at all. Caesar *had* various thoughts, and the way he is now settles that he previously had various thoughts, but his time as a thinking thing is over. And so on Cameron's moving spotlight view, just as with presentism, the only thinking things are present things, and so no-one ever falsely entertains the thought that they are present, and so our belief that we are present is 'epistemically safe'. Knowing that we are present is no harder, given the enriched presentism moving spotlight view, than it is given presentism (Cameron 2015, Ch.1).

5. The Future of the Moving Spotlight

In this entry, we have described the traditional version of the moving spotlight theory; some of the major objections to that view; and two recent versions of the view due to Cameron (2015) and Deasy (2015, 2022), which we think improve on the traditional view. Of course, there is a lot more to say. For one thing, there are objections we have not considered, such as that any theory which implies that not all regions of spacetime are metaphysically on a par is incompatible with contemporary physics (and that that is bad). Versions of permanentist propositional temporalism such as Bacon's (2018) are intended to avoid this objection (at the cost of rejecting spotlight and perpetuity), as might the temporal analogue of Dorr's (Unpublished MS) modal counterpart theory. And some B-theorists such as Leininger (2015) argue that even *with* 'fundamental tense' (which both Deasy and Cameron reject), there is no way to guarantee change in which time is objectively present. Moreover, there are contemporary versions of the moving spotlight theory motivated by concerns distinct from those that motivate Cameron's and Deasy's views. For example, Miller (2019) defends a version of the moving spotlight theory that is intended to best explain the nature of our temporal phenomenology, and Skow (2015) describes a number of versions of the view that are intended to capture the notion of 'robust passage'. But whatever else might be said of the moving spotlight theory, it is now rightly regarded as central to the philosophy of time.

Recommended Reading

Cameron, R. P. (2015). *The Moving Spotlight: An Essay on Time and Ontology* (Oxford: Oxford University Press) is a book-length defense of the moving spotlight theory as 'enriched presentism'. Deasy, D. (2015). The Moving Spotlight Theory (*Philosophical Studies* 172: 2073-89) defends a permanentist and 'tense reductionist' version of the theory. Miller, K. (2019). The Cresting Wave: A New Moving Spotlight Theory (*Canadian Journal of Philosophy* 49: 94-122) defends a version of the view on which presentness is identified with

causal efficacy. Sider, T. (2011). *Writing the Book of the World* (Oxford: Oxford University Press) discusses many fascinating metaphysical issues that are of relevance to the issues discussed here, and in Chapter 11 provides an excellent overview of the logical space of theories of time. Skow, B. (2015), *Objective Becoming* (Oxford: Oxford University Press) explores a variety of moving spotlight-like views and discusses their compatibility with physics.

Related Topics

Time and Tense; The Passage of Time; Presentism and Eternalism,; The Growing Block; Is the Future Open?.

References

- Bacon, A. (2016). Tense and Relativity. *Noûs* 52: 667-696.
- Barnes, E. (2010). Ontic Vagueness: A Guide for the Perplexed. *Noûs* 44(4): 607-627.
- Barnes, E. & R.P. Cameron (2019). The Open Future: Bivalence, Determinism, and Ontology. *Philosophical Studies* 146(2): 291-309.
- Broad, C. D. (1923). *Scientific Thought*. London: Routledge & Kegan Paul.
- ___. (1938). Ostensible Temporality. In C. D. Broad *An Examination of McTaggart's Philosophy Vol. II*. Cambridge: Cambridge University Press: 264-288.
- Brogaard, B. (2012). *Transient Truths*. Oxford: Oxford University Press.
- Cameron, R. P. (2015). *The Moving Spotlight: An Essay on Time and Ontology*. Oxford: Oxford University Press.
- Crisp, T. (2007). Presentism and the Grounding Objection. *Noûs* 41: 90-109.
- Deasy, D. (2015). The Moving Spotlight Theory. *Philosophical Studies* 172: 2073-89.

- _____. (2018). Philosophical Arguments against the A-theory. *Pacific Philosophical Quarterly* 99: 270-92.
- _____. (2022). The Modal Moving Spotlight Theory. *Mind* 131: 1195-1215.
- Deasy, D. & J. Tallant (2020). Hazardous Conditions Persist. *Erkenntnis* 87: 1635-58.
- Diekemper, J. (2005). Presentism and Ontological Symmetry. *Australasian Journal of Philosophy* 83(2): 223-240.
- Dorr, C. & J. Goodman (2020). Diamonds are Forever. *Noûs* 54: 632-65.
- Frege, G. (1879) *Begriffsschrift, eine der arithmetischen nachgebildete Formelsprache des reinen Denkens*, Halle an der Saale: Verlag von Louis Nebert. Translated as *Concept Script, a formal language of pure thought modelled upon that of arithmetic* by Bauer-Mengelberg, S. in J. van Heijenoort (ed.) (1967) *From Frege to Gödel: A Source Book in Mathematical Logic, 1879–1931*. Harvard, MA: Harvard University Press.
- Fine, K. (2005). Tense and Reality. In *Modality and Tense: Philosophical Papers*. Oxford: Oxford University Press: 261-320.
- Lewis, D. (1994). Humean Supervenience Debugged. *Mind* 103: 473-90.
- Leininger, L. (2015). Presentism and the Myth of Passage. *Australasian Journal of Philosophy* 93: 724-39.
- McTaggart, J. M. E. (1908). The Unreality of Time. *Mind* 17: 457-74.
- _____. (1927). *The Nature of Existence: Volume II*. Cambridge: Cambridge University Press.
- Miller, K. (2019). The Cresting Wave: A New Moving Spotlight Theory. *Canadian Journal of Philosophy* 49: 94-122.
- Parsons, J. (2002). A-theory for B-theorists. *The Philosophical Quarterly* 52: 1-20.
- Prior, A. (1967). *Past, Present, and Future*. Oxford: Oxford University Press.
- _____. (2003 [1968]). *Papers on Time and Tense: Second Edition*. Oxford: Oxford University Press.

- Quine, W. V. (1964). Time. In J. J. C. Smart (ed.) *Problems of Space and Time*. New York: MacMillan: 370-84.
- Richard, M. (1981). Temporalism and Eternalism. *Philosophical Studies* 39: 1-13.
- Russell, J. (2017). Temporary Safety Hazards. *Noûs* 51: 152-74.
- Sider, T. (2001). *Four-dimensionalism: An Ontology of Persistence and Time*. Oxford: Oxford University Press.
- _____. (2011). *Writing the Book of the World*. Oxford: Oxford University Press.
- Sosa, E. (1999). How to Defeat Opposition to Moore. *Philosophical Perspectives* 13: 137-49.
- Skow, B. (2015). *Objective Becoming*. Oxford: Oxford University Press.
- Thomson, J. J. (2001). McTaggart on Time. *Philosophical Perspectives* 15: 229-52.
- Williamson, T. (2013) *Modal Logic as Metaphysics*. Oxford: Oxford University Press.