The Moving Spotlight(s)

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Abstract. The moving spotlight account (MS) is a view that combines an eternalist ontology and an A-theoretic metaphysics. The intuition underlying MS is that the present time is somehow privileged and experientially vivid, as if it were illuminated by a moving spotlight. According to MS-theorists, a key reason to prefer MS to B-theoretic eternalism is that our experience of time supports it. We argue that this is false. To this end, we formulate a new family of positions in the philosophy of time, which differ from MS in that, intuitively, they admit a plurality of moving spotlights. We argue that these 'deviant' variants of MS cannot be dismissed as conceptually incoherent, and that they are as well-supported by our experience as is MS. One of these variants, however, is consistent with the B-theory. Thus, if our experience of time supports MS, then it supports the B-theory as well.

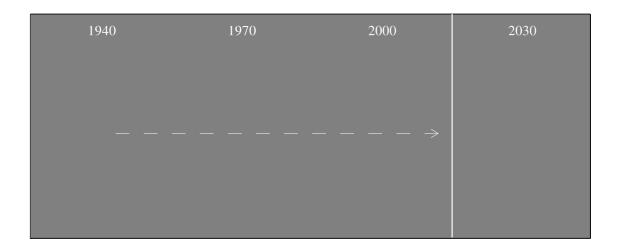
1. Introduction

Time moves forward. That is, there is an objectively dynamic element in reality. As time goes by, new events become present, then they slide away and are replaced by still newer events. Presentness is not to be confused with (Quinean, unrestricted) existence: present, past and future things all exist. Rather, being present is something like having a special metaphysical status. Present things are absolutely so, not just relative to a time, or to a temporal perspective, or the like. There is a unique privileged time or temporal perspective, *the* present.

This is a reasonably fashionable narrative in the philosophy of time nowadays. It is called the *moving spotlight* view (MS).¹ In a nutshell, one time is metaphysically privileged, and which time is privileged keeps changing, as if there were a spotlight moving along the timeline (see Figure 1).

¹ Cameron (2015) and Deasy (2015) defend MS accounts. Skow (2009, 2011) articulates one, although he eventually (2015) doesn't adopt it. Sullivan (2012) and Williamson (2013) defend views that closely resemble MS. Sider (2011, ch. 11) discusses and criticizes a form of MS, which both Deasy and Cameron take to be the traditional way to understand it. Roughly, in this traditional understanding of MS, the only dynamic aspect of reality concerns the position of the present along the timeline, whereas in Cameron's and Deasy's version the dynamic aspect of reality also concerns the qualitative nature of the entities in the temporal series. The distinction between these two understandings of MS is immaterial to our point. See the final section for further considerations on 'non-traditional' versions of MS.

Figure 1: The moving spotlight



The metaphor of a moving spotlight might suggest the existence of a 'projector' that casts a beam of light on the temporal series, but this should not be taken seriously. No projector external to time exists. The time that is 'under the spotlight' possesses an *intrinsic* property that the other times lack.² Let us label this property *brightness*.

Brightness is an intrinsic feature of times (or, indirectly, of entities located at those times) that is directly tied to their metaphysical status. According to MS, exactly one time is bright. This time is metaphysically *special* or *privileged* precisely because it is the unique time endowed with brightness. However, 'bright' and 'metaphysically special/privileged' cannot be used interchangeably, for brightness is intrinsic, whereas 'special' and 'privileged' are extrinsic, comparative notions.

We assume that brightness is necessary to ground experiential availability, in the sense that it must be appealed to in any complete explanation of a time's experiential availability. In saying that a *time* is experientially available, what is meant is that the *experiences* of a subject S that occur at that time are available to S. Let us note that availability is not a notion that applies to the *objects* of our experience but, rather, to our experience itself. This is how the notion is used in the literature.³ Thus, by saying that a

² See, e.g., Cameron 2015, 16. We know of no version of MS in which 'being under the spotlight' stands for an extrinsic property of times. In any event, here we will only consider versions of MS in which the property at stake is intrinsic.

³ See Skow 2015, 214–221. See also the related notion of 'appearing to be occurring *simpliciter*' in Balashov 2005. Let us stress, however, that appealing to this experience-directed notion

time is available, what is meant is that the experiences that take place at that time are available. However, we assume that availability is not itself relative to a time. For if MS comes with an explanation of our experience, this explanation requires an absolute, non-time-relative notion of availability (see Skow 2011, 372–83). Thus, in what follows, 'experientially available' means available *simpliciter* (and not available *at a given time*) unless otherwise specified. Finally, we assume that, if a (conscious) subject has some experience at a time *t*, and *t* is bright, then *t* is experientially available to the subject. In this weak sense, we can say that brightness entails experiential availability.

