

Simon Prosser, *Experiencing Time*, OUP, 2016<sup>1</sup>

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On 01/24/2021 Alice thinks of her next birthday. After approximately one rotation of the Earth, the number of days that separates her experience from the anticipated event diminishes by one unit. Eventually her next birthday will become present and then it will be remembered. In the philosophy of time, there are two main explanations of this indubitable fact of our experience. One explanation, associated with some form or other of the A theory of time, amounts to the claim that time really passes: previously unreal, anticipated events continuously come into being in the present and our memories accumulate because past events mind-independently become more and more past. The other explanation, associated with the B theory of time, is that the universe is a 4-dimensional, static block in which there is no ontologically privileged present and the relation between Alice's anticipations of her birthday on 01/24/2021 and her lived experiences the year after is fixed once and for all. The passage of time is an illusion.

Simon Prosser's *Experiencing Time* (2016) is a very brilliant defence of the B-theoretic explanation. There are two main merits of the book. The first is the richness of the philosophical arguments presented with clarity and discussed with a remarkable analytic skill. The second is Prosser's familiarity with the empirical literature stemming from psychology and the cognitive sciences, which is sometimes brought to bear in the philosophical problems in an illuminating way.

After a brief introduction to the metaphysics of time in chapter 1, in chapter 2 we are presented with the main thesis of the book. While the A theorists typically invoke our "experience" in support of their dynamic metaphysics, Prosser reverses their argument: he claims that it is impossible to experience the passage of time, that expressions like "the passage of time" fail to denote and that dynamic theories of time invoking passage are unintelligible. The rest of the book is an attempt to defend the B theory by explaining away as illusory all the "experiences" that seem to militate in favour of a dynamic theory. As it will become clear in the following, I don't find explanations of our experience postulating a real passage of time unintelligible.

In the first step of his explanatory project, Prosser addresses the various attitudes that we have toward the past and the future (chapter 3). He notes that our untutored beliefs about them

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<sup>1</sup> I thank Simon Prosser for his very helpful comments on an previous draft of this paper.

are influenced by our grammar, where 'past' and 'future' are treated as monadic predicates, while they really are relations between person stages *S* at certain times and events (see first paragraph above). He claims that one of the mistakes of the A theorist believing in the non-relational character of the A properties is her failing to consider that such properties contain the thinking subject as an unarticulated component. In this context, Prosser generalizes his semantic analysis involving the thinking subject by presenting one of the most central claims of his book, namely that the relation of persons to their environment is essentially functional (SEF, or Subject-Environment Functional Relations). 'Function' here is synonymous with 'causal role': for any two subjects standing in the same SEF relations to their environments, such environments play the same role in their lives.

After an important excursus in the durational aspect of our experience of the rate of change of the passage of time (chapter 4), in chapter 5 he defends some needed scepticism about the main phenomenological models of our experience of time that are discussed in the literature. He claims that the cinematic model (in which the mental act and its contents have a quasi-instantaneous duration), the retentional model (where the mental episode is quasi-instantaneous, but the content is not) and the extensional model (in which both the act and the content are temporally extended) are empirically underdetermined. I agree, but then the question one may want to ask is: "shouldn't we drop the whole debate?". It is not completely clear whether Prosser wants to go so far, even if he emphasizes that it is unclear how empirical data could be brought to bear to decide among these three models, the main reason being that they all seem to be based on a "Cartesian" view of consciousness that has been famously attacked by Daniel Dennett.

For this reason, I find it puzzling that later in the chapter he illustrates a 'dynamical snapshot theory of our experience', according to which we perceive an instantaneous present, which serves the negative purpose of attacking the view that in order to perceive change, we need a specious present. To defend the idea that we can have an instantaneous perception of change, he helps himself with a metaphor coming from calculus: "experience has an instantaneous content that includes *vector rates of change*" (chapter 5, p.123, my emphasis). This is problematic: while it is true that for their definition instantaneous velocities involve infinitesimally small neighbourhoods of a point *x*, our estimate of the speed and direction of a ball that we want to catch (represented by the vector) seem to require some retained information, which is indispensable to anticipate the ball's future direction. Prosser claims that our anticipatory capacities need not involve short-term memories of which we are aware. However, it seems difficult to establish whether this difference

does not fall into the Cartesian theatre problem. In any case, given his stress on SEF, and despite his discussion of Nöe's arguments, Prosser should have given more emphasis to the view that perceptions are forms of actions, a fact that may count as an argument in favour of the specious present.

