The time we experience: understanding the phenomenologies of temporal passage and presentness

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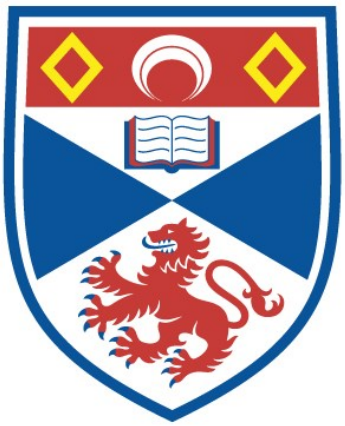
A thesis submitted for the degree of MPhil
at the
University of St Andrews



2024

Identifier to use to cite or link to this thesis:
DOI: https://doi.org/10.17630/sta/702

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Acknowledgements

First and foremost, I would like to express my deepest gratitude to my supervisor, Simon Prosser, whose profound scholarly wisdom, dedicated philosophical rigor, remarkable patience, and unwavering support have been indispensable in navigating the journey of this dissertation. Your exceptional qualities as a supervisor, philosopher, and human being will continue to inspire me for years to come.

I would also like to thank my fellow students, both within and outside the Department of Philosophy, as well as my friends from around the world. Their willingness to engage in discussions pertaining to my topic and their valuable insights significantly helped deepen my understanding of the subject and refine the clarity of my ideas.

Lastly, my thanks go to my family for their unconditional support, even when they may not always understand what I am doing.

Abstract

This dissertation explores what is involved in the alleged phenomenologies of the passage of time and the present, two phenomenological data that are normally cited to support the A-theory of time. It argues that the phenomenology corresponding to the purported passage phenomenology is that of dynamic changes in things' states, and the phenomenology corresponding to the purported presentness phenomenology is that of (only) some things and events occurring *simpliciter*. It claims that these illusory phenomenologies are products of the feature of our perceptual experience of having a confined temporal horizon, which includes three aspects – limited access, involuntariness, and directionality. It also argues that the illusory phenomenologies of dynamic change and things and events occurring *simpliciter*, despite being at odds with the B-ontology, do not lend support to the A-theory of time. Furthermore, it provides insight into why our perceptual experience has a confined temporal horizon and how the intuitive beliefs that we experience temporal passage and presentness arise from the illusory phenomenologies.

Contents

Introduction

Commonsense often suggests that time passes, ceaselessly ferrying us from a concrete past, through a palpable present, and into an uncertain future. The widespread acceptance of this belief is commonly attributed to our lived experiences – it seems that we just experience time as passing and experience the present as perpetually shifting. This overarching theme nevertheless encompasses two sets of questions. The first set is concerned with the ontological nature of objective time, whereas the second set investigates what experiences the subject has and *what it is like* for the subject to have those experiences. The latter is typically referred to as the phenomenology, or the phenomenal character, of experiences; it focuses on the subjective, qualitative character of experiences, without taking into account theories of the nature of reality. While these two enquiries seem closely related, they can – and should – be considered in isolation to a large extent.

The ontological debate about time normally takes place between the A- and B-theories of time. The A-theory holds that pastness, presentness, futurity, and passage are real features of time *per se*. In contrast, the B-theory claims that there is no past, present, or future in objective time, and consequently there is no such thing as objective temporal passage.

A conventional line of argument favouring the A-theory of time is known as the Argument from Experience. This line typically argues that we have such-and-such phenomenologies, the A-theory is the best explanation for those phenomenologies, and therefore the A-theory is correct. It is generally formulated as follows:

> P1: We have the phenomenology of *X*.
>
> P2: The A-theory of time is the *best* explanation for such phenomenology.
>
> (An alternative version of P2: Any *reasonable* explanation for such phenomenology relies on the A-theory of time being true.[1])
>
> C: The A-theory of time is the true theory of time.

Two types of phenomenologies are normally cited to support the A-theory in various versions of the Argument from Experience. One is the alleged phenomenology of *temporal passage*, or at least, a sort of dynamic character that our experiences allegedly have, which tells us that time passes. The other is the alleged phenomenology of *presentness*, or a sense of presence in our experiences.

The Argument from Experience presumes an intimate, even if not direct, connection between ontological and phenomenological issues. Such connection, however, has been proven problematic, as many B-theorists have pointed out that even if we have such-and-such phenomenologies, the A-theory does not naturally follow from the phenomenologies, since both the A- and B-theories seem to be able to provide effective explanations for them. In the meantime, some B-theorists have noticed that P1 might (also) be flawed, noting that the content and the nature of those frequently cited phenomenologies are far from explicitly delineated. As the latter insight gains growing attention, it has become increasingly clear that if we want to make such a move as that in the Argument from Experience, arguing from our phenomenology to the metaphysical theories of time, the right order of considerations is to first clarify what is involved in certain phenomenologies, and then determine what metaphysical

[1] See Baron and Miller 2019, 55–56.

theory of time can best accommodate the phenomenological data defined in the first step. This is not to say that the discussions of what theory of time is correct must begin with phenomenology – it is perfectly viable to find out the true theory of time via other ways independent of our phenomenology, such as pure metaphysical or scientific investigations. The point is that properly identifying the content and the nature of phenomenology is an independent and crucial task on its own.

In line with this idea, this dissertation will seek to explore whether we truly have these phenomenologies that are often believed to support the A-theory, or, more precisely, to clarify what exactly is involved in these purported phenomenologies. In section one, I will focus on the purported passage phenomenology. I will argue that such phenomenology involves a kind of dynamic character of our experiences which is not part of the B-ontology – specifically, we experience things as though they were undergoing dynamic changes. In a parallel manner, sections 2.1 through 2.3 will focus on the purported presentness phenomenology, suggesting that it involves us experiencing some things and events as though they were all that are occurring (occurring *simpliciter*).

A central proposition throughout will be that our perceptual experience is characterised by having a confined temporal horizon; it is such a feature that gives rise to the phenomenology of dynamic change and the phenomenology of (only) some things and events occurring *simpliciter*. After clarifying what is involved in the purported phenomenologies of passage and presentness, I will explain why those phenomenologies, despite being at odds with the B-ontology, do not support the A-theory of time (sections 2.4 and 2.5).

Finally, section three, as an extra elucidation, will provide insights into why our perceptual experience has a confined temporal horizon and how the intuitive beliefs that we experience temporal passage and presentness arise from those phenomenologies previously described. Overall, I hope to establish that our experiences do have contents that are at odds with the B-ontology, but this does not constitute evidence for the A-theory of time.

1. The Passage of Time We Experience

When the A-theorists argue that experience serves as evidence for the A-theory of time, they take for granted that we can experience time passing. Many B-theorists also accept this intuitive idea yet hold that such experience is illusory. However, what exactly the alleged experience of temporal passage involves remains rather vague. Two notions are normally associated with the alleged experience of passage. The first is that our experience has a kind of dynamic character, and the second is that we experience the present and what is experienced as the present is constantly changing. Most B-theorists tend to reject the second sense of experiencing time passing. The typical reason they give, to put it very shortly, is that the present is not something we can experience in the same way as we experience typical perceptible properties such as shape and colour, and moreover, there is no obvious reason to assume that we experience something, in addition to typical perceptible properties, that should be designated as the present; therefore we can hardly make sense of the claim that we experience the present (this will be the topic of section two, where I will discuss the relevant arguments in detail). The first notion of experiencing time passing, on the other hand, seems to hold an attraction for some B-theorists. I too think taking our experience as having a dynamic character is a promising way of making sense of the intuition that something about our experiences tells us that time passes, the intuition that the Argument from Experience relies on. What I will do in section one is then provide an explanation of what is dynamic about our experiences.

Among the B-theorists, those who adopt the A-theoretic assumption that we have experience of temporal passage are often referred to as illusionists, as they acknowledge passage phenomenology while denying the objective existence of temporal passage; while those who claim that we do not have passage phenomenology are known as veridicalists, since they hold that neither passage phenomenology nor objective passage exists. The view I will be defending can be taken as a broad illusionist view, though my explanation of what the illusion is might be different from the typical illusionist position.

The starting point of the illusionist-veridicalist debate is that we have some phenomenology whose content is in dispute. Let us call this phenomenology in question the "purported passage phenomenology".[2] The illusionist believes that this phenomenology is truly passage phenomenology, while the veridicalist claims that it is something different and in effect should not be called passage phenomenology.

What precisely is this purported passage phenomenology? We may gain a preliminary grasp of it by considering some typical descriptions people provide when talking about experiencing the passage of time:

> Let me begin this inquiry with the simple but fundamental fact that the flow of time, or passage, as it is also known, is given in experience, that it is as

[2] The term "purported passage phenomenology" is borrowed from Latham, Miller and Norton (2020). As they note, it is not really possible to say much about this phenomenology in neutral terms, and it is far from clear which phenomenology it is. Yet just as a starting point, given that temporal passage has been a long-standing philosophical issue, and that we are neutral about whether such phenomenology really represents temporal passage, it is reasonable to assume that we all have some (perhaps vague) ideas about what phenomenology we are talking about (Latham et al. 2020, 354).

> indubitable an aspect of our perception of the world as the sights and sounds that come in upon us, even though it is not the peculiar property of a special sense. (Schuster 1986, 695)
>
> As for the passage of time, we are not only aware of this when we reflect on our memories of what has happened. We just *see* time passing in front us, in the movement of a second hand around a clock, or the falling of sand through an hourglass, or indeed any motion or change at all. (Le Poidevin 2007, 76)

It seems, then, it is primarily our experiences of things persisting, changing, or moving, and events occurring in succession or being separated by temporal distance, that are associated with the alleged experience of time passing. Those are the experiences that philosophers sometimes label as "temporal phenomenology".[3] Matt Farr indicates that the term "temporal phenomenology" is an umbrella term (Farr 2020, 6)[4]. One might reckon, however, that if passage phenomenology does exist, it should be something more fundamental (or more transcendent), i.e., something that plays a part in every specific temporal phenomenology. Thus, given that we do have temporal phenomenology defined as such, the question we face is, as Natalja Deng asks, "Does our temporal phenomenology involve passage phenomenology? Or just impressions of succession, order, and duration?" (2019, 7)

It is broadly accepted that our perceptual experiences have representational contents, meaning that experiences are directed at the external world, reflecting certain features or aspects of the world. Throughout this dissertation, I shall follow this convention to interpret our temporal phenomenologies in terms of representational contents. This is neutral as to whether such phenomenology is veridical or illusory: if the world matches the content of an experience, the experience is veridical, otherwise the experience is illusory – the world is not the way the experience makes it appear to be. Under such terminology, illusionism and veridicalism of temporal phenomenology can be respectively defined as follows: *Illusionism* is the view that our temporal experiences represent objective time as passing, yet objective time does not really pass, so our temporal experiences are illusory. *Veridicalism*, on the other hand, is the view that our temporal experiences do not represent objective temporal passage, and hence they are not illusory, because if we do not even have experience of passage, then there is nothing to be illusory. As we will see, the typical veridicalist view is that the purported passage phenomenology represents change, motion, etc., and since the objective reality, which is a B-theoretic universe, also has change, motion, etc., our phenomenology is veridical.[5]

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[3] There are other things that may also be labelled as temporal phenomenology, such as that we experience time as having a direction, that we experience the past as fixed and the future as open, that we experience things as present, i.e., as happening now, and so on, but there are controversies regarding whether or not we truly have those experiences. However, it is less disputable that we do have experiences of change, motion, duration, and succession, and therefore that we have temporal phenomenology as such should be a common ground from which we can start our discussions.

[4] Farr mostly talks about "temporal qualia", but he uses qualia and phenomenology as synonymous.

[5] Note that not everyone agrees that experiences have representational contents. Naïve realists, in particular, usually do not interpret perceptual experience in

Among the various kinds of temporal phenomenologies, the one most frequently associated with the notion of time passing is the phenomenology of change and motion (which is a special kind of change). In this regard, I will primarily focus on whether the phenomenology of change includes passage, yet I believe the central idea that I will be defending also applies to other temporal phenomenologies, such as the phenomenologies of persistence and succession.

Again, there may be different ways we can understand what it means for temporal phenomenology to include passage phenomenology, but I will focus on the notion that our temporary phenomenology has a dynamic character, since the recent illusionism-veridicalism debate can be largely understood as the debate of whether there is an extra dynamic element in addition to the phenomenology of motion and change.

A classic illusionist understanding of in what sense our temporal experiences are dynamic (and therefore illusory) is elaborated by L. A. Paul (2010/2012),[6] according to whom our illusory passage-like experience is somehow analogous to perceptual illusions studied by sciences. In section 1.1 I will start with introducing Paul's analogy and how the veridicalist thinks the analogy fails; then, I will argue that proving the analogy's deficiency is not sufficient to overthrow illusionism. After establishing that there is still theoretical space for illusionism, section 1.2 will explore how we can make sense of the illusionist's stance that the passage of time is a kind of ubiquitous illusion in our temporal phenomenology. Section 1.3 will serve as a development of section 1.2 by appealing to the notions of enduring and perduring. Section 1.4 will discuss how the illusionism-veridicalism debate is related to the distinction between two modes of experiencing changes, i.e., we sometimes have robust phenomenology of change and sometimes have to infer that things have changed. Section 1.5 will highlight that even if our temporal phenomenology does not directly represent the passage of time, it still represents something that is at odds with the B-ontology.

Just like the philosophers in the illusionist camp, philosophers holding the veridicalist position also typically endorse the B-theory of time. Despite what we might expect from their slogan "the passage of time is not an illusion" (Deng 2019, 3), the veridicalist has no intention to argue for the reality of temporal passage. What they want to do is rather to purge the understanding of our temporal phenomenology of all A-ontological implications. Considering this, just to set the stage for discussion, I shall assume that the B-theory is true. This means that objective time does not have such a feature as passage, or put differently, time is static.

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terms of representational content. Naïve realism claims that we simply encounter the world as it really is, and what we normally refer to as illusions are rather cases where things just look the way they are, but we are making false assumptions about how they should look. Nevertheless, even if we avoid the talk of illusions, there is still room for considering whether *what we (veridically) perceive* (the naïve realist's term for representational content) aligns with certain ontological facts or metaphysical theories. If we find out that what we perceive and how things exist cannot be described in exactly the same terms – I will argue that it is what happens in the case of temporal phenomenologies – it will amount to illusionism when such a term is allowed. In any case, I will stick with the talk of representational content for the convenience of discussion.

[6] A similar view can be found in Barry Dainton (2012).

My purpose in section one is twofold: first, to show that the veridicalist's arguments are not fully satisfying, and second, to argue that there can be an important sense in which our phenomenology of change contains a dynamic element that is at odds with the B-ontology, and it is this dynamic feature that explains the intuition that experience gives us reason to think we experience the passage of time.

1.1. Paul's Analogy and Its Difficulties

Various types of illusory motion perception are studied by scientists and discussed in philosophical literature, including apparent motion, motion aftereffect, and induced motion.[7] These perceptual illusions typically involve the perceiver experiencing change and motion when the stimuli are static. A classic case of apparent motion frequently discussed in philosophical literature is the so-called colour phi phenomenon. In this phenomenon, the subject first sees a slide showing a red dot flashing and after a very short period sees another slide showing a green dot flashing at a short distance from the location of the red dot in the first slide. And it is reported that the subject typically experiences one single dot moving the location and changing the colour halfway.[8]

Paul suggests that perceptual illusions as such illustrate how our passage-like experiences are illusory:

> [W]hen there are qualitative differences between the static images of the dots shown on the different sides of the screen, the brain represents the situation as though there is an animated qualitative change in a dot from red to green, and this representation is as of an animated, qualitative change that is no different in character from other sorts of visual experiences as of change that we normally have as part of everyday experience.
>
> [W]hen we have an experience as of passage, we can interpret this as an experience that is the result of the brain producing a neural state that represents inputs from earlier and later temporal stages and simply "fill in" the representation of motion or of changes. Thus, according to the reductionist[9],

[7] Apparent motion occurs when two stationary objects flash in succession, but we experience it as one object moving. Induced motion occurs when a stationary object appears to be moving when other objects nearby are moving, where the stationary object is believed to be caused, or induced, to appear to be moving by the movement of other objects. A typical example is that when clouds are moving on a windy night, the moon and the stars, which are (almost) stationary in the sky, can also appear to be moving. Motion aftereffects occur when you look at a moving stimulus for a while and then fixate on a stationary stimulus, the stationary stimulus will appear to be moving in the opposite direction. The most well-known case of motion aftereffects is the waterfall illusion.