Since the purpose of this paper is to discuss the explanatory role of MS with respect to our experience of time, we shall make no other assumption on brightness. In other words, all we are assuming concerning brightness is that it is an intrinsic property that both grounds and entails, in the sense of 'entails' just specified, experiential availability. (We shall consider the possibility of imposing further constraints on brightness later on, in section 4.)

The connection between brightness and experience is important. As Skow 2009 notices, MS seems to be better off than B-theoretic eternalism in explaining the dynamic phenomenology of our conscious experience—what Falk (2003) calls the *whoosh* of experience. Consider, for instance, the following quotation:

[T]he motivation [for MS] that I like best appeals to the nature of our conscious experience. Of all the experiences I will ever have, some of them are special. Those are the ones that I am having NOW. All those others are ghostly and insubstantial. But which experiences have this special feature keeps changing. The moving spotlight theory explains this feature of experience: the vivid experiences are the ones the spotlight shines upon. As the spotlight moves, there are changes in which experiences are vivid. (Skow 2009, 677)

The general idea should be clear enough. It is precisely because the spot that is endowed with a special metaphysical status (what we call 'brightness'), with its correlated experiential 'vividness', *moves* along the timeline that the whoosh of experience, the peculiarly dynamic phenomenology of our experience, exists. This

of availability is not indispensable for our purposes, since our main point could be pressed also by resorting to an object-directed notion of availability.

positive story of why MS can account for the whoosh of experience naturally comes with a negative story of why the B-theory cannot. B-theorists fail precisely because they take all times to be metaphysically on a par, so that no change is possible in what time is metaphysically privileged. There is no way to explain why the phenomenology of our experience is peculiarly dynamic, unless we suppose that one time is metaphysically privileged over all the others, and there is a constant change in what time is privileged. In a nutshell, MS-theorists hold that the whoosh of experience can be properly accounted for only in 'dynamic' theories, in theories in which what time is bright changes, and that MS, as opposed to B-theoretic eternalism, does count as a 'dynamic' theory.⁴

In this paper, we argue that both the positive and the negative story—and anything resembling them for that matter—go astray. Unless MS theorists are prepared to make very implausible assumptions concerning conscious experience, there is no reason to suppose that MS is in a better position than the B-theory when it comes to accounting for the whoosh of experience. If the dynamic phenomenology of our experience favours MS, then it also favours the B-theory. Note that we will not be repeating the well-known claim that the B-theory is *compatible* with the phenomenology of time (see Callender 2012 and Prosser 2016, Chapter 2). Rather, we shall argue that the whoosh of experience *cannot be explained at all* by the thesis that there is one moving spot of brightness.

⁴ As an anonymous referee has pointed out, apart from Skow (2009), who is here exploring the view and later (2015) rejects it, it is not clear that contemporary supporters of some version of MS make any *strong* appeal to experience of passage in defending their view. We agree. However, it is important here to distinguish the dialectic within the various A-theories (presentism, growing-block, moving spotlight) from the dialectic between A-theory and B-theory. Even if MS-theorists do not put emphasis on experience for dialectical purposes when debating with other A-theorists, it seems to us undeniable that A-theorists believe in a connection between *being objectively present* and *experiencing* of the kind we are appealing to in the text. For instance, Cameron (2015) writes that 'Caesar is now some way, on my view, but he is not now experiencing anything [...]. As a result, he lacks experiences [...] *simpliciter*' (49). And in explaining the worry that in the traditional version of MS theory the property of presentness is metaphysically idle, he says 'Any A-Theorist is motivated by the thought that there is genuine change, not mere variation in how things are from one time to another. [...] That's the world we experience; that's how we come to learn about change' (111).

2. Uniqueness and the whoosh of experience

Let us start by providing a precise characterisation of MS—or, better, of the 'minimal' version of MS we are going to discuss for most of the paper. MS has the same eternalist ontology as the B-theory:

Eternalism Present, past, and future things all exist.

The difference between MS and the B-theory lies in their metaphysical commitments. First, MS allows for a unique, absolutely privileged time:

Uniqueness There exists (unrestrictedly) a unique time that is (absolutely) bright.⁵

Second, MS requires that the privileged spot 'moves' along the timeline:

Change What is bright changes through time.

Uniqueness and Change relate to our experience in the appropriate way: the privileged time is the *subjectively present* one, the one we ordinarily pick up when we use such expressions as 'present', or 'now'.⁶ Since the subjectively present time, as we write, is 12:00 on October 14, 2017, now we have:

(1) 12:00 on October 14, 2017 is bright.