Prosser's central explanations of why our experience seems to suggest a dynamical element is taken up in the last two chapters, which in my view are the most interesting. A first puzzlement is generated at the beginning of chapter 6, when he argues that our experience of change has a contradictory content even if it does not seem to us this way (p.178). But if our experience has a contradictory content, why are we not led to judge the world to be contradictory?<sup>2</sup>

His main account of why change seems dynamic is that we perceive objects as persisting in time by *enduring* rather than by *perduring*. He speculates that the reason why we perceive objects as retaining a numerical identity across time depends on hardwired computational economy, something that seems to hint to some kind of evolutionary explanation that it would be interesting to pursue. In this context he argues that his view of passage is close to Kant's, who claimed that no change can be perceived without assuming that the changing object remains the same through time. When Prosser claims that "the passage of time is transcendently ideal, but everything else can be real" (p. 186), he means that, unlike Kant – who claims that all temporal features of our experience (persistence, succession and simultaneity) are "transcendentally ideal and empirically real" – he is Kantian only about passage.<sup>3</sup> According to Kant, it is the permanence of objects through time – ensured by the transcendental category of substance – that enables the attribution of a temporal order to events. This means that we cannot have an experience of succession without permanence and if permanence is necessary for the passage of time, Kant's view justifies the claim that without the experience of passage we would have no experience of time whatsoever, not even of B-succession. We could say that the main aim of the book is to show against Kant that succession can be disentangled from passage. In addition, we should note in order to defend the view that we perceive the world as enduring, Prosser must extend this claim also to the identity of the self through time and here his claim seems to be on target: by mentally travelling back in time, we project our current self into the past rather than having a current memory of an earlier self.

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<sup>2</sup> On this point see Deng (2013), whose criticism I find appropriate.

<sup>3</sup> Of course, Prosser has no philological intentions here.

Since Prosser's explanation of the dynamic character of our experience hinges almost exclusively on the claim that we perceive objects as enduring rather than as perduring, he needs to assume that the dispute between endurantism and perdurantism is genuine. I have my reservations here. Mount Everest is typically considered to be a 3-D, enduring object rather than a perduring, 4D object because, we are told, it has no temporal parts and is "always present at any moment of its existence". But we can legitimately and without any loss of meaning redescribe the enduring object Mount Everest as the mereological sum of all the time slices composing its full spatiotemporal volume in spacetime. The possibility of this redescription may imply that the dispute between stage theorists and endurantists is purely verbal. My table can be regarded as an enduring object from a certain macroscopic viewpoint (its properties don't change too quickly) but it can also be regarded as being identical with the sum of the constant changes and motions of its microscopic structure at all instants of its existence. In this alternative description, the table is a perduring entity because it is different at any moment of its existence and the relation of continuity is weaker than that of identity. The same (macro)objects can perdure because at our scale they typically don't change their properties very quickly, but from another viewpoint they can be said to perdure because of the constant changes in their microstructure.

In the last chapter there is a brilliant attempt to explain why humans use so many spatial metaphors to describe their experience of time: our death is "approaching", our birth is "receding", we "are looking forward" to a certain event, etc. If our reliance on these metaphors is the main reason why we believe in the passage of time, explaining their origin is very important for the main project of the book. In order to explain why future events seem to approach us in time, he uses his SEF relations, and he invites us to remove from them any spatial connotation, so as to arrive at a pure "approaching relation" between a person stage and an event, which holds for both space and time: "The SEF relation in which one stands to an approaching event is thus very closely related to, albeit not identical to, the SEF relation in which one stands to an object approaching through space." (p. 189). This may be correct, but it is not incompatible with the view that events come into being one after the other along local worldlines, as a defender of an objective passage of time would put it.

By stressing the subject-environment approaching relation, Prosser's explanation of our sense of motion through time presupposes that this relation is the only spatial metaphor that we use of time. However, one should note that while in European languages the future is represented as being in front of us and approaching and the past behind us and receding, in other languages

(the Aymara spoken in the Andes, for instance) 'past' means 'ahead' (we know the past more than the future, after all!) and the future means 'behind'.<sup>4</sup> In Mandarin Chinese, down refers to future events, so that "next week" becomes "down week", while "last week" becomes "up one week". It seems reasonable to conclude that Prosser's approaching relation has a cultural origin but that the metaphor of motion in space is a universal. If this is correct, studies on the so-called mental time travel may shed new light on why spatial metaphors are so important in our representation of time. Possibly, the fact that the neural mechanisms involved in the representation of mental space travel and mental time travel are different<sup>5</sup> may have some important philosophical consequence. Given Prosser's openness to new empirical studies (p.191), he would certainly welcome results of this kind, which, however, he does not mention.