[8] The difference in the dots' colour is not necessary to produce apparent motion. But since the relevant philosophical literature mostly discusses the case of the phi phenomenon involving colour changes (which is why it is the "colour phi phenomenon"), I will follow this practice.

[9] What Paul calls "reductionism" is the view that we do not need to postulate properties of nowness or the passage of objective time to explain our experiences as of nowness or passage (Paul 2010/2012, 102). Paul's reductionism is just the same as what I call illusionism, as it acknowledges the phenomenology of passage while denying objective passage.

> there is no real flow or animation in changes that occur across time. Rather, a stage of one's brain creates the *illusion* of such flow, as the causal effect of prior stages on (this stage of) one's brain. (2010/2012, 113–114)

In the case of perceptual illusions, the brain receives static inputs but produces dynamic representations. This means that the brain creates an element of animation that is not part of the inputs themselves. According to Paul, this is analogous to how we perceive the B-theoretic reality in general: just as the brain projects motion to the non-moving stimuli, the brain also projects temporal passage onto the B-theoretic reality, which, on its own, lacks the quality of passage or flow.

Commentators have pointed out various difficulties with Paul's analogy. One major problem is that whatever cognitive mechanism gives rise to perceptual illusions, there is no reason to think that the same mechanism is also responsible for the impression of temporal passage (Deng 2013, 376). Thus it in effect leaves open the possibility that there is no cognitive mechanism that is generating the alleged illusion of passage. Although one could argue in Paul's favour that it also cannot establish that such a mechanism does not exist, it remains true that the analogy can hardly serve the purpose of explaining how passage-like experiences are generated.

Another issue with Paul's analogy is that while we can understand in what sense perceptual illusions are "illusory", we cannot make sense of the illusoriness of passage-like experiences *in the same way*. This point is articulated by Matt Farr. Perceptual illusions can be properly called "illusions" because they represent situations where static stimuli result in representations of motion. Crucially, "there are independent ways of verifying that the stimulus lacks [the quality of motion]." (Farr 2020, 15) We can verify this because perceptual illusions are "localised in that they generally do not apply wholesale across all of our sensory modalities." (Ibid., 16) This means that we must first acknowledge that our *normal* perceptions of stimuli are *not illusory*, in the sense that we have experiences of motion when encountering moving things and have experiences of stillness when encountering still things. And only on this basis can we understand what it means to experience illusions in the case of perceptual illusions – that is, our experiences fail to represent things in the normal pattern.

Put shortly, in the case of perceptual illusions, we can, through inspections, identify what the stimuli really are and what our perceptions of them are like, and thus articulate how the perceptions misrepresent reality. However, the alleged illusion of temporal passage is not like this: we cannot spell out how it misrepresents reality in any parallel manner, because such an illusion is said to be pervasive. Farr thus concludes:

> [T]he usefulness and empirical meaning of the term 'illusion' in cases of motion and change illusions does not carry over to the case of temporal passage; nothing, it seems, is gained philosophically by taking an illusionist account of temporal qualia. (ibid.)

It appears to me that these objections to Paul's analogy are correct in that the way we misrepresent reality in the case of perceptual illusions is not a pattern that can be expanded or analogously applied to our broad temporal phenomenology.[10] However,

[10] There are other problems with Paul's analogy indicated by commentators that all lead to this conclusion. For instance, Deng indicates that "in order for the

it might be too quick to claim that the talk of "illusion" is entirely off the point regarding the alleged experience of time passing. – It is still possible that our broad temporal phenomenology is illusory (or, not veridical) in the sense that while the fundamental reality, a B-theoretic universe, is static, we experience it as somehow dynamic. In other words, even though such an illusion cannot be verified in the same way as perceptual illusions, or the cognitive mechanism resulting in this illusion may be completely different from the mechanism producing perceptual illusions, it is at least conceptually comprehensible that our broad temporal phenomenology might be illusory in a different way.

If we accept this, then there are in fact two different senses in which our temporal phenomenology can be illusory. The first sense is that we represent the fundamental reality that is static as a whole as dynamic, and the second sense is that we *could* represent still things as moving. The first illusion is a necessary and pervasive illusion, and the second is contingent and local.

Paul evidently holds that there are two levels of illusions in phi phenomenon.[11] As she writes:

> [T]he apparent motion in our sample case in which a computer blinks dots on alternating sides of its screen presents us with two illusions. The first illusion is as of motion, that is, as of a persisting object changing its location (motion requires persistence, but the dots are not causally related in a way that is suitable for the persistence of a single dot, so our sense that we are seeing the motion of a dot is illusory). The second illusion is as of flow or animated character, that is, of the animation arising from "the motion of the dot," which derives from the brain's need to preconsciously accommodate certain kinds of contrasts of property instances. These illusions are different because motion is not flow. (2010/2012, 119)

I am suspicious of Paul's explanation of the second level of illusion,[12] but I think Paul is correct that there are two types of illusions that we may encounter in our temporal experiences.

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analogy to work, we have to pretend that there is discreteness in the block universe, or rather a 'gappiness' of the kind found in the color phi phenomenon." (2019, 9) This presupposition about the B-universe is something we can hardly justify. Hoerl points out that Paul's analogy "turns on an equivocation over the word 'static'." (2014b, 93)

[11] It seems unclear whether Paul thinks there are two illusions or just one illusion (or, more precisely, two aspects of the same illusion) that are included in perceptual illusions. In suggesting the analogy between perceptual illusions and the alleged illusion of passage, Paul seems to imply that we are under the same kind of illusion when (for example) seeing a bird soar through the sky and experiencing a perceptual illusion (as Farr reads it, see Farr 2020, 16). However, that "ordinary experiences of motion and illusory motion qualia are equally illusory *with respect to passage*" (ibid., my italics) does not imply that the two cases are equally illusory, since it is possible that only one type of illusion occurs in the former case while there is an additional illusion in the latter.

[12] If we read Paul in this passage as claiming that the representation of the dot's movement is just the phenomenology of time passing, then I think it is an erroneous view. Relevant issues will be discussed in section 1.4.

Admittedly, once we acknowledge that there are two kinds of illusions, it becomes dubious that we can learn anything substantially informative from Paul's analogy. – Probably just one thing. That is, the analogy should be read as proposing only a modest argument: perceptual illusions show that the brain can produce dynamic output from static input, and therefore, dynamic experiences are compatible with the B-theoretic universe, a static reality.[13] In other words, Paul's use of the analogy might be taken as a rejection of P2 of the Argument from Experience: the dynamic nature of things themselves may not be the best explanation of our dynamic experiences.

Thus, I agree with the critics that what we can learn from Paul's analogy is very limited. The analogy, at most, can support the idea that *if* there is a dynamic element in our temporal experiences, then it *could* be a creation of the brain rather than a genuine feature of reality itself. To be clear, the analogy cannot be used to *prove* that there is a dynamic element in our temporal experiences. Nor does it provide a very cogent explanation of what precisely the dynamic element is. Only on the basis that we take it for granted that our temporal experiences are dynamic, the analogy can serve the purpose of explaining how it is possible. However, as the commentators have correctly pointed out, we also cannot expect too much from the analogy for this purpose.

1.2. Making Sense of "The Second Illusion"

Here is a quick summary of what I have said about Paul's analogy: On the one hand, it fails to establish that there is a compelling analogy between perceptual illusions and the alleged illusion of passage. Therefore, it cannot be used to prove that our temporal experiences include a particular element of animation. Nor does it provide an effective explanation as to how our cognitive system generates such a dynamic element, even if we assume that such an element exists. On the other hand, however, just showing that the analogy is weak is not enough to rule out the possibility that our temporal experiences are illusory in a different sense. Thus, we still need to consider further reasons provided by the veridicalist regarding why there is no additional passage phenomenology beyond the phenomenology of motion and change.

Let us go back to the illusionist stance that our experiences can be illusory in two ways. Against this, the veridicalist's position is that there is only one illusion, or that we cannot make intelligible the second illusion. Here is how Deng argues for this:

> [T]he claim that there are really two illusions involved in cases of apparent motion now seems less plausible than ever. The illusion that is created by the brain's response to the static inputs <red flash left>, <green flash right> is the illusion of a single dot moving and changing color. If the change has an "animated" character, then that character is not a separate illusion, but just an aspect of the illusory motion experienced. The illusoriness of the experience of apparent motion concerns the (seeming) movement of the (seemingly) numerically identical dot. It is hard to see what the second illusion could be, or why it should be given rise to by the same cognitive mechanism. (2013, 376)[14]

According to Deng, there is only one dynamic element in the colour phi phenomenology, that is, we misrepresent the static stimuli – two dots – as one moving dot. This follows that if no perceptual illusion happens, there should be nothing

[13] Prosser (2016, 30) suggests that this is more likely what Paul is getting at.
[14] The same point is put slightly differently in a later paper by Deng (2019).

dynamic in the story – what we have in our phenomenology are simply static inputs <red flash left> and <green flash right>.

I agree with Deng that it is hardly the case that "the second illusion" – the alleged illusion of passage – is produced by the same cognitive mechanism that generates perceptual illusions, but I do not think that we cannot make sense of this second illusion or that we only have experience of static things when no perceptual illusion happens. My view is that there are two illusions involved in perceptual illusions such as the colour phi phenomenon and one illusion in all of our temporal experiences. In the rest of section 1.2, I will explain how it is the case.[15]

Perceptual illusions typically involve static input resulting in dynamic output. However, the meaning of being "static" can be ambiguous. In the colour phi phenomenon, for instance, the statement "static input results in dynamic output" mostly means that the dots are static, and yet we perceive them as moving. However, upon closer inspection, the stimuli included in the phi phenomenon *as a whole* are actually not static – what really happens is that one slide changes to another slide. If we consider the phi phenomenon in this way, it follows that we actually do not represent static things as dynamic; instead, we (mis)represent one kind of change (the change of slides with static images) as another kind of change (an animation clip). This is the illusion that the phi phenomenon captures. However, I suggest that there is another level of illusion that the notion of illusory passage seeks to capture. That is, we experience the metaphysically static reality, the B-theoretic reality, as somehow "dynamic".

As indicated above, both the illusionist and the veridicalist typically accept the B-theory of time. Now we may consider further what it implies if the B-theory is true. In the common version of the B-theory, reality is a four-dimensional block universe. As Minkowski writes, "space by itself, and time by itself, are doomed to fade away into mere shadows, and only a kind of union of the two will preserve an independent reality." (Minkowski 1952, 75) This means that in the four-dimensional block, time, as one of the four dimensions, and space, the other three dimensions, are ontologically homogeneous. This means that just as all spatial locations are equally real and exist altogether, all temporal locations likewise are all out there. Here is a typical description of the B-theoretic reality:

> According to…the *B-theory* of time or the *tenseless theory* of time, none of the apparent dynamic features of time are real. By 'dynamic' features of time I mean, roughly, those apparent features of time for which there is no spatial analogue. Objects and properties are distributed over space, just as events are distributed through time. When one looks along a line in space, one sees a series of different objects and properties at different locations. But there is no sense of any *change*, no *dynamic* variation from one place to the next. (Prosser 2016, 1)

Then let us think about how an object exists in space. Suppose there is a rope extending in space, and some parts of the rope are smooth and other parts are rough. There is certainly a contrast between different properties of the rope in its different spatial locations, but we usually won't say the rope changes, say, between being smooth and being rough. Instead, we simply say some parts of the rope are smooth

[15] It is worth noting that I do not think the understanding of the second illusion I propose aligns with Paul's own view on the second illusion.

and some parts are rough. This applies to any spatially extended thing. A mug consists of a cup and a handle, a dog consists of a head, a body, a tail, and four legs, and a room consists of a mug, a dog, and a bunch of other things. These things all distribute over space, and the term *change* does not apply to their spatial variation.

If time and space are entirely homogeneous, then the term change should also be inapplicable to the mere contrast between things' different states at different times. This is the point made by McTaggart in his criticism of (what he refers to as) Russell's view of change. In Russell's view of change, if an object *O* has the property *F* at t_1 and does not have the property *F* at t_2, then it is sufficient to say that *O* changes (McTaggart 1927, 14). This notion of change is just what "change" means in the B-theoretic world (the "at-at" notion of change).

However, in McTaggart's consideration, which I find quite right, mere temporal variation, much like spatial variation, does not qualify as change. Suppose, to use McTaggart's example, a poker is hot on a particular Monday and cold on all other days. Then it is true that the poker is hot on that particular Monday and not hot on any other day, regardless of when the proposition is uttered. In other words, both the quality of being hot on that particular Monday and the quality of being not hot on any other days than that Monday are real qualities of the poker at all times. Nothing ever changes. Therefore, it is "erroneous to say that there is any change in the poker." (ibid., 14–15)

This conclusion should come as no surprise if we keep in mind the spatial analogy.[16] Being smooth in some parts and rough in other parts hold true for the rope, regardless of the spatial location from which we speak. If we agree that the contrast between different properties in different spatial locations does not make the rope change, then there seems to be no reason that the contrast between being hot on the Monday and being not hot on other days constitutes a change in the poker. But the fact is that we do tend to ascribe "change" to the poker while not to the rope. Why is this the case? What distinguishes temporal variation from spatial variation?

If we acknowledge that temporal variation and spatial variation are ontologically homogeneous, then the disparity likely lies in how we experience them or how they appear to us. I suggest that the way we experience temporal existence is different from that of spatial existence in three aspects:

(1) Limited access: we have access to an object's various spatial states in one perception but only one temporal state in each perception. Put differently, a thing's multiple spatial states can coexist in one perception, whereas its different temporal states cannot.

(2) Involuntariness: which part of temporal existence is presented in our perception is entirely beyond our control, while we have at least some degree of control over which part of spatial existence is experienced.

(3) Directionality: our perception of things' states in time exhibits an irresistible sense of directionality – once a state is perceived by us, it immediately fades from our immediate perception and never will return, unlike in our perception of spatial existence, which lacks obvious directionality.

[16] The example used by McTaggart is the meridian of Greenwich, which has the property of being within the UK in some spatial locations and the property of not being in the UK in other spatial locations (McTaggart 1927, 15).

I shall characterise the three aspects as this feature of our perceptual experience: it has a *confined temporal horizon*, which lacks any comparable spatial counterpart.[17]

This feature of perceptual experience manifests as a phenomenal difference in our experience of spatial and temporal existence: we experience temporal variation as though it were a dynamic process, involving things' different states irresistibly appearing and disappearing, or things' news states constantly replacing their old states; while in the case of spatial variation, we simply perceive the contrast between things' different states in different spatial locations. – I suggest that this is why we ascribe the notion of change to temporal variation but not to spatial variation: *change* involves the coming into existence and coming out of existence of things' states, which we only experience in the case of temporal existence.

Perceiving a new state of things in space does not have to be accompanied by some other states' ceasing to exist, whereas perceiving an object's one particular state in time always comes hand-in-hand with perceiving its previous state ceasing to exist. This will become clearer if we think about the rope and the poker again. Let us assume the part of a long rope right in front of us is the rope's *state here*. Then, if we take a step to the left, we get a new state here. Nevertheless, our access to the new state here does not have to be accompanied by the loss of the previous state here in our immediate perception. Conversely, in the case of the poker, our perception of the poker's being not hot necessarily involves the disappearance of the state of being hot in our perception. In a sense, the former presupposes the latter.

To delve a little deeper, imagine there is a rope in an entirely dark space, and we have to experience the rope using one's sense of touch only. Suppose one of your hands starts with one end of the rope and slides to the other end, then in each unit of your tactile perception, you will access only a small part of the rope. Will you think the rope is changing or moving through space? Presumably no. The reason is that from our usual engagement with spatial existence, we know that the rope's various parts can exist in our experience together, and also, practically there is no difficulty in making this so – we can use visual sense to experience it, or simply use two hands. The fact that we can freely move our hands back and forth along the rope and freely decide which parts we touch will not impose on us the feeling that the rope's states are constantly, irresistibly appearing and disappearing. This is drastically different from the temporal case, where once a temporal state of the poker leaves our immediate perception, we consider it permanently gone. There may be room for disagreement regarding whether the fact that when a part of spatial existence leaves our immediate perception, we usually do not think of it as gone out of existence, is a matter of phenomenology or cognition. It may appear to be merely cognitive, but from my perspective, it is more of a case where our habitual way of thinking is shaped by the way our perceptual experience works.