More generally, given a context, a time is subjectively present if and only if it coincides with the time of the context. If, for simplicity, we identify a context with its temporal index t_0 , and we use the customary notation (see Kaplan 1989), we can make explicit the semantic rule governing the use of the context-sensitive expression 'subjectively present', as follows:

(2) [t is subjectively present] t0 = true if and only if $t = t_0$ (viz., a sentence of the form ^{-}t is subjectively present $^{-}$ is true as uttered at t_0 if and only if $t = t_0$)

⁵ The idea that brightness is possessed in an absolute way goes hand in hand with the idea that times are available simpliciter rather than in a time-relative way (see above, section 1).

⁶ Subjective presentness is a B-theoretically-friendly notion, for it is compatible with the B-theory (see, e.g., Merricks 2006, 103). But it is not a B-theoretical notion in the sense that it is unavailable to A-theorists. Quite to the contrary, it is A-theoretically unproblematic. As Cameron (2015, 2) puts it, 'we [A-theorists] can talk like B-Theorists even if there's an objectively privileged time – we are the masters of our words, after all'. Moreover, as a matter of fact, many A-theorists exploit, more or less explicitly, a subjective or indexical understanding of 'present', 'now', and related expressions (see, e.g., Smith 1993).

Given (2), the link between the subjective present and brightness can be contextually spelled out as:

Presentness The time that is subjectively present is bright.⁷

From now on, we shall identify MS with the conjunction of Eternalism, Uniqueness, Change, and Presentness. According to MS-theorists, MS receives support from our experience in that it provides an adequate account of the whoosh of experience. Now let us ask: what are the principles that, according to MS-theorists, are needed to account for the whoosh of experience? It is plausible, as a preliminary hypothesis, to include Uniqueness on the list. After all, Uniqueness ensures that exactly one time is both subjectively present and bright, and this is precisely the 'fleeting' time where our experience takes place. However, the hypothesis is false. Or at least, it is so unless MS theorists are prepared to endorse a very implausible view about our experience of time. Let us see why.

2.1 The double moving spotlight

Suppose we stick with Eternalism, Change and Presentness, and substitute Uniqueness with the following, weaker thesis:

Existence There exists (unrestrictedly) some time that is (absolutely) bright.

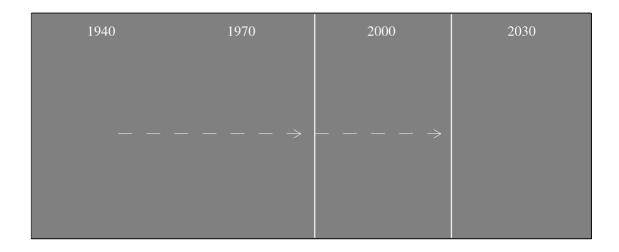
By doing so, we obtain a family of theories that strictly resemble MS, except that, intuitively, they allow for a plurality of moving spotlights. Let us focus on one such variant of MS, which we call the *double moving spotlight* view (2MS). In 2MS, Uniqueness is replaced by:

Doubleness There exist (unrestrictedly) exactly two times that are (absolutely) bright.

By Presentness, one of these two spots of brightness is located at the (subjectively) present time. Let us assume that the second spot is located thirty years before (see Figure 2).

⁷ To be more accurate, Presentness should be construed in a similar fashion to (2), as a metasemantic principle saying that, for any time *t*, the sentence 'The time that is subjectively present is bright' is true as of *t*. We thank an anonymous referee for having pressed us to be clearer on this point.

Figure 2: Two moving spotlights



There is a question that is likely to come to mind at this point: is it conceptually coherent to hold that a second moving spotlight exists, which is located thirty years ago in the past? The answer depends on how 'moving spotlight' is understood. In one understanding, the question is whether two times, which are thirty years apart from one another, can be both *subjectively present*. If so, then the answer is no. Nobody who uses 'present' and 'now' competently can say, of a time that is located thirty years ago, that it is present now.

However, 2MS does not entail that two times are subjectively present. Rather, it entails that two times are *bright* and (by Presentness) that *one* of them is subjectively present. Since it is apparently coherent to suppose that one time is subjectively present, the relevant question becomes: is it coherent to suppose that two times are both bright? We see no reason to answer no to *this* question. After all, brightness is an intrinsic property, and intrinsic properties are such that a thing possesses them 'in virtue of the way that thing itself, and nothing else, is' (Lewis 1983, 197). But to say that it is conceptually incoherent that two times are bright is precisely to assume that a thing is bright partly in virtue of other things not being bright. In other words, if Doubleness is conceptually incoherent, then there is a conceptual requirement on brightness to the effect that, if a time is bright, all other times are not. However, it is hard to see how this conceptual requirement may be imposed without injecting some extrinsic ingredient into the very notion of brightness—that is, without turning brightness into an extrinsic property (recall that, as mentioned in note 2, here we are only focusing on variants of

MS in which brightness is taken to be intrinsic). In any event, we will come back to the charge of conceptual incoherence against 'plural' variants of MS in the final section.