Passing now to a general evaluation of this thought-provoking book, my main objection to the view that the passage of time is illusory is based on the fact that our brains evolved to anticipate the future. This is evident from the most automatic sensory-motors mechanism: we open our mouth before putting the food inside it. In general, to anticipate a future event F entails a robustly justified belief that F, relative to the moment in which we decide to act, does not exist. Since I take this to be a moorean fact that must be captured by any metaphysical theory of time, illusory approaches to the passage of time face a dilemma. If the metaphysical dispute between static and dynamic theories is not purely verbal, views like Prosser's cannot fully recover the meaning of central terms like *anticipation* or *causation*. In this case, however, they are unsatisfactory because these terms are needed for any explanation of our actions, which entails that they cannot be stretched to the point of rupture. Or, if they can recover such meanings, the result of the translation is indistinguishable from moderately dynamical views in which time passes independently of our mind.

To exemplify, within dynamic and static metaphysics alike, it is false to claim that, at the moment M in which we anticipate them, future events "already exist". Relative to M, they exist only when they become present. The introduction of an unrestricted quantification could obviate the well-known charge of triviality, since it would enable one to claim that, according to the static theorist, the anticipated events "exists simpliciter" also in the present. In typical dynamical views,

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<sup>4</sup> Núñez and Sweetser (2006).

<sup>5</sup> Gauthier and Wassenhove (2016).

instead, these events would come into being in the present, and at M they would not exist (simpliciter).

However, in our context the introduction of unrestricted quantification can only be admitted if one is ready to countenance the view that it makes sense to claim that we anticipate something that is located in the future but that nevertheless exists simpliciter. Here's the rub. Either the meaning of 'anticipate' in this context is not stretched to the point of rupture, which seems hardly plausible. Or some minimal dynamic view must be admitted: by following Savitt and Dieks (and myself in their wake), there seems to be no harm in claiming that anticipated events relationally come into being by happening. We would arrive at the same conclusion by choosing the first horn, since in this case one ought to argue that it is always possible to paraphrase the anticipatory talk – that requires a coming into being as a matter of meaning – by invoking Prosser's unchanging relations between subjects' temporal stages and events. Translations of this kind, however, should make one worry about the real difference between moderately dynamic views of time that do justice to our talk of anticipating the future (the second horn), and their "static" paraphrases. The dilemma is solved in favour of the view that time really passes in the moderately dynamic sense.

The same point holds for causation. Like before, we are facing a dilemma. Either the claim that 'we cause an event that before our action is located in the future but exists unrestrictedly' does not change the meaning of 'causation', a claim that I find implausible. Or, as before, we accept that anticipated events come into being simply by happening and that we cause their happenings via our action. If one insisted that the first horn can be accepted, the cluster of meanings constituting the concept of causation – requiring bringing about future events – should be reformulated in terms of the second option, which requires a real though "deflationary" passage of time.

In general, as in many discussions about the philosophy of time, when metaphysics prevails over the empirical dimension the debate, I find it difficult to distinguish the positions at stake. In part this is due to the vagueness of the term "experience of time", which in the literature is too often used as an umbrella term: if we don't know exactly what "experience" means, we don't know in what sense our experience of time can be as illusory as one due to refraction. In one sense, 'experience of time' may refer to a phenomenological aspect (covered in part in chapter 5). In another sense, our experience of time could be regarded as a quale, but Prosser correctly claims that this not the case (chapter 7, p.186). In yet another sense, it may refer to a durational aspect, instructively tackled in chapter 4. However, in this option, one may want to further distinguish a

few-seconds long mental integrations windows – currently the target of many empirical studies<sup>6</sup> – from longer intervals of time that involve the working memory and that have to do with the experience of the continuity of our embodied self. All of these different senses of ‘experience of time’ are often merged to the detriment of clarity. Prosser’s book has the remarkable merit to have made significant progress in distinguishing among them by also bringing to bear empirical data. Yet, as it happens when I read books as brilliant as this one on the philosophy of time, I feel that an even stronger interaction between the metaphysics and the science of time would be more fruitful to both disciplines.

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<sup>6</sup> Fairhall et. al (2014).