If we want to further advance the thought experiment, we could imagine a creature that spends its whole life crawling along a rope, able to move in only one direction.

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[17] It may not be clear what counts as one state of things, and it also can be argued that several states can be experienced in one perception since we have immediate experience of change and motion. I will clarify these issues in section 1.6.

Also, there could be space for debating whether these should be taken as three aspects of one feature or three separate features, but I do not deem it crucial, so I will stick with my current use.

Suppose this creature has no other perceptual organs besides the sense of touch; then its perceived world would be just the small portion of the rope where it is currently located. Would the creature think that the rope is changing or moving through space? I think it would, although it may not call what it experiences as a "rope", as a rope is supposed to have spatial extension, something that this little creature can never experience. We human beings do not experience spatial existence as the creature does, hence we do not think of rope as changing or space as passing. However, the way we experience temporal existence is just analogous to how the imaginary creature experiences space, and it is this peculiar way we experience temporal existence that leads us to the belief that things are changing in time or moving through time.

It should be clear by far why we tend to ascribe the notion of change to temporal variation but not to spatial variation: we experience things' different states at different times as though they were irresistibly appearing and disappearing, which is what we typically mean by "change", whereas there is no comparable dynamicity in the spatial case. Note that what I am saying here has no bearing on whether the appearance and disappearance of states really happen to things in the fundamental reality (since I assume the B-theory is true, they do not). It also has no bearing on whether or not we *think* things' states are constantly appearing and disappearing in reality. – I believe the latter is beyond a mere phenomenological issue and is affected by one's prior notions of the nature of time.

According to McTaggart, change can only happen in an A-series, i.e., an object must have A-properties such as presentness, pastness, or futurity to be capable of changing. For instance, consider the poker; it only qualifies as undergoing change if being hot is initially its present state and then becomes not the present state. In other words, change occurs only if the proposition "the poker is hot now" is sometimes true and sometimes false (ibid., 15). McTaggart's account on this matter is brief, and it does not seem fully clear why he thinks an A-series is essential to change. Yet if what I said about the difference between temporal variation and spatial variations is correct, then why an A-series is essential to change can be understood to the effect that only an A-series makes possible the dynamic kind of change, which involves the appearance and disappearance of things' states or properties. In a B-series, an object's all states just exist altogether – the object always has these states, so there is no dynamic change, whereas in an A-series, new states constantly become the present state, and new states can only become the present state by replacing some old states, and thus the old states, in an important sense, cease to exist.

This may align best with presentism as the ontological theory, according to which only present things exist, as opposed to the growing block theory, in which the past and the present exist but not the future, and the moving spotlight theory, in which all things exist and are equally real, just as in the B-theory. Yet there is also a sense in which things' states are undergoing a shift in the ontological status even in the latter two theories. That is, what is central to an A-series and thus to all versions of the A-theory of time is that there is a privileged present, and being privileged present means that it is what is occurring (in a manner of speaking); hence when a state becomes the present state, it becomes what is occurring, and when it ceases to be the present state, it ceases to occur, even though this does not necessarily mean it ontologically vanishes.

Whether this makes sense as a metaphysical position or not, for my purpose we can set aside the metaphysical issue and focus on how we experience the world. As far as

the phenomenal character of our experience is concerned, I suggest that our experience demonstrates an inherent A-series, where there is a clear distinction between past, present, and future: what is currently presented in our immediate perception is the experiential present, whereas the experiential past refers to what we once experienced but no longer do, and the experiential future is what we anticipate to experience. This has no bearing on whether the reality is an A-series or not, since there is no guarantee that how the world appears to us is aligned with how it exists in itself.

One thing worth emphasising again is that the contrast between different states of things is a different notion from change. The mere contrast among different states in different spatial or temporal locations does not constitute change, because if those states always exist – as postulated in the B-theoretic universe – then nothing ever changes. What we would refer to as change must involve a thing first possessing a state and then losing it. – This notion of change is both logical and consistent with our intuitive understanding of what change involves. The latter aspect is demonstrated in the fact that we attribute the notion of change to temporal variation but not spatial variation. The veridicalist seems to take for granted that the contrast between different states/locations at different times is just the same thing as change/motion, but such identification is far from self-evident.

Now it should be clear just what the second illusion is. That is, while things in the fundamental reality, the B-theoretic universe, are static and have only the contrast between different states at different times, we somehow experience them as undergoing dynamic changes, which involves the appearing and disappearing of things' states.

This will also help us better understand the colour phi phenomenon. The stimuli involved in the phenomenon can be understood as two different states of a screen at two different times: <red dot left> and <green dot right>, which happen at t_1 *and* t_2 respectively. If no perceptual illusion occurs, we will experience one slide changing to another. – We do not simply experience the contrast between the screen's two different states at two different times but experience them as occurring in a dynamic manner: in perceiving the screen displaying the first slide, we also perceive the screen losing the state of displaying the blank, and in perceiving the screen displaying the second slide, we also perceive it losing the state of playing the first slide. Thus, while the inputs <t_1, red dot left> and <t_2, green dot right> do not appear and disappear in the B-theoretic reality and are *static* in this sense, we experience them as though they were undergoing the process of appearing and disappearing and are *dynamic* in this sense. This is the second illusion involved in the colour phi phenomenon, the illusion that is relevant to the intuition of experiencing time passing.

Given that all parties in the debate allow that we have phenomenology of change, what I disagree with the veridicalist is that they think we experience merely the contrast between things' different states at different times and such contrast counts as change in the B-theoretic sense (the "at-at" notion), whereas I think that there must be more to our phenomenology of temporal variation to distinguish it from that of spatial variation and thus to qualify as the *phenomenology of change*. – I have argued that instead of experiencing the mere contrast between different states, we experience things changing in a dynamic manner, which involves the irresistible appearance and disappearance of their states.

1.3. Change, Phenomenological Endurantism, and The Passage of Time

We may also consider the nature of the change we experience, as well as change in the B-theory, in terms of endurantism and perdurantism.

Perdurantism and endurantism are two views about the persistence of objects through time. Endurantism maintains that objects are wholly present at each moment of their existence, while perdurantism claims that objects are extended through time and consist of temporal parts. Given that time in the B-theoretic universe is just another dimension like the three spatial dimensions, it should follow, as perdurantism suggests, that an object comprises temporal parts, just as they comprise spatial parts.[18]

This means that an object's complete existence is collectively composed of these temporal parts, which is akin to how a mug's total existence in space is the sum of its cup and handle, or how a rope's complete existence is the sum of all its parts. However, due to our confined temporal horizon, only one state of an object is given to us in our experience each time, instead of viewing the object as the sum of all its temporal parts, we tend to view the state we are accessing as what the object is. In other words, we tend to view things as enduring, i.e., as wholly present at each point in time and having no temporal parts, regardless of whether they are perduring or enduring, or whether they comprise temporal parts in the fundamental reality.

If we accept that things really are perduring in the B-theoretic universe, then it should follow that the term "change" does not apply to things. The reason is that, again, change must involve the coming into existence and the coming out of existence of things' states, which do not happen to perduring things.

Suppose there is a spatially two-dimensional object which appears to us as a circle, and over a certain period of time, it becomes smaller (say, shrinking from size A to size B in Figure 1). Imagine this two-dimensional object exists in a three-dimensional space-time, with the third dimension being time, and imagine we can access the object's complete existence in the three-dimensional space-time, then the object presumably would look like a conical frustum as shown in Figure 2. This means what we normally view as a two-dimensional circle really exists in the three-dimensional space-time as a spatio-temporal conical frustum – we view it as a two-dimensional circle only because we have to perceive it in a confined manner. If the circle's complete existence is a spatio-temporal conical frustum, then there is nothing to change, as it is always a conical frustum. Nothing ever changes. It is only because we experience the object as if it were enduring that there is a sense of change: what we view as the object, i.e., the only state, among the object's many states, that stands in our immediate perception, is constantly changing.

[18] I shall not delve into whether the B-theory of time necessarily leads to perdurantism but assume it does.

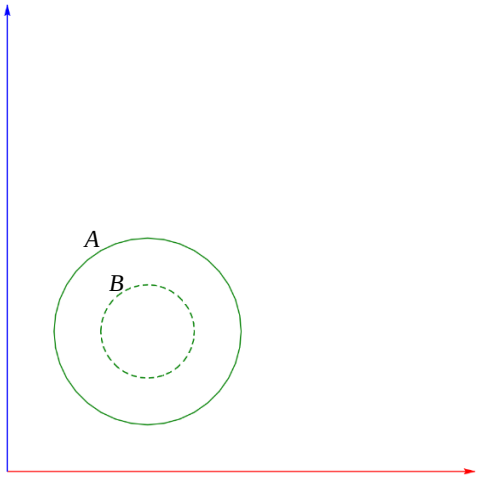

Figure 1 A two-dimensional circle that undergoes shrinking

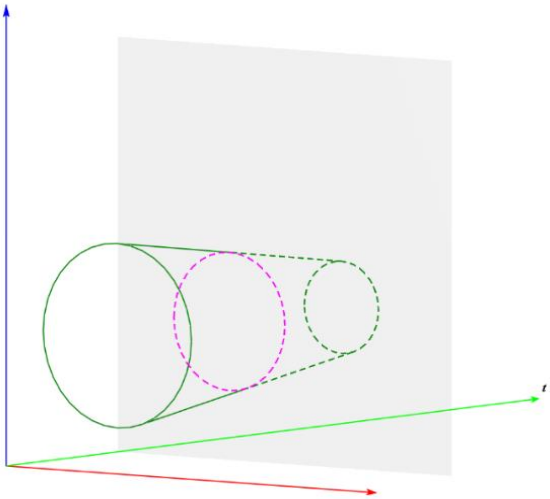

Figure 2 How the shrinking circle would look like in three-dimensional space-time

We might consider how things are different in the spatial case. Since our access to things' various spatial parts has no inherent restriction, we do not have to experience an object's spatial parts as constantly appearing and disappearing, and consequently we usually just view the sum of all spatial parts of an object as what the object really is, rather than taking each spatial part as what it is. A mug for us is neither the cup nor the handle – it is the sum of the cup and the handle. Thus, in the spatial case, we experience things as having spatial parts, while they really consist of spatial parts. And it seems that when we think of an object as being composed of spatial parts, we tend not to refer to the contrast between its different spatial parts using the term change.

Some philosophers have explored how phenomenological endurantism[19] might have contributed to our belief that time passes or the belief that we experience so. David Velleman (2006) and Craig Callender (2017) maintain that we, for various epistemological and psychological reasons, view ourselves as enduring through time, i.e., we think we are present in our entirety whenever we exist. In Callender's account, for instance, one's conception of the self usually involves a boundary between the self and the non-self, as well as what one is doing right now and one's plans and anticipations about what happens next. This requires that "this diachronic self is conceived as one object" so that one can "distinguish itself from others in planning and other interactions." (2017, 248) In other words, we need a steady point, which retains its identity throughout all the occurrences and alterations over time, to accommodate all the plans in one's mind and all the interactions one has with everything else in the world. And this steady point is just one's ego. As a result, "we don't believe that our present self is merely a temporal part of a larger four dimensional self. Instead we hold that our selves are wholly present at each time," (ibid.) – in other words, we view ourselves as enduring, being one same, complete entity whenever we exist – nothing is missing from me when I am now.

[19] A provisional term for the view that we experience things as enduring, wholly present whenever they are. It has no direct bearing on whether endurantism is the correct theory of persistence.

As for how the enduring self is relevant to the idea of (experiencing) time passing, there are two simple steps. First, since what we view as ourselves is constantly changing (due to our confined temporal horizon), we tend to think of ourselves as moving through time. Then, once we get the self moving through time, "it's a very small step to getting time itself moving too." (Callender 2017, 252) In a word, viewing the self as moving through time just amounts to viewing time as moving. The process is articulated by Velleman:

> I exist in my entirety at successive moments in time, thereby moving in my entirety with respect to events. As I move through time, future events draw nearer to me and past events recede. Time truly passes, in the sense that it passes *me*. (2006, 13)

That is to say, the notion that my self is moving through time (aka. the ego-moving perspective) and the notion that time is moving past me or simply time is moving or passing (aka. the time-moving perspective) are just two perspectives of seeing the same thing. Once we have one of them, we can effortlessly switch to the other. A simple way to understand this is that the two perspectives are just analogous to what happens in relative motion in space: When you are sitting on a train, if you take yourself as fixed, then for you the landscape is moving, and if you take the landscape as fixed, then it is you that is moving. Analogously, the ego-moving perspective treats the timeline as the background landscape and the ego as moving, while the time-moving perspective treats the ego as static and takes the timeline as the changing landscape (Callender 2017, 252–253).[20]

In a similar manner, Prosser (2012, 2016) also draws a connection between phenomenological endurantism and our alleged experience of time passing, yet he further indicates that we not only view ourselves as enduring but view all objects as enduring, since "in order to experience change our experience must also represent something as retaining its identity through the change." (Prosser 2016, 173) The reason is that we will think change occurs to an object only if the same object retains its identity and yet first possesses a property *F* and then loses *F* (or possesses not-*F*); if there is instead one object having *F* and another object having not-*F*, even if the two objects appear to us as one followed the other, we will not think of two objects as undergoing change in properties – they appear and disappear as a whole, which is different from undergoing a change in properties. And "it is this notion of a single entity passing 'through' a change that captures at least a very important element of the experience of temporal passage." (ibid., 175)

[20] An empirical research conducted by Latham, Miller and Norton (2020) supports the view that the ego-moving scheme and the time-moving scheme are just two perspectives of seeing the same thing. Arguably, the ego-moving perspective is the leading aspect in the two perspectives, since, as Callender suggests, the impression of ego moving through time or time moving arises from the ego's tendency to view itself as wholly present whenever it is. However, this does not mean that we must first have the moving ego perspective and then the moving time perspective. The sequence is not vital. The point is just that we can easily switch between the perspective of ego moving and that of time moving. Following this idea, we might also say that experiencing objects moving through time and experiencing the movement of time are just the same thing to us, once we have one of them, we naturally have the other.

It could be contended that these accounts of the connection between phenomenological endurantism and the notion of time passing cause no trouble for veridicalism. For instance, it might be argued that Callendar's explanation of why the self is enduring is too psychological, and thus it may be able to explain why we tend to *think* that ourselves are moving through time or that time is moving, but it leaves room for the possibility that either viewing the ego as moving through time or view the time as moving is only a matter of how we understand (or misunderstand) the content of one's experience rather than a matter of what we actually have in the phenomenology. Prosser's account of why we experience everything as enduring through time is immune to the criticism of being too psychological, but it faces a similar problem: what is presented in our phenomenology, the veridicalist would claim, is just one state of things after another state, and it is a different issue whether we understand these states as part of something enduring or perduring. In other words, even if we accept that experiencing things as enduring is tantamount to experiencing things as moving through time and thus experiencing time as moving, as long as the content of the experience does not include the phenomenology of things' enduring or perduring, there is no way to make sense of the claim that phenomenology involves passage.

It can be hard to fully settle the issue of whether we experience things as enduring or merely experience things' different states. Yet based on what I argued above, I suggest that there is a sense in which our phenomenology is the *phenomenology of enduring* – that is, when we experience an object, only one state of it can be given to us, and consequently, at each time this sole state presented in our experience is just what the object is for us. In other words, we experience an object as wholly present whenever we experience it.