2.2 MS, 2MS, and the whoosh of experience

In the previous section, we have argued that 2MS is conceptually coherent. In this section we argue that, under plausible assumptions, Uniqueness plays no role in explaining the whoosh of experience. Therefore, if MS explains the whoosh of experience, 2MS explains it as well. Before laying down our argument, it is useful to discuss a preliminary point, namely, whether MS, as opposed to 2MS, is supported by *phenomenological evidence*—that is, receives evidential support from the phenomenology of our experience. Let us assume that we have no phenomenological evidence that 2MS is true. Does this entail that we have evidence that Uniqueness, as opposed to Doubleness, is true?

In his guide to Ockham's razor, Eliot Sober observes that 'sometimes absence of evidence *is* evidence of absence, though often it is not' (2015, 252). To illustrate, he discusses the following arguments, which he borrows from Walton (1996):

- (1) I do not have any evidence that it is raining here and now.
 - : It is not raining here and now.
- (2) I do not have any evidence that there is a storm on the surface of Jupiter now.
 - : There is no storm on the surface of Jupiter now.

Despite having the same form, namely (3) below, arguments (1) and (2) can obviously differ as to their inductive force.

- (3) I do not have any evidence that p.
 - \therefore It is not the case that p.

The difference depends on the kind of evidence you have for p. To see how, consider the following counterfactual:

(4) If p were true, then I would have no evidence that p is true.

Suppose you are at home, looking out of the window. If so, counterfactual (4) is false in the rain example, for you are in a position to easily collect information about the

weather around you. Therefore, (1) is inductively strong: absence of evidence does count as evidence of absence in this case. In contrast, the counterfactual is true in the Jupiter case, for a storm on Jupiter is (plausibly) too remote to have any impact on the evidence that is available to you. Therefore, argument (2) is inductively weak.

Now let us come back to our question: are we justified in favouring MS over 2MS, given that we have no phenomenological evidence that a second moving spotlight exists? The answer depends, again, on the answer we give to the relevant instance of (4), namely (5) below.

(5) If 2MS were true, then I would have no phenomenological evidence that 2MS is true.⁸

If (5) is true, then absence of phenomenological evidence for Doubleness does not count as evidence for Uniqueness. If, on the contrary, (5) is false, we do have phenomenological evidence against Doubleness. For (5) to be false, however, the passage from an MS to a 2MS scenario must make some difference either on the phenomenological evidence we have now, in 2017, or on the evidence we had in 1987. But it is implausible to suppose that any such difference exists. After all, if there is anything we know about our phenomenological evidence, it is that it is subject to certain 'locality' restrictions. Think again of a storm on Jupiter. The reason why the storm would have no impact on our phenomenological evidence here on Earth is that it is too far removed in space. Analogously, it is plausible to suppose that we cannot have phenomenological evidence of a change in brightness status that is thirty-year removed in time.⁹

We are aware that the advocates of MS might regard the antecedent of (5) as stating a metaphysically impossibility, and they might want to conclude that (5) is vacuously true. If so, they might object, the truth of (5) is dialectically irrelevant. We are not much impressed by this objection. For one thing, the claim that metaphysical counterpossibles are all vacuously true is controversial (see Williamson 2017 and Berto et al. 2017 for contrasting views on this matter). More importantly, we are using (5) just for illustrative purposes. The point we are pursuing here can be expressed with no commitments to any specific view on counterfactuals. Does the fact that we do not experience certain times provide evidence for the conclusion that they are non-bright? Our point is essentially that, to answer yes to this question, one must ignore the existence of 'locality' restrictions on what we can experience. More on this in the text.

⁹ Admittedly, this comparison is rough and preliminary. The main problem is that, at this stage, we have made no assumption as to the underlying metaphysic of (personal) persistence. We

To make the relation between experiential availability and phenomenological evidence clearer, it is useful to consider a possible objection that the advocates of MS might raise at this point. Let us assume endurantism, the view that an object is completely located at each time it occupies, and consider a forty-year-old person, say Anne. If 2MS is true, then Anne is completely located at two different times that are both experientially available (simpliciter) to her. If so, Anne's experience in a 2MS scenario would be different than it is in an MS scenario, for in an MS scenario only one time is experientially available to her. But then, if 2MS were true, she would have phenomenological evidence for 2MS.