The veridicalist could still argue that even this involves an element of understanding beyond pure phenomenology. I deem this right. Yet as I understand it, viewing things as enduring is first and foremost a phenomenological issue and then a cognitive issue. Indeed, it is one thing whether or not only one state of an object exists in our experiences, and it is another thing whether or not we take this sole state as the whole existence of the object. If we grant a "yes" to the first question, it is highly likely that we will take the object's sole state in our experience as its whole existence, but certainly this is not necessary – if someone already accepts perdurantism as the correct metaphysical theory of persistence, they probably will think that the sole state standing in their experience is only part of the object. Nonetheless, I suggest that even if we think that things are perduring in reality, we still have to experience things as if they were enduring, in the sense that whenever we experience something, only one state of it is given to us. In this sense, I argue that viewing things as enduring is first a phenomenological issue and then a cognitive issue. The cognitive aspect might be corrigible, but there is no way for us to modify the phenomenological aspect.

To get veridicalism off the ground, we need to isolate understanding completely from phenomenology. But I doubt it is truly possible to do so. Given that we tend to view ourselves as wholly present whenever we are (as Callendar suggests), it is highly likely that evolution has predisposed the brain to view other things in the world we

live in as existing in the same way as ourselves. I doubt that we can truly drive out such disposition from our phenomenology.[21]

The veridicalist wants to slim down phenomenology to the minimum, but it is dubious how far they can go. There is at least one difficulty that will follow: if we want to deny that our experiences of things include even a modicum of understanding, then we may not even be allowed to talk about experiencing change in the B-theoretic "at-at" sense, since change, no matter in what sense, at least must rely on the object retaining its identity (as Prosser indicates). Yet if one insists that understanding can be fully isolated from phenomenology, then presumably an object's retaining identity is also not part of phenomenology. For instance, in my example of the two-dimensional shrinking circle, for one who accepts that we experience things enduring through time, they would say that we experience the circle as constantly obtaining smaller sizes and losing larger sizes, and the veridicalist (as I understand them) would say that we experience a circle's different sizes at different times. Yet if we insist on expelling all elements of understanding from our phenomenology, perhaps we can only say that we experience a series of circles of various sizes, without being able to refer to them as the same object. The same line also applies to other phenomena that the veridicalist acknowledges as contents of our phenomenology, such as motion (a kind of change) and persistence (things existing over time). The veridicalist's effort to banish understanding from our phenomenology may cause more difficulties than they expected.

1.4. The Myth of The Two Modes of Experiencing Change

In this section I will examine the illusionism-veridicalism debate in a different light, which has to do with the two modes of experiencing change that philosophers frequently talk about. Specifically, we sometimes directly perceive change while sometimes we can only infer that things have changed. The two modes of experiencing change are famously expounded by C. D. Broad:

> But it is a notorious fact that we do not merely notice that something *has* moved or otherwise changed; we also often see something *moving* or *changing*. This happens if we look at the second-hand of a watch or look at a flickering flame. These are experiences of a quite unique kind; we could no more describe what we sense in them to a man who had never had such experiences than we could describe a red colour to a man born blind. It is also clear that to see a second-hand *moving* is a quite different thing from "seeing" that an hour-hand *has* moved. In the one case we are concerned with something that happens within a single sensible field; in the other we are concerned with a comparison between the contents of two different sensible fields. (1923/1927, 351)

It is said that we can directly perceive the movement of the second hand of a clock but not that of the hour hand; similarly, we can directly perceive a tree swaying in the

[21] It could be an interesting question whether our cognitive system is innately wired in such a way that we have access to only one state of things at a time, resulting in our tendency to view ourselves and things as enduring, or whether we, for some psychological or practical reasons, need to view ourselves and our environment as wholly present at each moment, and consequently the brain has evolved to better accommodate this need. This presumably is a question beyond pure philosophical enquiries.

wind but not a sapling growing into a big tree over decades. The key difference between the two modes of change experiences is that in the first type of change experience, change is a phenomenology that is presented in our mind, while in the second type we have to infer that an object has changed or moved from a comparison between one's memory of the object's past property or location with one's present perception of it. Thus I will refer to the first type of change experience *non-inferential change experience* and the second type *inferential change experience*.

In this version of the illusionism-veridicalism debate, the illusionist typically assumes the passage of time is *directly* given to us in non-inferential change experiences. Le Poidevin evidently holds this view:[22]

> We are indirectly aware of the passage of time when we reflect on our memories, which present the world as it was, and so a contrast with how things are now. But much more immediate than this is *seeing* the second hand move around the clock, or *hearing* a succession of notes in a piece of music, or *feeling* a raindrop run down your neck. There is nothing inferential, it seems, about the perception of change and motion: it is simply given in experience. (2007, 87)

It seems obvious that non-inferential change experiences are more dynamic than inferential change experiences, as what we have in the case of inferential change experiences are mere impressions of objects occupying different spatial locations or exhibiting different states at different times, while non-inferential change experiences consist of an extra element of "flow" that inferential change experiences lack. And according to the illusionist view, this extra element of flow is just the phenomenology of temporal passage.

Against this alleged asymmetry between the two types of change experiences, Hoerl, as a representative veridicalist, argues that it is a mistake to think non-inferential change experiences, "in which we do have a direct perceptual experience of an object moving or changing, must involve something else being presented in experience in addition to the object occupying a series of different positions at different times or having different colours at different times." (Hoerl 2014a, 196) According to Hoerl's diagnosis, the reason why people tend to think non-inferential change experiences contain passage phenomenology is this:

> [We] mistake the difference between two different modes through which we can become aware of the movement of an object – that is, through the involvement of memory as well as through direct perceptual experience – for a difference in what it is we become aware of. (2014b, 95)

As far as Hoerl is concerned, it is true that sometimes we non-inferentially perceive motion and change, while other times we have to turn to memories and inferential capacities to become aware of motion and change, but this is only a difference in the way we experience things, not a difference in the content of experiences. Hoerl's position, in short, is that just as in cases of inferential change experiences, in non-inferential change experiences we also experience "simply variation over time in a thing's location and/or other properties." (Hoerl 2014a, 197)

[22] Paul also can be read as subscribing to this view. See the quotation at the end of section 1.1.

I think Hoerl is right in that there is no *extra* phenomenology of temporal passage in addition to the phenomenology of motion and change; especially it is not the case that we directly experience passage in non-inferential change experiences but not in inferential change experiences. However, from my perspective, the phenomenology of change and motion is just the phenomenology of temporal passage. The reason is that, as argued in section 1.2, the contrast between various states of things is a different concept from change. When we experience things' properties or locations, we not only experience their "variation over time" but experience them as undergoing changes of the dynamic kind, i.e., undergoing the process of coming into existence and coming out of existence. On this account, although there is no independently identifiable phenomenology of time passing, the phenomenology of things moving and changing is just the phenomenology of time passing.

In arguing that all we experience are things occupying different locations or having different states at different times, the veridicalist wants to establish that our experiences of things' states are fully aligned with the reality depicted by the B-theory. However, this view underplays the important fact that the way we experience things' different states at different times is fundamentally different from the way they exist in the B-theoretic reality. While all of an object's states exist in B-theoretic reality altogether, only one state can stand in our perception. Any state that occurs before the perceived state is deemed "gone" or no longer existent, while any state that might come after that state has not yet existed from our perspective. – As far as how things appear to us is concerned, none of these states seems to exist.

This distinctive manner in which we experience things' temporal variations has no spatial analogy, as our perceptual experience has a confined temporal horizon but no spatial equivalent. This presumably explains in what way space and time are different for us: the reality itself is a four-dimensional block, and we, for some reason, experience three dimensions of it without restrictions, being able to access different parts of the three dimensions freely, and yet have to experience the fourth dimension in a confined manner. We thus call the three dimensions that we can freely explore *space*, and the dimension that we are destined to perceive in a constrained way *time*. Moreover, the difference in our experiences of the three dimensions and the fourth dimension also leads us to think that things move through time or time passes but not that things move through space or space passes. It is possible for us to refrain from thinking time really passes once we learn that in reality things exist in the fourth dimension just in the same way as they exist in the other three dimensions, but it is hardly possible that we can experience the fourth dimension in the same way as we experience the other three dimensions. If the veridicalist wants to deny that we experience spatial and temporal existence so differently, they will have to explain why we view the three dimensions and the fourth dimension so differently.

It is typically assumed by the illusionist that if the passage of time is to be found anywhere in our temporal experiences, it must be in non-inferential change experiences, not in inferential change experiences. Indeed, non-inferential change experiences appear to be more dynamic in some way. However, I agree with Hoerl that the apparent asymmetry between the two modes of experience is not genuine regarding temporal passage. Yet unlike Hoerl, who claims that experiences gained from neither of them contain dynamic character, my view is that there is something dynamic about our experiences of change gained from both modes. That is, what we mean by experiencing change in both modes is that we experience things obtaining new states that they did not possess before and losing states that they once possessed.

In this sense, we experience things moving through time and time passing in both modes. A major difference between Hoerl's and my views is that Hoerl thinks we experience only the contrast between different states at different times, while I think we experience things' states as constantly coming into existence and coming out of existence. Thus I agree with Hoerl that non-inferential change experiences are no more dynamic than inferential change experiences – they are equally static for Hoerl and equally dynamic for me.

There is, however, one remaining question to be asked: how should we understand the two modes of experiencing change? Especially, how should we understand the fact that non-inferential change experiences appear to be more dynamic than inferential ones? Is it just a cognitive error, or such a difference is genuine in some way?

I believe it is hardly deniable that we have the kind of non-inferential change experiences, as opposed to inferential change experiences, and there is a sense in which non-inferential change experiences are more dynamic than inferential change experiences. For in the case of inferential change experiences what we perceive are merely objects occupying different spatial locations or exhibiting different states at different times, while in the case of non-inferential change experiences, we have continuous, animated representations in our mind. – As one might call it, non-inferential change experiences have an extra level of dynamicity. However, as Hoerl correctly suggests, this extra level of dynamicity does not represent the difference in whether or not we perceive the passage of time, but rather the difference in the way we experience things. Such difference, once we look closely, is in effect a difference in how the brain interprets signals it receives. (For clarity, I will use the term "continuous change" to refer to the robust phenomenology of change, which is the superficial level of dynamicity, and the term "dynamic change" to the underlying level of dynamicity, which involves the constant appearance and disappearance of things' states. Representations of continuous change exhibit only in non-inferential change experiences, whereas the phenomenology of dynamic change is part of change experiences in both modes.)

The crucial fact here is that both types of representations – whether they are representations of continuous change, which we have in non-inferential change experiences, or representations of stillness, upon which our inferential change experiences are based – are products of the brain. It is generally accepted that our sensation takes in only discrete information about the world each time, and the reason why we can have continuous representations in perception is that the brain is constantly processing and integrating sensory information and generating continuous and coherent representations of what is going on in the world. That suggests that there is no fundamental difference between the way we perceive continuous change and stillness – in both cases, what the brain keeps doing is to receive various discrete signals from the world and construct a mental representation of what is going on. The difference only lies in how the brain interprets the signals it receives: it translates some signals into representations of continuous change and others into representations of stillness.

The brain's central role in creating representations of continuous change is demonstrated in the fact that motion perception not only happens in the case of real motion, such as a car driving by and a tree swaying in the wind, but also in the case of illusory motion, including apparent motion, induced motion, and motion aftereffects. Due to the limitations in the way our perceptual system engages the world – for

example, the inputs that our eyes can receive are just discrete units of visual information rather than complete images of motion and change – all that the brain can do when processing data is just to produce an image that is close to reality as much as possible. Under ideal circumstances, when the object is actually moving, the brain should produce a picture of motion, while when there is no change or motion in reality, the brain should produce a picture of stillness. However, the brain is not sophisticated enough to always be right in distinguishing between the two kinds of circumstances. This is how perceptual illusions of apparent motion happen. Scientists have discovered that the mechanisms behind apparent motion and real motion are very similar.[23] Apparent motion happens presumably as a result of the brain misinterpreting data. Different mechanisms are thought to be associated with induced motion and motion aftereffects.[24] Yet it is common to all types of illusory motion that the brain is responsible for the representations of change. A seemingly opposite but actually similar story happens when we fail to accurately represent motion and change. The movement in reality has to be salient to a certain degree to trigger the motion detecting mechanism in the brain, otherwise the brain will interpret the stimuli as still. The reason why the brain fails to represent, say, the movement of an hour-hand is that the movement is not salient for it. This shows that the brain is also responsible for the representation of stillness.

How does our perceptual system work differently when it accurately represents motion and stillness, compared to when it misrepresents stillness as motion or motion as stillness? For instance, how is it different between our experience of the second-hand movement, where motion is accurately represented, and the hour-hand movement, where motion is misrepresented as stillness?

Scientists sometimes distinguish between sensation and perception. Although the distinction is rather rough and not approved by everyone, it can be helpful to unravel this. Generally, sensation is the bottom-up process by which our senses receive

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[23] A typical experiment was conducted by Larsen et al. (2006). In this experiment, three different displays are shown to a person in an fMRI scanner: (1) a control condition: two small squares at a short distance were flashed simultaneously, (2) a case of real motion: one small square was moving back and forth, and (3) a case of apparent motion: two small squares were flashed one after another so that they appeared to move back and forth. The fMRI images showed that the brain activations in (2) and (3) are very similar.

According to Goldstein and Cacciamani (2021, 180), scientists used to treat apparent motion and real motion as separate phenomena governed by different mechanisms, but as increasing evidence has been found as to how the neural responses to real and apparent motion are similar, the two types of motion are usually studied together now.

[24] The motion aftereffects are usually explained in terms of neural adaption, where the prolonged exposure to a moving stimulus leads to a temporary adaptation of some neurons in the brain that respond to motion, and when looking at a stationary stimulus, the neurons that were previously adapted will continue to respond in the same way for a short time, thus creating the representation that things are moving in the opposite direction. There are fewer agreements concerning the mechanisms behind induced motion, but usually it is believed to be due to the way our visual system interprets relative motion, influenced by the surrounding context and our brain's expectations based on past experiences.

outside inputs, convert them into electrochemical signals that the brain can read, and send the signals to the brain; perception, on the other hand, is the top-down process in which the brain interprets and organises the information it receives. Then, when we observe the second-hand and hour-hand movements, what happens presumably is this: the stimuli enter the senses and are transmitted to the brain via the same pathway, but when the brain decodes the inputs, the signals related to the second-hand movement trigger the motion detecting mechanisms in the brain and are thus interpreted as a picture of change, whereas the signals related to the hour-hand movement do not incite the same response. We can imagine, if we use a sufficiently sophisticated and precise machine to track the movement of both the second-hand and the hour-hand, the machine should be able to detect changes in both hands. Then when the machine translates this data into video format, the resulting videos should have no fundamental difference (the only difference is in how fast things are moving). Our brain is just not as sophisticated and precise as this machine.

What is crucial here is that there is no difference in the sensation part between accurately representing motion/stillness and misrepresenting motion as stillness or stillness as motion. Both cases require sensory organs and the brain to continually update signals about things' properties and locations. Even when experience accurately represents stillness, it is not like the brain receives one single signal and sticks with it forever. Instead, the brain still has to continuously update data about things' properties and locations to determine whether any change has occurred and whether a representation of continuous change is needed. (Thus, even when we do not perceive changes in the external world, we still experience time passing in the sense that we sense dynamic changes in our internal mental states.) This means that whether we have inferential or non-inferential change experiences, our perceptual system is always engaging the world in the same manner. Whether there is a picture of continuous change is irrelevant to whether we experience the world in a dynamic manner – in either case, we do.

Now let me quickly summarise what I have said about the two modes of experiencing change. On the one hand, I believe it is sensible to distinguish between the two modes, but the philosophical significance of such a distinction is rather limited – especially, the two modes of experiencing change are not a distinction between whether or not we experience the passage of time, as the illusionist assumes. On the other hand, contra to the veridicalist view, I argue that both modes involve dynamicity since what is presented in our perception is only one state (or a few states) of things, and which state is presented to us is continuously changing, and in this sense, we experience temporal passage in both modes.

1.5. What the Purported Passage Phenomenology Represents

As noted, the purported passage phenomenology is usually considered to have representational content, but it is controversial what exactly the content is. The illusionist typically assumes that our temporal phenomenology represents the passage of time, while the veridicalist claims that it represents the contrast among things' different properties or locations at different times. Some philosophers have argued that our experiences in fact cannot represent the passage of time. This line of argument is usually taken as a version of veridicalism. While I find the argument generally persuasive, I think it is consistent with my view that there is something dynamic about our temporal phenomenology. In this section I will first introduce Braddon-Mitchell's arguments against the view that our phenomenology represents

the passage of time, and then I will explain that even if our phenomenology does not represent the passage of time, it still represents something incompatible with the B-theoretic description of reality and thus counts as illusory.

Braddon-Mitchell (2014) argues against what he calls the Evidential Significance of Phenomenology (ESP), the view that our phenomenology represents the world as possessing A-properties such as the flow or passage of time. According to Braddon-Mitchell, in light of different theories in the philosophy of mind about representation, ESP can fail in various ways:

> a) Phenomenology does not have any representational content.
>
> b) Phenomenology has representational content, but the content is too ambiguous to be of flow, or the content is conditional.
>
> c) Phenomenology has representational content, and the content is precise, but the content is inconsistent among people. (2014, 212–213)

Braddon-Mitchell concludes that ESP can find no place in a wide range of theories in the philosophy of representation; therefore, even if all of these cannot thoroughly prove that ESP is false, the logical space that the truth of ESP can occupy is very limited.

I shall not go through those arguments in detail but highlight two key ideas underlying Braddon-Mitchell's discussions.[25] The first idea is that one's prior knowledge or commitment to certain theories can affect the representational content of one's phenomenology. Braddon-Mitchell argues that even if our phenomenology does have representational content, it is far from compelling that the content is of temporal passage. It might be true, as we generally agree, that our phenomenology represents the world as changing, but it is a big step (or several big steps) from that phenomenology represents change to that phenomenology represents A-properties. People who accept the former do not necessarily accept the latter. As Braddon-Mitchell puts it, "it can be theory that drives our view about representation, rather than the other way around." (ibid., 216) This means that those who already embrace the A-theory are more likely to believe that phenomenology represents A-properties, while others might just stop at a less "fine-grained" stage such as that phenomenology represents change. In other words, there is a question of at what "level of abstraction" the representational content of our experience is to be defined. The stronger one's commitment to a theory, the more likely they are to believe that the representational content shares the details of their theory (ibid., 215).

The second idea is that the content of our experience depends on what properties really there are in the world. This means we cannot decide what properties exist in the world by looking at what content is included in our experience; on the contrary, we have to first find out what properties are in the world by other independent means (such as metaphysical or scientific investigations), and then we can decide which properties are represented by the phenomenology: our phenomenology represents A-properties if there are A-properties out there, and it represents B-properties if there are B-properties out there (ibid., 217, 219). Put shortly, there is a hierarchy in

[25] In particular, I will not consider the possibility that our phenomenology does not have any representational power, since most versions of both illusionism and veridicalism assume that the phenomenology has representational content, while the debate lies in what the content is.

considerations: we first have to know whether A- or B-properties exist in the world, and then we can decide whether the content of our experience is of A- or B-properties.

I think it is reasonable that our experiences may not represent something as "fine-grained" as A-properties like the passage of time. Yet it seems to me that the representational content of experience need not be so fine-grained to be a phenomenology representing something that is not part of the B-ontology. We do not need to bring the debate to the level of whether our phenomenology represents something as "fine-grained" as the passage of time; even on the alleged minimum common ground that we have phenomenology of change, there is a potential difficulty for the B-theory: if the change represented in our experience is a kind of change different from what change means in the B-theory, then it means that our phenomenology has misalignment with the B-theory.

While the veridicalist thinks our phenomenology simply represents the "at-at" kind of change, which aligns with what change means in the B-theory, I have argued that it in effect represents dynamic change in things' states. If such phenomenology of dynamic change contains some element incompatible with the B-ontology – to my understanding, they do – then it follows that even though our phenomenology does not represent the passage of time, it still represents something that is at odds with the B-ontology. Although an element's being at odds with the B-ontology does not necessarily make it an "A-property", nor does it necessarily provide evidence for the A-theory, it is still something at odds with the B-ontology.

I believe this dynamic kind of change phenomenology is the real common ground shared among people. It is precise, unconditional, and consistent among people, which is due to the fact that we have to experience the world in a way different from the way the B-theoretic world exists. Braddon-Mitchell suggests that people's commitments to certain metaphysical theories and perspectives of what objective properties exist in the world can affect the content of our experience. Then we might consider whether one's knowledge and beliefs about the truth of the world can cause us to experience the world any differently. Suppose someone *knows* that reality is a static four-dimensional block, where everything that should happen already happens, and she even knows about the details of everything that ever happens in the block universe. Would she experience the world in a way different from ordinary people, which lacks the phenomenology of dynamic change? As far as I understand it, knowing is different from experiencing. As long as her perceptual system stays the same as ordinary people, the way she experiences things would not be any different – she still has to experience things in the way in which only one state of things stands in her immediate perception, while other states are only knowledge stored somewhere in her memories.

Ted Chiang's science fiction novella *Story of Your Life* tells a similar story which could be illustrative. In this story, where the universe, as per the setting, is an entirely deterministic block universe, there is an alien species, heptapods, who can perceive the universe just as it is – they experience all events at once. Heptapods use a written language called Heptapod B, and, as per the setting, Heptapod B can reshape the pattern of perception for those who learn and understand the language, making them able to have a non-linear perception of time like heptapods (no need to worry about the details). As the protagonist Louise, a human linguist, becomes proficient in Heptapod B, her cognitive system is reshaped, and she begins to be able to view the universe as heptapods do, yet not entirely – the way she experiences the world

becomes half-human and half-heptapod. The result is that Louise becomes aware of all events in her lifetime since sometimes she can perceive the world as heptapods do, but most of the time she still has to experience things as ordinary human beings. The following excerpt describes how Louise experiences the world after acquiring the alien language:

> Even though I'm proficient with Heptapod B, I know I don't experience reality the way a heptapod does. My mind was cast in the mold of human, sequential languages, and no amount of immersion in an alien language can completely reshape it…Before I learned how to think in Heptapod B, my memories grew like a column of cigarette ash, laid down by the infinitesimal sliver of combustion that was my consciousness, marking the sequential present. After I learned Heptapod B, new memories fell into place like gigantic blocks, each one measuring years in duration, and though they didn't arrive in order or land contiguously, they soon composed a period of five decades. It is the period during which I know Heptapod B well enough to think in it…Usually, Heptapod B affects just my memory: my consciousness crawls along as it did before, a glowing sliver crawling forward in time, the difference being that the ash of memory lies ahead as well as behind: there is no real combustion… (Chiang 2020, 166–167)

It is only truer of us that there is no way for us to remould the way we experience the world, so our consciousness of things is always like the "infinitesimal glowing sliver" of a cigarette, regardless of whether the universe itself is like ashes left over by a burnt-out cigarette, as the B-theory and the moving spotlight theory conceives, or a cigarette we are witnessing its burning, as the growing block theory and presentism depicts, and also regardless of whether we think the universe is one way or another. This implies that the extent to which one's beliefs and knowledge about the world can affect the content of their experience has boundaries – they may affect whether one thinks the content is A- or B-properties, as Braddon-Mitchell suggests, but it cannot change the fact that only one time slice of the block universe is given to us each time. And this leads to the illusory phenomenology that things are undergoing dynamic change.

1.6. Further Clarifications

To summarise, the understanding of the alleged experience of temporal passage I propose in section one is as follows: our temporal phenomenology, particularly the phenomenology of change, does not necessarily represent temporal passage, but it represents things as undergoing dynamic change, which involves the appearance and disappearance of things' states. Given that there is no dynamic change in the B-theoretic reality, our temporal phenomenology is systematically illusory, and this misleads us to the erroneous belief that we experience time passing.

Now I would like to address some potential issues that may arise from my previous discussions.

(1) The first question presumably is how my view should be considered an illusionist position rather than a veridicalist one, given that it endorses the veridicalist assertion that our experience lacks the content of temporal passage.

Veridicalism, as I have defined it, argues that our temporal experience does not represent temporal passage, while illusionism suggests that our temporal experience

contains the content of passage. Now to have a better grasp of these positions, we can distinguish between radical and modest versions of both veridicalism and illusionism.

Radical veridicalism will be the view that not only do we lack the experience of temporal passage, but also that experience does not contribute to our intuition that time passes at all (it is either that we do not even think that we experience time passing, or that something irrelevant to experience, such as language and conventions, that is relevant to the belief that we experience time passing). On the other hand, modest veridicalism suggests that although our experience accurately represents the B-theoretic world, there is still something about experience that leads us to erroneously believe that we experience the passage of time.

Theorists like Christoph Hoerl can be seen as proponents of modest veridicalism. Hoerl suggests that the reason why people erroneously think we experience time passing is that the representation of continuous change is mistaken as the phenomenology of temporal passage. This fits into the scheme of claiming that something about experience (mis)leads us to think we experience passage.

While I also agree with the idea that something about experience leads us to think we experience passage, my view differs from modest veridicalism in two ways. Firstly, I think this "something" is an inherent feature of our perceptual experience, i.e., the confined temporal horizon, and therefore an inescapable aspect of our experience, while for the veridicalist, this "something" is more of a cognitive error that can be modified. Secondly, I propose that this "something" manifests as illusory content in all our experiences, representing dynamic change, whereas the veridicalist asserts that our experience accurately represents reality.

Given that my view claims that our experience contains certain illusory representational content that is at odds with the B-ontology, it is more suitably classified as a form of illusionism, albeit a modest one, as contrasted with traditional illusionism, the view that endorses the A-theorist's assumption that we have phenomenology of temporal passage, which is better labelled as radical illusionism.

(2) The second issue is that a major aspect of the confined temporal horizon of our perceptual experience is that our experience has access to only one state of things at a time, and this seems to be in tension with the intuition that we have robust phenomenology of motion, succession, and persistence, since change, succession, and persistence all involve more than one state of things. (For the sake of simplicity, I will focus on change.) How should we understand this tension?

I think there are two ways to see it. The first is that having robust phenomenology of change and motion does not necessarily mean that the perception must contain content of more than one state of things. It has been intensely debated under the title of the specious present whether our perception must be extended in time and/or contain non-instantaneous content. The so-called doctrine of the specious present claims that the robust phenomenology of change and motion can only be explained by considering the perception as extended in time. The reason is that if our perceptual experience is like a snapshot, which captures only an instant state of things, then things cannot appear to be moving or changing, because things can occupy only one spatial location or state at an instant moment, while movement and change must involve things occupying at least more than one location or state.

Nevertheless, it has been pointed out by some philosophers that the specious present is not necessary to explain the phenomenology of change. For instance, Prosser (2016,

2017) argues that there is no obvious reason why an instantaneous content of experience cannot include things that have to be detected over a non-instantaneous interval. For example, a vector rate of change, e.g., the velocity of an object at an instant *t*, is something that can be represented as part of an instantaneous content of experience, and in experiencing a vector rate of change, we are experiencing change. Therefore, if the reason for assuming the specious present is just that an instantaneous content of experience cannot represent change, then it is not necessary that such an assumption has to be made.

Moreover, contrary to what the specious present theorists believe, the snapshot theories can actually explain the phenomenology of change. The key to the snapshot theorists' solutions is that motion and change can be part of the representational content of instantaneous experience even if different locations or states are not represented.[26] This is because the perceptual experience in the snapshot theories is not analogous to the frame in films, where each frame is independent and disconnected to each other. Instead, although each experiential unit in the snapshot theories does not contain non-instantaneous content, it is nonetheless affected by the contents of other experiential units. For example, when observing the movement of a ball, our perception at each moment may only include content about the ball's specific location at a specific moment, but in addition to location information, our representation of the ball also contains information about which direction it came from and what speed it is moving at, as well as anticipation of where it will go next. This is because perception involves not only low-level mechanisms such as sensation but also high-level mechanisms such as understanding, and each experiential unit is supposed to share the understanding.

This does not mean that the content of earlier experiential units all has to actually feature in the present perception. As Philippe Chuard puts it, "earlier processing might causally affect later processing and influence how later experiences represent what they do, but this needn't mean that earlier stimuli actually show up in experiences of later stimuli, given the temporal constraints on causal processing." (2017, 125) Take the movement of a ball for example. Experiencing motion requires that our senses have acquired information about the ball being in different locations at different times, and such information will affect how the ball is presented in the present perception, but this does not mean that the information about the ball's different locations received at different times all have to appear in this one single perception.

I do not intend to defend the snapshot theories here. All I want to highlight is that our perceptual experience does not have to be temporally extended or contain content of more than one state of things for us to have robust phenomenology of change. Most existing discussions of whether perceptual experience is extended are on an abductive basis, and I think both the specious present theories and the snapshot theories have their own way of accounting for the phenomenology of change and motion. On this account, at least it is safe to say that there is not necessarily a tension between the perceptual experience's limited access and the robust phenomenology of change.

[26] As we saw in Prosser's account of vector content. A similar view can be found in Arstila (2018). Arstila argues for a notion called the purity of temporal phenomenology, which means that experiences of change, motion, etc., can occur without an associated phenomenology of things having different states or locations at different times.

Furthermore, the second thing that can be said about this apparent tension is that even if the perceptual experience is temporally extended, my central contention – that our experience has illusory content of dynamic change – still holds.

I have characterised three aspects of the confined temporal horizon of our perceptual experience: limited access, involuntariness, and directionality. As I understand it, whether or not the perception has some temporal extension, all of the three aspects remain the same – the only difference lies in whether the range of access is instantaneous or extended over a short span. We can imagine that even if our perception spans a relatively long duration, such as a minute or even an hour, it remains true that only some of the things' states are given to us in our experience, and thus it remains true that things' states appear to be constantly appearing and disappearing.

What is crucial here is still that the way we experience the world is fundamentally different from the way the world exists (according to the B-theory). Due to the inherent epistemic limitations of human beings, it is extremely difficult for us to imagine what it would be like to experience temporal existence in a manner that fully aligns with the B-ontology. The closest approximations are likely to be some spatial metaphors. A two-dimensional creature would perceive circles as conical frustums if it could view the world from a three-dimensional perspective. Similarly, if humans could perceive time just as a fourth (quasi-)spatial dimension, the night sky would no longer appear to be a field of little bright dots, but rather an expanse of luminous spaghetti, representing the entire lifespan of stars, and human beings, who currently appear as two-legged creatures, would look like some millipedes, with babies' legs at one end and old people's legs at the other.[27]

Considering all these, I think whether there is the specious present or not is only peripheral to my claim that the way we experience is different from the way the world is. Whether our perceptual experience is strictly momentary or extended over a brief temporal span, it remains true that the temporal part that we have access to is only a tiny fragment of the whole existence of the world.

I do concede that it is hard to articulate what constitutes "one state" of things, and it is not entirely credible that each perception we have is strictly instantaneous and strictly corresponds to one distinct state of things, however it may be defined. Nevertheless, just to encapsulate the fact that the temporal dimension extends infinitely, just as the three spatial dimensions do, yet the portion of time we can access is but an (almost) extensionless point within it, I find the phrase "we have access to only one state of things at a time" quite effective. Hence I will continue using it, despite potential ambiguities that might be involved.

(3) One further issue of interest would be how the illusionist position I am defending will bear on metaphysical debates of time. A quick answer is that I do not think that the fact that the way we experience temporal existence is at odds with the B-ontology should lend any support to the A-theory of time. More detailed discussions of this issue are set to come in sections 2.4 and 2.5.

[27] The metaphors of spaghetti and millipedes are borrowed from Kurt Vonnegut's novel *Slaughterhouse-Five*.

2. The Present We Experience

Section one has explored one of the two major intuitions that are typically cited to support the A-theory of time via the Argument from Experience, the intuition that we experience the passage of time, or at least, that there is something about our experience that tells us that time passes. I argued that this A-theorist's stance does have a point as it captures the important aspect of our perceptual experience that the way temporal existence appears to us is at odds with the B-ontology. Now I will turn to the second intuition that the Argument from Experience frequently appeals to – the intuition that we experience the present. (To align with the "purported passage phenomenology" in section one, I will refer to the alleged experience of the present as the "purported presentness phenomenology.")