The objection is misguided. To see why, consider an analogy with the so-called *many-worlds* interpretation of quantum mechanics. In the many-worlds view,

our universe is constantly splitting into a stupendous number of branches, all resulting from the measurement like interactions between its myriads of components. Moreover, every quantum transition taking place on every star, in every galaxy, in every remote corner of the universe is splitting our local world on earth into myriads of copies of itself. (DeWitt and Graham 2015, 161)

Given that we are part of 'our universe', each of us is also 'splitting into a myriad of copies' of themselves. There are many ways to make sense of this idea, but a very natural one is to think of different copies of a person as the same person in different worlds. Accordingly, each of us is literally and completely *located at many worlds*. This view is the modal counterpart of endurantism (Yagisawa (2002) calls it *modal endurantism*). If it is correct, there is a sense in which our experience, in a many-worlds scenario, is radically different than it is in a single-world one. For if we are located at many worlds, then many worlds are available to us (simpliciter, not in a world-relative sense). However, even if different worlds are experientially available to us, it is implausible to suppose that we have phenomenological evidence that there are many worlds. For there is no reason to think that the alternative experiences we have at each world join together to form a *unified* trans-world experience. And it is precisely this

will provide a couple of much more accurate analogies in a few lines, after having assumed an endurantist perspective. Essentially for the same reason, we have not yet adequately characterized the relation between phenomenological evidence, time, and experiential availability. Again, this problem will be fixed shortly.

kind of unified experience that is required, for us to have phenomenological evidence that other worlds exist. Analogously, even if in a 2MS scenario two times are experientially available (simpliciter), it is implausible to suppose that we have a unified trans-temporal experience. But again, it is precisely this kind of unified experience that is required for us to have phenomenological evidence for 2MS. Note that in the multiverse scenario, having an experience *simpliciter* is compatible with having distinct, non-unified, experiences relative to different worlds. Similarly, according to the 2MS theorist, someone can (and *can only*) have experiences relative to 12:00 on October 14, 1987 and relative to 12:00 on October 14, 2017.

As a further analogy, consider a case of time travel. Imagine that forty-year old Anne travels back in time to meet her ten-year old self. As a result, let us assume, Anne completely occupies two disjoint spatial regions at her arrival date, say on October 14, 1987. Therefore, Anne's experience covers two distinct spatial regions, so that two places are available to her (simpliciter, not in a place-relative sense). Even if so, however, we would never conclude that Anne on October 14, 1987 is having a unified experience, with two spatially dislocated perceptual centres. The same holds for the 2MS scenario: the fact that two distinct times are experientially available simpliciter to a subject S does not entail that S is having a unified experience, with two temporally dislocated perceptual centres. Note that in the time travel scenario, having an experience *simpliciter* is compatible with having distinct, non-unified, experiences relative to different spatial regions. Similarly, according to the 2MS theorist, someone

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Let us stress that we are not suggesting that MS (or 2MS) theorists are committed to modal endurantism, or to the view that different worlds are experientially available to a single subject. Rather, our point is that, even if those views are adopted, it is still extremely implausible to conclude that, in a many-worlds scenario, we would have a *unified* experience covering different worlds. We thank an anonymous referee for having pushed us to be clearer on this point and on the related issue mentioned in note 12.

¹¹ Of course, according to an MS theorist it is *not* metaphysically possible to have experiences simpliciter relative to distinct times. However, as we stressed already, this is a matter of substantive metaphysical disagreement between the two views.

Again, we are not suggesting that MS (or 2MS) theorists are committed to the view that, in the time travel scenario, two distant places are both experientially available to Anne, or to the view that Anne is a unique person completely located at different places. Rather, our point is that, even if those views are adopted, it is still extremely implausible to conclude that, during her time travel, Anne has a single, unified experience covering different places.

can have experiences relative to 12:00 on October 14, 1987 and relative to 12:00 on October 14, 2017.

Now we are in a position to see why, even if MS is true, uniqueness plays no role in explaining the whoosh of experience. Let us say that two or more times are jointly part of our experience (simpliciter) if the experiences occurring at those times constitute a single, consciously unified experience. As argued thus far, in a 2MS scenario, it is never the case that distinct times are jointly part of our experience. In other words, even though what we experience simpliciter in a 2MS scenario is different from what we experience simpliciter in an MS scenario, the existence of two moving spotlights would make a difference neither in what is experienced relative to 12:00 on October 14th 2017 nor in what is experienced relative to 12:00 on October 14th 1987. However, Uniqueness has a role in explaining the whoosh of experience only if such a difference exists. In the MS account, the explanatory role of Uniqueness goes as follows: the fact that distinct times are not jointly part of our experience (simpliciter) is explained by the fact that only one time is (absolutely) bright. However, if this explanation is correct, then the MS theorist is committed to the following counterfactual view:

(6) If more than one time were bright, then distinct times would be jointly part of our experience.

Thus, if Uniqueness played some explanatory role in accounting for our experience, then, in a 2MS scenario, we would have a single, unified experience of distinct, very distant times. The truth of counterfactual (6) is relevant here for essentially the same reason that the falsity of counterfactual (5) was relevant to the above discussion of the phenomenological evidence for 2MS. By analogy, suppose that you are at home and ask yourself why you have no phenomenological evidence of any storm on the surface of Jupiter. If you hold that this lack of evidence *is explained* by the fact that no storm is taking place on Jupiter, then you should also maintain that, if a storm occurred there, you would have evidence that it did, and so that your experience would be different. Analogously, suppose you ask yourself why distinct times are not jointly part of your experience. If you hold that this is explained by the fact that only one time is bright, then you must hold that, if there were two bright times, they would be jointly part of your experience. We have already argued that this view is highly

implausible. If we are right, Uniqueness plays no role in explaining the whoosh of experience. 13

Thus far, we have relied on counterfactual reasoning. However, there is a more direct reason against the view that the lack of brightness of a time t located in 1987 explains why t and the (subjectively) present time are not jointly part of our experience. The point is that we have perfectly adequate explanations of why we do not have a unified experience of distant times, which appeal to inherent, built-in temporal limitations of perception and short-term memory (and, for younger people, to the shortness of human life). The existence of this kind of explanations is a common fact, which holds for time as much as it does for modality, or space. Think again of the analogy with the many-worlds and the time-travel scenarios. Either way, there are locality restrictions on what can be part of our experience. These restrictions explain why we would not have phenomenological evidence of other worlds, or why forty-year old Anne would have no access to the experiences of her younger self. Strong arguments are needed to maintain that the temporal case is any different, and it is hard to see how these arguments are to be found. Even more important, it appears that looking for such arguments would be futile. After all, MS-theorists no less than Btheorists can recognize the existence of locality restrictions on temporal experience, and such restrictions come with an easy explanation of why distant times are not jointly part of our experience. It would be uneconomical, and thus unadvisable, for MS-theorists to resort to a metaphysically-based explanation of this very same fact.

3. Change and the whoosh of experience

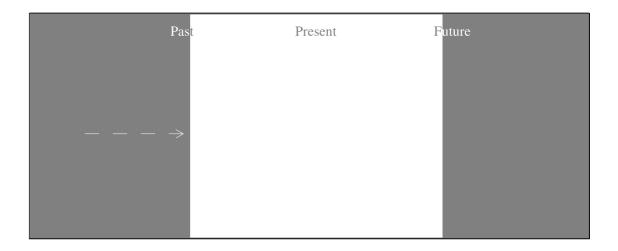
So far so good as to what concerns Uniqueness. But what about Change? If an adequate account of the whoosh of experience does not require the truth of Change, then it need not be cast within an A-theoretic framework: a 'static', B-theoretical setting will do just as well. In what follows, we argue that, indeed, Change is not needed to account for the whoosh of experience.

¹³ For other arguments to the effect that the existence of a privileged time does not come with an explanation of the whoosh of experience, see Paul 2010. For a more general reflection on the connection between experience and metaphysics, see Benovsky 2013.

3.1 The XXL spotlight

Let us start by considering another variant of MS, which we call the *XXL spotlight* view (XXLS). In XXLS many times are bright, namely, the subjectively present time and all the times in its immediate surroundings (see Figure 3). Intuitively, XXLS is quite like MS except that the moving spotlight covers an interval of time.

Figure 3: The XXL spotlight



Consider a time *t* that lies within the *future* part of the XXL spotlight. By a reasoning that strictly parallels the one just seen in section 2.2, we can conclude that the brightness of *t* would make no difference to our present experience. Moreover, we have an obvious explanation, which appeals to the causal nature of perception and to the directionality of causality, of why future times do not impinge on our present experience. Therefore, again, it would be both problematic and uneconomical to resort to a metaphysical explanation of this very same fact.

Now let us turn to the *past* part of the XXL spotlight. Here we can distinguish two cases. First, consider a bright time *t* that lies outside the so-called specious present—the short interval of time that we seem to experience directly. If so, we are back to the previous cases. We cannot say that, if *t* were bright, then the specious present would be automatically 'enlarged' as to cover *t*. For again, we have perfectly sound, cognitively based accounts of why the specious present has the length it has (see, e.g., Dainton 2006, 171)—or, better, the *average* length, as there are intersubjective variations in this respect (see, e.g., Phillips 2011, 817n16). In passing, we observe that

virtually all A-theorists would agree that the length of the specious present must be accounted for on cognitive rather than on metaphysical grounds.

Suppose, on the other hand, that *t* lies *within* the specious present. Here it is even more obvious that the brightness of *t* would yield no explanatory disadvantage. For if anything, the phenomenological datum seems to support the view that *t* and other times in the specious present *are* jointly part of our experience. And it is hard to see how admitting as bright a time that *feels* bright from a phenomenological perspective can disrupt an account of the phenomenology of our experience.