While it seems natural for people to think that we experience the present, the exact meaning of the statement "we experience the present" is rather ambiguous, and different people may have different intuitions about what it means. Nonetheless, one thing that everyone can agree upon is that it makes sense to say we experience the present in the sense that when there is a certain time *t*, and when we engage with events and phenomena occurring at *t*, we can consider ourselves as experiencing the present. For instance, there is a concert scheduled at 7 pm on Friday, and when we attend the concert at 7 pm on Friday, we are having experience of the present. This sense of experiencing the present supposedly can be accepted by the proponents of both the A- and B-theories, since it has no commitment to the nature of the present – it assumes neither that the present we experience holds any metaphysical significance, as the A-theory assumes, nor that the present we experience is just one of many times that are metaphysically equivalent in nature, as the B-theory posits. Thus the experience of presentness in this sense does not fulfil the requirement of the A-theorist seeking support for the A-theory through the Argument from Experience.

Then what kind of experience of presentness is the A-theorist in search of? The meaning of presentness varies across different versions of the A-theory of time. In presentism, the present is the only thing that exists, whereas in the growing block theory and the moving spotlight theory, other times apart from the present also exist and yet the present is still metaphysically special in some way – a vague way to put it may be that the present is the only thing that is occurring. In addition to the sole existence or the sole occurrence, being present can also mean occupying a metaphysically special position, a meaning that theorists of all three versions of the A-theory would likely accept. Regardless of the specific meaning of the present, however, all versions of the A-theory presuppose that the present is something that pertains to the objective reality rather than to our subjective view of the world or the relationship between the subject and the world. Thus, to have experience of such a present means that our experience has representational content and the content is veridical, meaning that the experience accurately represents reality – specifically, the experience accurately represents that there is a thing that can be properly called the present existing in the objective world.

Many philosophers, primarily B-theorists, have argued that we cannot have experience of the present of this nature. In section 2.1 I will give a comprehensive examination of these arguments. As I will interpret them, the key idea behind these arguments is that there is no phenomenological element in our experience that can be suitably recognised as the phenomenology of presentness, where presentness refers to either a property, of things or experience itself, or the temporal location that things or

experience itself can occupy. If we accept this position, which I believe we should, the question will arise as to what exactly is involved in our alleged experience of the present. Section 2.2 will explain that it involves nothing other than having an experience. Nevertheless, I will further suggest that what we attempt to grasp by saying that we experience the present over and above ordinary kinds of experiences (such as sitting in front of a desk and listening to music) is that our perceptual experience has a confined temporal horizon. In other words, the statement that we experience the present just means that we are having experiences within our confined temporal horizon.

There will be two major implications of this view. First, although the present, a thing that pertains to the objective reality, is not part of the content of our experience, there is something about our experience that underlies the intuition that we experience the present. Second, nonetheless, it would be a cognitive error to think that the present we experience has anything to do with the objective reality. Sections 2.3 and 2.4 will provide further elaborations on the two points respectively.

Section 2.3 will argue that there is a disparity between the present experience and the past and future experiences – that is, the former appears to us to be the only experience that exists or is occurring. In light of this, I suggest that the representational content of the alleged experience of the present can be described in terms of some things or experiences appearing to be existing or occurring *simpliciter*. Despite the legitimacy of the discourse of experiencing the present, at least in a certain sense, section 2.4 will argue that it would be erroneous to think phenomenology immediately lends support to the A-theory of time or any metaphysical theories of time. It might be contended by the A-theorist that even if there is no direct inference from the experiential present to the ontological present, it could still be true that the A-theory provides an adequate explanation for the former. Regarding this, section 2.5 intends to show, through further exploration of our experiential present at both the individual and intersubjective levels, that the present we experience differs importantly from the A-theoretic, objective present, and this constitutes another reason to reject the A-theory as the "best explanation", or even a good explanation, for our experiential present.

2.1. What The Purported Presentness Phenomenology Does *Not* Involve

There are several ambiguities surrounding the intuition that we experience the present. One apparent ambiguity is that it is unclear whether it is the things and events we experience that are said to be present, or it is the experience *per se* that is said to be present – both claims seem to belong to our pre-reflective intuitions. The arguments that philosophers have raised against the experience of the present thus can be roughly categorised into two groups: those that deny that we experience the presentness of objects or events, and those that deny that we experience the presentness of the experience itself. I will elaborate on each type of argument respectively. Note that this classification serves primarily for convenience, and other interpretations and classifications are possible.[28]

[28] Torrengo and Cassaghi (2021) notice this ambiguity and distinguish between perceptual presentness and locational presentness. To experience *perceptual presentness* means to experience the object or event as occurring now, and to experience locational *presentness* means to have present experience, or to experience the experience as occurring now. The former is object-oriented and the latter subject-

Let us begin with arguments against the experience of the presentness of things or events. A typical line of this kind starts with this: if the presentness of things is something for us to experience, then there must be something about the things or events that we can identify as associated with our experience of their being present. Presumably, that something is a property of things. However, as the argument continues, for a property to be represented in experience, the experiencing subject must be able to distinguish experiences that encompass this property from those that do not – this is what we mean in the case of experiencing typical perceptible properties such as colour and shape – but we can hardly see how presentness would make an experience distinguishable from other experiences.

The key idea behind this type of arguments is related to the notion of phenomenal contrast, which is a standard method for determining if an experience has a certain phenomenal character. According to the notion of phenomenal contrast, if a property is part of the content of our experience, there must be a component of the phenomenology that corresponds to that property.[29] For example, when you perceive something as red or round, there should be a component of your phenomenology that corresponds to redness or roundness. In the same vein, if presentness is a property of things for us to experience, there should be a phenomenological component corresponding to presentness.

One way to determine whether such a phenomenological component exists is to examine whether there are discernible distinctions between a phenomenology with the target particular property and a phenomenology without that property. In other words, a contrast in the content of experiences must manifest as a contrast in phenomenology. In the case of typical perceptible properties, for instance, it is readily apparent that we can tell how an experience with a property like redness or roundness is different from an experience without it. This means that an experience of redness is phenomenologically discernible from an experience that is not of redness. Such a phenomenal contrast is demonstrated by the fact that if we first think about an experience without redness and then imagine adding redness to the experience, we can easily recognise how the two experiences are different. This constitutes the reason for thinking that we have phenomenology of redness, or that redness is a property that can be part of the content of our experience.

When it comes to presentness, however, it is hard to see how presentness could make experiences with and without it different, since we can hardly imagine adding presentness to an experience or reducing presentness from an experience will bring about any phenomenal difference (Callender 2017, 184; Torrengo and Cassaghi 2021, 5). As Callender explains it, for an experience to be the experience of a certain property, there must be other experiences that are distinguishable from such experience, but we cannot think of what experiences the alleged experience of presentness could be different from. Therefore, we cannot experience presentness in the same way we experience typical perceptible properties such as redness and roundness.

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oriented. I will follow their classification, though I may interpret some of the arguments differently.

[29] Phenomenal contrast is most famously defended by Susanna Siegel (2007, 2010).

A different but relevant line to argue that we do not experience presentness as a property of things is that there is no way we can make sense of how our perception can be affected by such a property as it is affected by typical perceptible properties; therefore, it is impossible for the property of presentness to be part of the representational content of our experience, at least not in the way typical perceptible properties are represented in our experience. Arguments of this kind can find support in Braddon-Mitchell (2013) and Prosser (2016, 42–54). Both authors discuss various theories regarding how experience can represent certain things in the world and argue that none of the theories allows that experience can represent A-properties. Their discussions mostly focus on whether experience can represent the passage of time, but we can see how the arguments would also apply regarding presentness.

Generally, most theories of representation require that there has to be a specific causal relation between the thing that is represented and the representing vehicle – in this case, our perceptual experience. This is to say, for a thing or a property to be represented in our experience, there must be a constant and unique causal chain leading from that thing to part of our experience – when the thing is instantiated, it should cause a certain kind of experience. For instance, if redness is a property that can be represented in experience, then whenever objects with redness are around us, there will be the phenomenology of redness in our mind. However, there seems to be no causal chain that can be leading uniquely from presentness to phenomenology.

The point is illustrated by Prosser's multi-detector argument. The argument invites us to imagine a detector with many different lights, each light corresponding to a particular type of phenomenon we experience. For example, the redness-light would illuminate iff a red object is in its vicinity, the roundness-light would illuminate iff a round object appears, and so on. For one light on the multi-detector to indicate a certain type of phenomenon *f*, "the light must stand in some suitable relation to *f*, and no other light must stand in that same relation to *f*." (Prosser 2016, 43) This means that for a light to be the indicator of presentness, it cannot meanwhile indicate any other phenomenon, just like the redness-light would not react to roundness. However, as far as we can imagine, whenever a light is said to be illuminated by the presence of presentness, there must be other lights that are also illuminated. It follows that there cannot be a presentness-light that is uniquely related to the putative property of presentness.

Prosser suggests that our brain functions just like a multi-detector. The activation of a certain state of the brain (such as the firing of a certain group of neurons) can be compared to the illumination of a certain light on the multi-detector. When red things appear, a certain state of the brain will be activated, analogously to how the redness-light on the multi-detector will be illuminated. Then, just like in the multi-detector, for an element of experience *E* to be the experience of phenomenon *P*, a certain relation must be held between *E* and the target phenomenon *P* but not any other phenomenon. However, it is hard to see how presentness can stand in such relation to one element of experience without also standing in relation to some other elements of experience. The upshot, therefore, is that we cannot be affected by presentness in the same way as we are affected by typical perceptible properties, or that presentness cannot be a property of things that can be represented in our experience as typical perceptible properties can.

One thing in common between the arguments based on phenomenal contrast and the arguments regarding representation such as the multi-detector argument is that both

kinds of arguments rely on the notion of contrastability. They both hold that in order for an experience to be the experience of presentness, we should be able to differentiate it from other experiences or distinguish between experiences with and without the phenomenological element of presentness. And since such distinctions are impossible to make, they both conclude that we cannot make sense of experiencing presentness.

Note that the presentness of our concern here is solely the A-theoretic type of presentness, which is supposed to be a real, mind-independent part of the objective world. Both kinds of arguments reject that there can be experience of such a thing. However, their conclusions will diverge if our discussions extend beyond the mere A-theoretic presentness: while the phenomenal contrast argument claims that there is no element of phenomenology corresponding to any type of presentness, whether A-theoretic or B-theoretic, the multi-detector argument allows the possibility of a phenomenological element that corresponds to a metaphysically non-committed kind of presentness, the kind of presentness that both the A- and B-theorists would accept – that is, when an event is the object of our experience, the event's being present involves that the event is occurring at the same time as our experience of it (though for the B-theorist this is all it means to be present, whereas the A-theorist would maintain that there is more to presentness than this).

We can easily imagine how the presentness of the metaphysically non-committed kind can be represented on a multi-detector: for a light on the multi-detector to be the light of presentness of this metaphysically non-committed kind, it simply needs to illuminate when a certain event is occurring. For example, the presentness-light of 7 pm on Friday is the light that will illuminate once it detects the beginning of a concert scheduled at 7 pm on Friday. This is different from the claim that the phenomenal contrast argument would make, i.e., that there is no phenomenological element that particularly corresponds to the presentness of any kind. If an event's being present necessarily involves the event occurring at the same time as the subject's experience (when an event is the object of our perceptual experience, of course), it follows that whenever an event is experienced, it is present. This means that presentness of this metaphysically non-committed kind and experience always happen in tandem, making it impossible to demonstrate presentness as a phenomenal contrast, and in this sense, we cannot make sense of having phenomenology of presentness.

While the phenomenal contrast argument, which claims that there is no phenomenology of presentness of any kind, and the multi-detector argument, which allows the experience of presentness of the metaphysically non-committed kind, seem to have saliently different conclusions, they are in effect compatible with each other. Consider the light of the presentness of 7 pm on Friday again. It is, in fact, not a light of some objective property called presentness which is over and above the occurrence of the event – it is *de facto* just a light of the occurrence of the event located at that time (in this case, a light of the beginning of the concert). In other words, the presentness that the multi-detector can represent just involves the occurrence of certain events. On the other hand, according to the notion of phenomenal contrast, there is also no difficulty in making sense of experiencing the occurrence of certain events, since we certainly can recognise the contrast between experiences with and without an event's occurrence.

Thus, while both arguments acknowledge that our experience can represent the occurrence of things and events, if we investigate our experience in search of

something over and beyond the mere occurrence of events, something that pertains to the objective world and is called presentness, both arguments will contend that such a thing cannot be found. The reason, again, is that we cannot single out a distinct phenomenological element of presentness from common perceptual experiences, such as the experiences of sitting in front of a table, listening to music, etc.

Apart from the two lines of argument, there is a third line that rejects the experience of the presentness of things. This line of argument exploits the fact that it takes years for light to travel from stars to earth, and as a result, whatever we see in the night sky belongs to the past. An argument that Skow attributes to Hestevold is an example of such a line: "Hestevold argues: 'since past events [or past things] appear through the telescope to an observer in the same way that present events [or things] appear to the observer,' nothing looks present." (Skow 2015, 195)

This is obviously a bad argument. As Frischhut retorts, "if you seem to see two red apples, although one of them is actually green, it does not follow that neither of them looks red. It rather shows that you experience both apples as red, and that in one case your experience is mistaken." (2015, 151) Thus, the more convincing conclusion we can draw from the fact that past and present events appear to us as the same is probably that everything looks present, with some impressions being illusory. However, Frischhut continues to argue, if everything is experienced as present, then there is no way we can tell "what something has to look like" for it to look present. (ibid.) If I understand her correctly, Frischhut is also arguing for a point similar to the one made in the previous arguments – presentness cannot be a contrastable property as typical perceptible properties (though it does not exclude the possibility that presentness is part of every experience).

Another argument that utilises the same fact but takes a different line is that we cannot tell the difference between the present state of things and the past or future states of the same things only by experiencing, so there is no way that things can *look* present. This point is made by Mellor:

> We cannot for example refute someone who claims to see the future in a crystal ball by pointing to the visible pastness of the scene it shows, since there is no such thing…Nor can the look of a supernova tell us directly how long ago it happened. (1998, 5)

Mellor also underscores the fact that things look just the same whether they occur in the past or future, but as I read him, what he emphasizes is that our experience of things does not contain any information that is particularly about their temporal location or the temporal distance between them and our perception of them. As a result, it makes no sense to say we experience things as happening in the present or experience the presentness of things, since our experience of things carries no information about their temporal locations at all. Consider how this is different from the case of space. Things that happen in different spatial locations just look different. For instance, if someone points to something in the distance and asserts that it is located here, we can easily tell that they are wrong.

So far I have introduced four lines of argument against the experience of presentness of things. We can identify two theses that are claimed by these arguments. The first is that presentness is not a contrastable property that can be represented in our experience in the same way as typical perceptible properties can; the second is that

experience does not represent things as occurring at a temporal location – instead, things are simply being represented as occurring.

Here is one further remark regarding the first thesis. If we accept that presentness cannot be a contrastable property we can experience, there may still be two ways to maintain the claim that presentness is a property of things: either to claim that presentness is a kind of property that does not affect our perceptions, or to claim that presentness is part of the content of every experience whatsoever. However, it can be argued that it is empty to postulate such a property, since it would be hard to understand what it is like to have experience of such a property and how it could possibly affect our perceptions. Although this may not be sufficient to put an end to the possibility that presentness is a property of things, at least it is safe to say that we will need further reasons if we are to posit such a property, rather than simply claiming that we have experience of it.

Let us now move on to the arguments against the experience of the presentness of experience *per se*. It might be relatively easy for people to accept that presentness as a property is not what we experience when experiencing things (once we learn about the time lag of perception, it is likely that we will discard the belief that what we experience happens in the present). However, it may be more tempting to think that it is not the objects that I experience as present, but I experience my perception, my thought, or my consciousness in general as present, or as occurring now.