We conclude that, insofar as Existence, Presentness and Change remain in place, if MS-theorists can explain the whoosh of experience, their explanation is still effective no matter what the number of bright moments and their position is.

3.2 From the moving darkness to the sunshine

What if we both enlarge the moving spotlight and allow for two of them? If so, we could reach a near negative image of MS, in which a unique *non-bright* moving point exists. We can call it the *moving darkness* view. For the sake of concreteness, let us assume that the moving darkness is located some thirty years ago (see Figure 4).

1940 1970 2000 2030

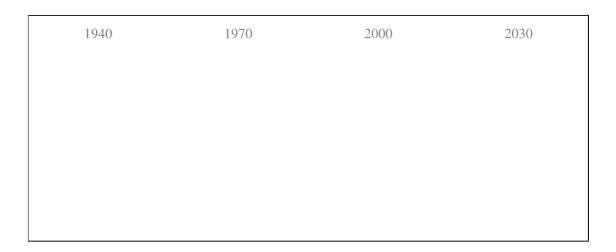
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Figure 4: The moving darkness

If what we have said so far is on the right track, within a moving darkness scenario it is as easy to explain the whoosh of experience as it is in the 2MS scenario and thus in the original MS scenario. Now compare the moving darkness with a picture that may be called the *sunshine* view, in which also the last trace of darkness is whited

away, and the spotlight shines over each and every time (see Figure 5). Although the moving darkness and the sunshine view look very similar, there is a crucial difference between them. Namely, while the moving darkness entails Change, the sunshine view is inconsistent with Change.

Figure 5: The sunshine



Thus far, we have argued that, if the whoosh of experience can be explained within an MS scenario, then it can be explained also within unorthodox scenarios like the moving darkness one, provided they are compatible with Change. This suggests that Change is essential to provide an explanation to the whoosh of experience. However, if Change were indeed essential, then this explanation would be disrupted in the passage from the moving darkness scenario to the sunshine scenario. A moment of reflection should suffice, however, to see that this cannot be the case. For a change in brightness status located on October 14, 1987 cannot contribute to explain the dynamic phenomenology of present experience. Again, to think otherwise requires giving up independently reasonable locality constraints.

Now let us observe that the sunshine view is compatible with the B-theory. Recall that, by 'brightness', we mean nothing more than any intrinsic property of times that correlates with experiential availability. In the sunshine scenario, all times are bright; in the B-theory, every time is experientially available. There is thus nothing incoherent in a B-theorist who identifies brightness with a universal property on the domain of times, the most obvious candidates being existence or self-identity.

At this point, one may object that the official B-theoretical notion of availability is availability *at a time* rather than availability *simpliciter*. Accordingly, when B-theorists claim that every time is available, they mean available at itself and not available simpliciter. Let us observe, however, that while the B-theory is *not* compatible with the assumption that some but not all times are available simpliciter, it *is* compatible with the assumption that every time is available simpliciter. In a B-theoretic framework, being available simpliciter is tantamount to being available at some time or other. Thus, the notion of availability simpliciter, albeit explanatory idle, consistently applies. The same holds for brightness. Although it is not compatible with the B-theory that all times exist but only some of them are bright, it is compatible with the B-theory that all times are both existing and bright.

4. Concluding remarks

Let us take stock. According to MS-theorists, the need to explain the whoosh of experience provides a crucial reason to prefer their view over B-theoretic eternalism. If the explanation of the whoosh of experience that comes with MS is correct, the whoosh of experience exists because (i) a unique time is bright (metaphysically privileged) and, so, experientially available; and (ii) what is bright changes over time. Point (i) of this explanation appeals to the principle we called Uniqueness, point (ii) is the principle we called Change.

We have argued that Uniqueness contributes to explain the whoosh of experience only if certain locality restrictions, which generally apply to our experience, do not apply to our experience of time. However, on the one hand, this exceptionalist attitude towards time experience is implausible. On the other hand, if we allow locality restrictions to apply to our experience of time, we have a straightforward and economical explanation of why distinct times are not jointly part of our experience. We conclude that, plausibly enough, whatever role Uniqueness was supposed to play in the MS-theoretic explanation of the whoosh of experience is best played by locality restrictions on time experience.

The subsequent discussion about Change has shown that, if Uniqueness is explanatory idle, then Change is not essential to explain the whoosh of experience: if the whoosh of experience can be explained within a scenario consistent with Change, then it can also be explained within a sunshine, B-theoretic scenario. If this is correct,

the need to explain the whoosh of experience does not provide us with a reason to prefer MS over B-theoretic eternalism.

Let us now consider two possible criticisms. First, one might object that, given our ordinary notion of presentness, it is an analytic truth that a time is objectively present if and only if it is bright. If this is right, then our above case that 2MS is conceptually coherent fails, and our main point does not even get off the ground. Such a defensive move strikes us as particularly weak. As Moore (1903) famously stressed, if there is substantive philosophical disagreement on a certain issue, then, most likely, what at stake is not an analytical truth. And of course, the view that only the present time is bright is very controversial. Besides, this paper is addressed to philosophers who lean towards an A-theory because of its putative advantages in accounting for the whoosh of experience, not to hard-core A-theorists who take the present to be metaphysically privileged as a matter of conceptual necessity.

Second, one might object that while our notion of brightness reflects the traditional version of MS (see Sider 2011, ch. 11), it is not the only one available to MS-theorists. Indeed, it is possible to inject some additional features into brightness, which make it conceptually inconsistent with the denial of Uniqueness. Cameron (2015), for instance, requires that brightness flags the border between past determinacy and future indeterminacy. Let us call any such 'enriched' notion *brightness**. One might object that 2MS and/or other deviant variants of MS are incoherent when properly reformulated in terms of brightness*.

We grant that it is incoherent to countenance a plurality of bright* times. But we do not think this is enough to discard our case against MS as irrelevant. Our aim was to individuate a core notion of brightness, which any enriched version entails. Hence, if a time is bright*, then it is bright. Now, run again our account of 2MS. You will end up with a theory in which two times are bright, but only one of them is bright*. Is such a theory a threat to a version of MS formulated in terms of brightness*? As far as the issue at stake is how to account for the whoosh of experience, it *is* a threat. Unless MS-theorists offer a convincing case that brightness*, as opposed to mere brightness, comes with an adequate account of the whoosh of experience, our challenge stands: the need to explain the whoosh of experience does not provide us with a reason to prefer A-theoretic over B-theoretic eternalism.

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References

- Balashov, Y. 2005. Times of our lives: negotiating the presence of experience.

 *American Philosophical Quarterly 42: 295–309.
- Benovsky, J. 2013. From experience to metaphysics: On experience-based intuitions and their role in metaphysics. *Noûs* 47: 1–14.
- Berto, F., R. French, G. Priest, and D. Ripley. 2017. Williamson on Counterpossibles, Journal of Philosophical Logic (Online first).
- Callender, C. 2012. Time's ontic voltage. In *The Future of the Philosophy of Time*, ed. A. Bardon. Oxford: Routledge.
- Cameron, R. 2015. The Moving Spotlight. Oxford: Oxford University Press.
- DeWitt, B. and N. Graham. 2015. *The Many Worlds Interpretation of Quantum Mechanics*. Princeton: Princeton University Press.
- Dainton, B. 2006. Stream of Consciousness (II ed.). London: Routledge.
- Deasy, D. 2015. The moving spotlight theory. *Philosophical Studies* 172: 2073–89.
- Falk, A. 2003. Time plus the whoosh and whiz. In *Time, Tense, and Reference*, eds. Q. Smith and A. Jokić, 211–50. Cambridge, MA: MIT Press.
- Kaplan, D. 1989. Demonstratives. In *Themes from Kaplan*, eds. J. Almog, J. Perry, andH. Wettstein, 481–563. Oxford: Oxford University Press.
- Lewis, D. 1983. Extrinsic properties. *Philosophical Studies* 44: 197–200.
- Merricks, T. 2006. Goodbye growing block. In *Oxford Studies in Metaphysics*, *Volume* 9, eds. K. Bennett and D. Zimmerman, 103–10. Oxford: Oxford University Press.
- Moore, G. E. 1903. *Principia Ethica*. Oxford: Oxford University Press.
- Paul, L. A. 2010. Temporal experience. *Journal of Philosophy* 107: 333–59.
- Phillips, I. 2011. Indiscriminability and experience of change. *Philosophical Quarterly* 61: 808–27.
- Prosser, S. 2016. Experiencing Time. Oxford: Oxford University Press.

- Sider, T. 2011. Writing the Book of the World. Oxford: Oxford University Press.
- Skow, B. 2009. Relativity and the moving spotlight. *Journal of Philosophy* 106: 666–78.
- Skow, B. 2011. Experience and the passage of time. *Philosophical Perspectives* 25: 359–87.
- Skow, B. 2015. Objective Becoming. Oxford: Oxford University Press.
- Smith, Q. 1993. Language and Time. Oxford: Oxford University Press.
- Sullivan, M. 2012. The minimal A-theory. *Philosophical Studies* 158: 149–74.
- Williamson, T. 2013. Modal Logic as Metaphysics. Oxford: Oxford University Press.
- Williamson, T. 2017. Counterpossibles in metaphysics. In Armour-Garb, B. and Kroon, F. (Eds.), *Philosophical Fictionalism*. Forthcoming.
- Yagisawa, T. 2002. Primitive worlds. Acta Analytica 17: 19–37.