It is nevertheless not so easy to articulate what it means to say that I am experiencing my experience as occurring now, or that I experience the presentness of my experience, and so on. According to Torrengo and Cassaghi, claims of this sort can be interpreted in two different senses. The first sense is that there is some phenomenological element in our experience that indicates that our experiences are in the present time. The second sense is that the present experience has some distinctive "awareness status" that sets it apart from past and future experiences – specifically, we are aware of the present experiences as occurring *simpliciter* (2021, 11). In the current section I will only discuss the first sense, since, in my view, it is the only sense that the A-theory would need, should the experience of presentness in this sense truly exists. The reason is that the first sense is concerned with whether some objective feature of our experience is revealed to us via the experience, while the second sense is merely about the subjective, phenomenal feeling of having certain experiences. The latter should not be of much assistance to the A-theory, since the B-theorist also has explanations for such subjective feelings. I will discuss the second sense in more detail in section 2.3.

Now, against the claim that some phenomenological element in our experience indicates that our experiences are in the present, Torrengo and Cassaghi argue that it is impossible for us to experience such a phenomenological element. Their argument goes as follows: for a phenomenology to be the phenomenology of presentness, as opposed to pastness and futurity, the phenomenology has to involve "*awareness* of a difference in phenomenology between present and past (and future) experiences." However, it is impossible for us to experience such a contrast, because we have no access to experience that occurs at any time other than the present, which means that we are unable to experience that our experience at this moment contains presentness whereas experiences at other times do not. Therefore, "the fact that we are aware that the experience that we are having now (as opposed to the ones that we had and the

ones that we will have) are present is not due to some phenomenal aspect of our experience." (ibid., 12–13)

It is not fully clear whether Torrengo and Cassaghi think that, for us to have the phenomenology of presentness, an awareness of the difference between experiences involving and not involving presentness has to be an actual part of our experience, or if such awareness only needs to be possible in principle. If it is the former, then it may not have to be the case, since, say, for a phenomenology to be the phenomenology of redness, we do not necessarily need to experience the contrast between red things and non-red things. Suppose you are in a room with red walls but nothing else, and thus you can only perceive red things. While you do not experience the contrast between redness and non-redness, you certainly can have phenomenology of redness. Thus, as I understand it, what really matters is that redness is a *contrastable* property, while whether a contrast between redness and non-redness is an actual part of our experience is not essential. Similarly, it makes more sense if it only requires that an awareness of the difference between experiences that contain presentness and experiences that do not is possible in principle, i.e., it is possible for us to experience things without presentness. However, whenever we have perceptual experience, it occurs at the present time, and it follows that if there is really such a thing as presentness, whatever experience we have, it contains presentness. Therefore, presentness can never be a contrastable property.

If my understanding is correct, this argument again relies on contrastability. Then just as in the case of presentness as a property of things, one might contend that it is misleading to expect presentness to be experienced as something contrastable, because every experience is supposed to be present, and therefore presentness is part of the content of every experience. However, for anyone who wants to postulate such a ubiquitous property and such a ubiquitous phenomenological element, there is the burden of explaining what they involve and why they should be postulated. At least it appears to me that it is very difficult to make sense of such a property and such a phenomenological element if we want to avoid referring to contrastability.

Setting aside the issue of whether there can be a non-contrastable property as presentness and a corresponding phenomenological element, another way to reject the view that some phenomenological element tells us that our experiences are in the present moment is to argue that there is no *reflexive* element in our perceptual experience, i.e., an element that involves an awareness of the experience itself.

This stance is embodied in the view that experience is transparent, a view widely shared among philosophers. According to the transparency thesis, when we have a perception, we just "see" through the experience and lands our attention on the perceived things and their properties, thus the experience will reveal nothing about the properties of the experience *per se*. As Harman describes it, "When Eloise sees a tree before her, the colors she experiences are all experienced as features of the tree and its surroundings. None of them are experienced as intrinsic features of her experience. Nor does she experience any features of anything as intrinsic features of her experiences." (1990, 39) This is just true for all of us.

The transparency of experience seems to be a natural stance to hold when considering typical perceptible properties: when one is seeing a red square, it seems rather implausible to say that our experience is "qualified by redness and squareness" (Robinson 1994, 183). However, some philosophers seem to think that the transparency thesis fails when it comes to temporal properties. This means that when

we think about our experiences of temporal phenomena, we not only become aware of the phenomena but also become aware of certain temporal properties of our experiences. Matthew Soteriou evidently holds this view, as he writes:[30]

> When one introspects one's experience, the temporal location of one's perceptual experience seems to one to be transparent to the temporal location of whatever it is that one is aware of in having that experience. Introspectively, it doesn't seem to one as though one can mark out the temporal location of one's perceptual experience as distinct from the temporal location of whatever it is that one seems to be perceptually aware of. Furthermore, it seems to one as though the temporal location of one's experience depends on, and is determined by, the temporal location of whatever it is that one's experience is an experience of. (2013, 89–90)

As far as Soteriou is concerned, when we reflect on our perceptual experience, it appears that the temporal location of one's perceptual experience is inseparable from the temporal location of the object of that experience. In particular, Soteriou suggests that the temporal location of the experience itself is determined by the temporal location of the objects experienced. This presumably means that we become aware of the temporal location of our experience by virtue of being aware of the temporal location of the objects we are experiencing. Contra Soteriou's view, Hoerl argues as follows:

> [T]he reason why "it doesn't seem to one as though one can mark out the temporal location of one's perceptual experience as distinct from the temporal location of whatever it is that one seems to be perceptually aware of" (Soteriou 2013: 89) isn't that both of these locations figure in the phenomenology of experience, and are experienced as being identical, but rather that there is no such thing as the felt temporal location of the experience forming part of the phenomenology of experience. (2018, 143)

Hoerl acknowledges that it might be difficult to differentiate the temporal location of one's perceptual experience from the temporal location of what one is aware of. However, he argues that this is not because we experience both the temporal location of experience and the temporal location of objects, and these two locations appear to be identical, but rather that we do not experience the temporal location of experience at all. In other words, there is no phenomenological element in our experience that says anything about the temporal location of the experience itself.

The point that there is no phenomenological element in our experience that corresponds to the temporal location of experience is elaborated in Hoerl's contention that one distinctive feature of our perceptual experience is that it is not temporally viewpointed.

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[30] Another philosopher who can be read as claiming that introspection reveals temporal properties of experience is Ian Phillips (2014). Phillips argues that when we experience the temporal extension or structure of phenomena, we also become aware of our experience being temporally extended and structured in a way that mirrors the properties of the phenomena. For instance, if we experience the succession of occurrences, we also experience the succession of the episodes of our experiences. Since this is not directly relevant to presentness, I will not delve into it.

To grasp what Hoerl means by "temporally viewpointed", we need to first understand what "spatially viewpointed" is. In Hoerl's account, typical spatial experience such as visual perception can be considered as *spatially viewpointed* in the sense that we can identify the position or perspective from which objects are seen. "This means that, when we look at an array of objects, we see them in a particular way, which also allows for other ways in which the same array of objects could be seen, if they were seen from other locations." (ibid., 142) In contrast, we cannot make sense of our experience being *temporally viewpointed* in any analogous sense. For there is no way in which we can identify the temporal location from which things are perceived, nor can we imagine seeing the same group of objects from a different temporal location or perspective.

One way to grasp it may be this: a thing's spatial location can be recognised only because meanwhile we can also perceive other spatial locations. That is to say, the sense in which a thing's spatial location is represented in our phenomenology is that we perceive this thing located in this place *in contrast to* other places – we can distinguish between the phenomenology of being in this place and that of being in other places. On the contrary, there is no phenomenological element that can be recognised as corresponding to the temporal location in any equivalent sense.

Although Hoerl's argument is mainly targeted at the experience of the temporal location of experience itself, the same line should also apply to the experience of the temporal location of things and events: there is no ingredient in our phenomenology that can be recognised as corresponding to the temporal location, of the things experienced or the experience itself. (As one may notice, this line of argument is similar to the one I attributed to Mellor regarding why we do not experience things' temporal locations.)

If this is correct, then another mistake with Soteriou's argument is this: Soteriou thinks that the temporal location of our experience "depends on, and is determined by," the temporal location of the things we are perceiving. Yet if the temporal location is not part of our experience of things in the first place, there will be no way in which we can become aware of the temporal location of our experience *by virtue of* experiencing the temporal location of the objects. In either case, the conclusion remains the same: the temporal location does not violate the transparency of experience, i.e., we do not become aware of the temporal location of experience itself by having experience.

Then why is there a temptation to think that the temporal location does violate the transparency of experience, or that the experience and the things experienced appear to occupy the same temporal location? I suppose it is because this view attempts to capture the intuition that things presented in our experience *appear to* be simultaneous with the experience itself. This intuition, however, is mistaken. In my view, things do not appear to be *objectively* simultaneous with our experience, and it is a cognitive error to think that they do. I will come back to this in section 2.5 after more flesh is put on the bones.

Now let us take stock of the arguments examined so far. All the arguments introduced in this section can be roughly identified as *arguments against the experience of the present*, though the connotations of presentness they adopt are different – some interpret presentness as an objective property, of things experienced or experience

itself, while others interpret it as the temporal locations that things experienced or experience itself occupy. To think of presentness as a property is to view it as an intrinsic part of things, while the temporal location is more of an external property – it is where the thing as a whole is located. Nonetheless, regardless of whether it is interpreted as an intrinsic property or the temporal position, the present is always understood as a mind-independent part of the objective world, which we allegedly become aware of through experiences. The presentness of this nature is exactly what is essential to the A-theory – if one wants to argue for the A-theory via the Argument from Experience, experiences of objective presentness are what one would need. However, as we have seen, the arguments discussed in this section all maintain that we do not have experience of such a mind-independent part of the world. The simplest form of these arguments is this: in order for a phenomenology to be the phenomenology of the present, we have to be able to distinguish between phenomenology with and without presentness; it does not seem possible for us to make such a distinction; therefore, there is no phenomenological element in our experience that can be suitably recognised as the phenomenology of an objective thing called the present.

The major idea of this line is that the present is not a contrastable thing that we can have experience of, especially not in the same way as we have experience of typical perceptible properties such as shape and colour, which exemplifies what it means for us to experience certain aspects of the objective world. Nevertheless, this argument leaves open two possibilities. First, the objective present really exists, but it is not something we can have experience of. Second, the objective present really exists, and a corresponding phenomenological element of the objective present ubiquitously exists in all of our experiences.

While it is clear that enquiry into the first possibility is more of a metaphysical undertaking rather than a phenomenological one, I think the same can be said to the second possibility as well. The reason is that a thing's being able to be presented as contrastable is how we typically make sense of having experience of something, and there is no obvious reason why we should posit a different way of experiencing things, especially when we can recognise no relevant phenomenological element. If strong evidence for the existence of the objective present is found in metaphysics or sciences, it might provide new grounds for us to take seriously the possibility that such a ubiquitous phenomenological ingredient exists, but phenomenology alone does not seem to provide any obvious reason for us to accept such a possibility, just as phenomenology gives us no good reason to take seriously the possibility that there is a unicorn in the garden. As my primary focus is on the phenomenological aspect, I shall leave behind the two possibilities hereafter.

Before moving on, one final note is that I have categorised the arguments against the experience of presentness into two groups for the convenience of exposition, but the division will no longer be important from this point onwards. I shall henceforth assume a weak transparency thesis regarding experience, i.e., we do not become aware of any features of our experience by virtue of having perceptual experiences. This implies two things. First, when we have experience, we have experience of things, events, or their properties, but we do not experience the experience itself. Second, while the sole act of having experience does not tell us about any features of our experiences, it is possible that we can get to know some features by other means such as reflexion.

2.2. What The Purported Presentness Phenomenology Does Involve

In the previous section we have seen reasons why it is reasonable to accept that the alleged experience of the present does not involve a phenomenological element that can be taken as corresponding to an objective thing called the present, whether the present refers to a property of things and events or the temporal location that things and events can occupy. The next question that will naturally follow is, what exactly is involved in our alleged experience of the present?

The answer is simple. If we look for a phenomenological element of the present in our experience but could not find it, then it follows that we are simply having experience, rather than having experience *plus* the experience of the present. In other words, what is involved in the alleged experience of the present is nothing more than having experience.

Given that there is no phenomenological element in our experience particularly corresponding to the present, when we start talking about *present* experience or experiencing things *in the present*, we are in effect adding things that the content of experience does not contain into the picture. This stance is what Torrengo and Cassaghi call *experiential eliminativism about presentness*, the view that "we do not perceive objects as located in the present, we simply perceive them." (2021, 9)

On this account, if there is any sense in which we experience the present or things located in the present, it is a kind of subjective present, not objective present. Or more precisely, it is not that we only have access to experience located in the present moment, but that we call the only experience we have access to "the present experience". That a thing is being experienced as present is just another way to say that a thing is presented in our perceptual experience. Put differently, "I am experiencing *X*" and "I am experiencing *X in the present*" are entirely equal. Adding phrases such as "now" or "in the present" to the sentence "I am experiencing *X*" provides no extra information about the content of experience.

Torrengo and Cassaghi refer to the issue regarding the relationship between the present and our perceptual experience as a "Euthyphro style" dilemma: "do we perceive an object because it is located in the present…or do we locate an object in the present because we perceive it?" (ibid., 8) The option that Torrengo and Cassaghi embrace, which I also agree with, is the second disjunct.

A question nevertheless will arise: why do we tend to judge that things are occurring *in the present* rather than simply judge that they are being perceived? Or why do we tend to think that we are experiencing things *in the present* rather than simply thinking that we are experiencing things? While we all accept that we have ordinary experiences, such as the experiences of sitting in front of a table, listening to music, etc., we meanwhile have a tendency to believe that we also have experience of something over and above those ordinary occurrences. Why?

Torrengo and Cassaghi seem to tend to downplay this issue. As they write, "The mere fact that we are aware of [an object] as an object of perception – rather than memory or imagination – is sufficient to explain why we judge it to be located in the present." (ibid., 9) However, the question remains. If in reality we do not have experience of the present, why do we tend to *think* that we experience the present?

My suggestion, to put shortly, is that to think that we have experience of the present over and above ordinary experiences is essentially a projection of the feature of our

perceptual experience that I have been talking about, i.e., it necessarily has a confined temporal horizon.

Philosophers have approached this feature of our perceptual experience from various perspectives. Hoerl's (2018) claim that our perceptual experience is not temporally viewpointed is an example. Recall that the reason why our perceptual experience lacks temporally viewpointedness is that there is no way we can recognise the temporal location of what we experience as we recognise their spatial location. To move a step further, the reason why experience is spatially viewpointed but not temporally viewpointed lies in our different ways of experiencing spatial and temporal existence. That is, we can freely move around and change our location and perspective in space but not in time, and we have access to different parts of space all at once but not different parts of time. The different ways we experience spatial and temporal existences is also captured by Callender's notion of "mobility asymmetry," which claims that we can freely travel in space, whereas there is no such thing as time travel in any parallel sense (2017, 222).

The limited horizon of perceptual experience is also explicitly expressed in Torrengo and Cassaghi's notion of "experiential availability", which means that "I only *have access* to experiences located in the present moment and not to past or future ones." (2021, 13) Torrengo and Cassaghi suggest that this is a feature of our perceptual experience that both the A-theorist and the B-theorist approve of, while what the A-theorist and the B-theorist disagree about is the metaphysical implication of this feature. The A-theorist thinks that the reason why only the present experience is available to us is that the present experience is the only experience that exists in reality, whereas the B-theorist holds that experiences at all times exist, but at any time *t* the subject has access only to experiences located at *t*. According to Torrengo and Cassaghi, both the A-theorist's and the B-theorist's notions of experiential availability are effective in explaining why the experiential horizon we have is restricted, so this feature alone is in favour of neither the A-theory nor the B-theory. All that is safe to say is that the arguments for the A-theory based on experiential availability are unjustifiable. Since Torrengo and Cassaghi also stand for "experiential eliminativism about presentness", the view that having present experiences just means the same as having experiences, the notion of experiential availability can be simply understood as that we only have access to these experiences rather than other experiences.

We can read from these discussions several different descriptions of our perceptual experience: it is not viewpointed, it lacks mobility in time, and it only has access to the present experience (or, in terms of availability, only the present experience is available to us). If I understand them correctly, although proceeding from different perspectives, these expressions as roughly expressing some or all of the three aspects of what I have been referring to as the perceptual experience's confined temporal horizon – limited access, involuntariness, and directionality.

In section one I have discussed how this feature contributes to the dynamic character of our temporal experiences and thus our belief that we experience temporal passage. This feature's connection with the belief that we experience presentness is supposedly more straightforward. My suggestion is that this feature of our perceptual experience is just what we want to capture by thinking that we experience the present over and above ordinary experiential phenomena. One way to put it may be this: "we are experiencing the present" or "we are experiencing things in the present" just means that "we are having experiences within our confined temporal horizon."

Adding the restriction "within our confined temporal horizon" does not affect what I said earlier, that experiencing the present and having experience are entirely equivalent. The reason is that the latter focuses on the representational content of the alleged experience of the present. If we consider this issue in terms of representational content, i.e., which aspects of the world are represented in the experience in question, then the answer is that the experience represents the occurrences of certain things and events in the world, while the experience's feature of having a confined temporal horizon is hardly part of the representational content.

This sense of experiencing the present will explain another two views people sometimes hold regarding presentness. The first is that presenting things as being in the present is a feature of perceptual experiences due to their nature as perceptual states, as opposed to other mental states such as memories and anticipations. Without delving into the details of this so-called mode view,[31] I suggest that it is a justifiable position as long as we take presentness as associated with how we perceive, i.e., some inherent feature of our perceptual apparatus, rather than what we perceive, i.e., the external, mind-independent world.

The second view is that presentness is part of all of our perceptual experiences whatsoever. I think this is also a reasonable stance if it is made clear that we are talking about subjective presentness, which just stands for the quality of being experienced by us. A metaphor would be this: suppose our head is encased and fixed in a steel sphere that we can never take off, and only through an eyehole on the steel case are we able to look into the outside world.[32] In such a world, everything we perceive will have the property of *being perceived through an eyehole*, and we will never be able to have experiences devoid of such a property. Consequently, being perceived through an eyehole cannot be a contrastable property that we can experience as we experience typical perceptible properties such as colour and shape. However, it does not follow that being perceived through an eyehole is an intrinsic property of everything in the objective reality. Neither does it mean that being perceived through an eyehole is not part of our experience. Perceiving the world within a confined temporal horizon is just analogous to seeing things through an eyehole. Presentness, in this case, just refers to the quality of being perceived through an eyehole (take it as a metaphorical term for our confined temporal horizon). Presentness defined as such has nothing to do with any ontological property or existence that pertains to the objective world.

One implication regarding language followed from such a notion of presentness is that it can be legitimate to use expressions such as "experiencing the present" if what we mean by it is simply that we experience the subjective present, which involves things and events being presented to us in our confined temporal horizon. However, expressions such as "the experience/ phenomenology of the present" will be misleading. The reason is that the phrase "the experience/phenomenology of *X*" typically implies that there is an objective phenomenon *X* and we subjectively experience this *X*. Yet I have explained that we cannot make sense of a

[31] Recanati (2007), Almäng (2012), and Kriegel (2015) can be read as advocating such a notion of presentness.

[32] Another metaphor from *Slaughterhouse-Five*. Some details of the original analogy are left out.

phenomenological element that particularly corresponds to an objective thing called the present.

To wrap up, my overall view on the intuition that we experience the present is that it captures an important feature of our perceptual experience, i.e., it has a confined temporal horizon. This view will further imply two contentions. The first is that it is something about our phenomenal character of our experience (as opposed to, say, how we interpret our experience) that leads us to believe that we experience the present. The second is that this "something" involves only certain aspects of our perceptual experience, and it would be a cognitive error to think the present we experience pertains to the objective world. In the next two sections, I will provide further elaborations on the two claims respectively. Section 2.3 will argue that this feature manifests as a phenomenology that is at odds with the B-ontology, and section 2.4 will explain why it is erroneous to infer from the experiential present to the ontological present.

2.3. The Hard Problem of The Experiential Present

I mentioned in section 2.1 that there is an alternative understanding of experiencing the presentness of our experience, i.e., we are aware of the present experiences as occurring *simpliciter*. I believe that this sense of experiencing the present, with a few clarifications being made, can serve as an effective description of the representational content of the alleged experience of the present, which motivates the Argument from Experience.[33]

This understanding of the alleged experience of the present is most explicitly defended by Yuri Balashov (2005). Balashov identifies three aspects of our present experiences, or the presence of experience (PE) as follows: 1) Presentness: whenever we have an experience, we judge the experience to be present, as opposed to being past or future. 2) Exclusion: an experience's being present means that it is known to occur in the present to the exclusion of other experiences that happened before it and will happen after it. And 3) Occurrence: the present experiences "are known to be *occurring*, or *present*, as opposed to *not* occurring, or *absent*," or "occurring *simpliciter*, in addition to occurring when they are." (2005, 295–296, 298)

According to Balashov, all three aspects of PE are perfectly compatible with most versions of the A-theory, especially presentism. When B-theorists address this issue, they usually focus on Presentness and Exclusion, and it appears that they can account for these two aspects satisfactorily. However, Balashov maintains, Occurrence poses a more significant challenge for the B-theorist, who often underestimates its importance

[33] In this section I will mostly talk about how the present experiences are known to be, or more precisely, appear to be, occurring *simpliciter*, and I do so to follow Balashov's use. It should not be taken as suggesting that experience itself is some object of our experience, or that we get to learn about certain features of the experience itself by having experience, a view that would violate the weak transparency thesis that I have assumed. I shall take the statement that the present experiences are known to be or appear to be occurring *simpliciter* as concerned with the content of the experience, i.e., things and events experienced, rather than the experience itself. I believe this is in line with Balashov's own use, since when he uses the expression "some experiences are occurring *simpliciter*," what he usually means is that the experience of something, typically pain or happiness, is occurring *simpliciter*. So, it is about the content of experience, rather than the vehicle.

and confuses it with the other two aspects. Balashov thus labels Occurrence as the "*hard* problem of PE." (ibid., 296)

In Balashov's account, while all our experiences are on a par with respect to Presentness and Exclusion, a disparity arises when considering Occurrence. It is true for all experiences that when it occurs and a judgment about its A-property is made, this experience is judged to be present, and it is so to the exclusion of its predecessors and successors. For example, if I am eating breakfast now, it means that, in the present moment, only the experience of eating breakfast is regarded as present by me, and when I judge the experience of eating breakfast as present and occurring, I will not also regard other experiences such as eating dinner last night or watching a film this afternoon as present and occurring. This is true with respect to any experience. Say, when the afternoon comes, the experience of watching a film becomes present for me, while the experiences of eating breakfast this morning and eating dinner this night are not. Hence, as far as Presentness and Exclusion are concerned, all of our experiences are "items tenselessly confined to their respective dates; each of them occurs when it does," and therefore they all have equal status (ibid., 297). However, according to Balashov, Occurrence captures "an extra feature" that the present experience has but other experiences does not: "in addition to being known to be present when it occurs, the former, but not the latter, is known by you to be occurring *simpliciter*. It is known to be present in a more radical sense than that allowed by token-reflexivity." (ibid.)

The token-reflexivity here refers to the standard B-theoretic treatment of presentness.[34] In the linguistic debate about the truth condition of propositions containing "now" or "present", the A-theorist claims that for propositions such as "an event *E* happens now" or "a thing *T* is present" to be true, there have to be truth conditions that *E* or *T* demonstrates presentness, which is an A-property, meaning that these propositions are true because when *E* or *T* happens, the present moment objectively exists. For example, "I am sitting in front of my desk now" is true, because my sitting in front of my desk happens at the objective present moment. On the contrary, the B-theorist argues that the propositions can be true by virtue of the fact that the events they refer to and the utterance of the propositions occur at (roughly) the same time. In other words, for a now-proposition to be true, it only requires that the tokening of the proposition and the occurrence of the event it referred to happen at the same time. "I am sitting in front of my desk now" is true, because my sitting in front of my desk is simultaneous with the utterance of the statement. According to the token-reflexive account, therefore, the temporal now is just analogous to the spatial here: a here-proposition or a now-proposition is true iff the thing or the event that the proposition refers to occurs at the same spatial or temporal location as the proposition. The metaphysical implication of the token-reflective treatment of now-propositions would be that "now" and "here" are both devices with which we are allowed to express our perspective in time and space, and they are both context-sensitive and subject-dependent in nature, reflecting no genuine nature of the world.

Balashov nevertheless argues that there is something about our present experiences that is left out by the B-theorist's token-reflexive account of the present: while in this account all experiences are on a par, the phenomenon of Occurrence seems to breach the parity. Balashov's next move is to argue that the B-theory has to be supplemented

[34] Typically defended by Mellor (1998) and Oaklander (1993, 2004).

with stage theory in order to accommodate Occurrence. For in that case, that only these experiences rather than other experiences appear to be occurring at *t* will be easily explained by the objective fact that other experiences never exist at my *t*-stage.

Balashov's notion of Occurrence, as well as his view that we have to accept stage theory to explain it, has faced criticisms from some philosophers. Callender is a typical example of such dissenting voices:

> Balashov (2005), for example, tries hard to identify this experience not captured by the token-reflexive theory. He says tenseless accounts to date miss the crucial feeling, the feeling of events "simply occurring" (p. 295). What is it to simply occur? Balashov struggles to say. At one point he explains that the "hard problem" of the presence of experience is that "some experiences are known to be *occurring*, or *present*, as opposed to *not* occurring, or *absent*" (p. 296). But if this problem is about knowledge (and not experience), and in particular, knowledge at one time that other experiences don't exist – as opposed to don't exist now – then the claim is clearly question-begging. Later Balashov settles on the "distinctive aspect" of occurrence as the alleged fact that "present experiences are known to be occurring *simpliciter*, in addition to occurring when they are" (p. 298). This again pushes our question back: what is occurring *simpliciter*? The answer is more Latin – the experience, he says, is "*sui generis*" (p. 298) – but we never get more *lumen*. (2017, 188)

Callender's dissatisfaction is shared by Hoerl (2018) and Deng (2017). Despite the unequivocal disapproval, it is nevertheless not entirely clear what their criticisms are. As I read them, two lines of objection can be attributed to the critics. The first objection is that we cannot make sense of the Occurrence aspect of our experiential present, or that the notion of Occurrence is unintelligible; the second objection is that Occurrence should not be regarded as bearing on the metaphysical theories of time. I think the second objection is correct but the first is mistaken. My overall position thus is that it is true that some experiences appear to be occurring *simpliciter*, but it is wrong to take this as supporting the A-theory of time or certain versions of the B-theory. I will address the first part in the current section and the second in the subsequent section.

Let us start with the intelligibility of Occurrence. Recall that what Balashov's notion of Occurrence attempts to capture is the disparity between present experiences and past and future experiences. Thus, if we are able to make sense of such a disparity, the notion of Occurrence should also be intelligible. And if we can make sense of such a disparity and thus Occurrence, it will be established that there are some aspects of our experiences that are left out by the B-ontology.

Does such a disparity exist then? Natalja Deng evidently thinks it does not. She uses a thought experiment to make the point:

> Suppose it's Tuesday today…Suppose you spent all of today, and all of yesterday, in a completely red room (Skow, 2015, p. 203), meditating while looking at the red walls. And suppose you're able to produce perfectly accurate descriptions of your phenomenology. Will your descriptions of your experiences on Monday and on Tuesday differ in some way? Do the Tuesday experiences feel somehow more vivid or more lustrous or in some other way 'special'? Presumably not: Instead, the descriptions will be exactly the same.

> Presentness makes no difference to how things look or feel or sound. (2019, 11)

Deng is certainly correct in that when we experience the same thing at different times, *ceteris paribus*, the content of these experiences should be undifferentiated. However, I argue that searching for the specialness of perceptual experience within its content would be misplaced. When we say that the present experience is special, what we are trying to capture is rather that I only have this experience, or that only this experience is accessible to me. Although Deng may be correct in that "presentness makes no difference to how things look or feel or sound," presentness nevertheless determines whether things are felt or heard in the first place. In other words, the specialness of the present experience lies in its sole existence in our immediate experience, not in the specific content it has.

Deng is clearly aware of the specialness of present experiences in this sense, but she argues that such specialness has nothing incompatible with the B-theory of time:

> At each time, one perceives only some things and not others. But this is a kind of 'specialness' that is compatible with the block universe: Each time is 'present' and therefore 'special' at itself, just like each spatial location is 'here' at itself…These perceptual experiences present the world in a way that is perfectly compatible with the block universe view. (ibid.)

If we understand Deng's claim that "these perceptual experiences present the world in a way that is perfectly compatible with the block universe view" in the sense that the fact that we only have these experiences rather than others does not constitute a counterargument to the B-theory, then I totally agree with it. Yet if it suggests that the way we experience the world, or the way the world appears to us, accords with the B-theoretic description of the world (the view that I would attribute to Deng), then I think it is misguided.

Consider it this way: the A-theory claims that only present experiences are existing or occurring, and the B-theory claims that all experiences are equal. Which description of the present, the A-theoretic or the B-theoretic, aligns more closely with the way the world appears to us? I would think it is the former: we simply have to experience the world as if only present experiences were existing or occurring.

It appears to me that Deng's account of the specialness of the spatial here and the temporal now involves an ambiguity. The specialness of a certain spatial location or a temporal location in the B-theory lies in its ontology, i.e., it is this one, not others. This, however, does not explain why people tend to think that the temporal now is special but the spatial here is not, or at least that now and here are not special in the same way – we tend to think now has a kind of specialness that exceeds the "it is this one, not others" kind of specialness, as Balashov's description of Occurrence attempts to capture.

Then what is this extra layer of specialness that the temporal now has while the spatial here lacks? I think it is that the temporal now appears to be the sole existence or occurrence while the spatial here does not. This sense of specialness can be easily mistaken as the ontological specialness that it *is* the sole existence or occurrence, but what it really involves is merely the epistemic status, i.e., we have access to only the present time but not others, or only the present time appears to be existing or occurring while other times do not have such appearance. This is radically different from space. A spatial position, no matter how ontologically special it may be, can

appear in our experience along with other spatial positions, but one temporal location can never appear in our experience together with other temporal locations. Thus, to talk about space and time as if they share the same kind of specialness would be misleading. As far as how things appear to us is concerned, the temporal now and the spatial here are by no means analogous.

Now we can go back to Balashov's notion of Occurrence. I believe this notion is intelligible, because there is indeed a disparity between the present experience and the past and future experiences: only the present experience appears to be the only experience that exists or is occurring, and when the present experience appears to be existing or occurring, it seems to us that other experiences do not exist or are not occurring. – They do not appear to be equivalent at all.

This is neutral regarding whether or not other experiences really are existing or occurring, since how things appear to be can be different from how things really are. It is thus also neutral regarding whether the A-theory or B-theory is the correct metaphysical theory or even which theory we think is correct. As a matter of fact, both the A-theory and the B-theory have their own explanations as to why only the present experience appears to be occurring *simpliciter*: the A-theorist would argue that this is because only the present experience exists or is occurring, whereas the B-theorist would contend that the limited access of our experience to the world is sufficient to explain it. If we acknowledge the validity of both explanations, then the experience alone cannot settle the metaphysical debate. Despite this, however, it is understandable that people intuitively lean towards favouring the A-theory solely based on experience, since the experiential present indeed feels more akin to the A-theoretic present than the B-theoretic present, since it indeed does not feel so equal to other times.

One thing worth noting is that although I believe that the notion of Occurrence can be an effective interpretation of the intuition that we experience the present, I think Balashov's original description of Occurrence is ambiguous and misleading. Balashov characterises Occurrence as "some experiences are known to be *occurring*, or *present*, as opposed to *not* occurring, or *absent.*" However, as Callender points out, it is not clear whether Balashov is talking about knowledge or experience (Callender 2017, 188, quoted above). I suggest that a more accurate characterisation of Occurrence is that "some experiences *appear* to be occurring *simpliciter*" or "some things and events *appear* to be existing or occurring *simpliciter*" (I use them interchangeably, see footnote 33). The confusion will be avoided, as the mere appearance of certain experiences occurring *simpliciter* does not amount to the *knowledge* that in reality only those experiences are occurring while others are not. An intelligible notion of Occurrence involves only how things appear to us, rather than how things really are in themselves. Balashov's inaccurate description of Occurrence presumably led him to think that Occurrence should have a bearing on metaphysical theories of time, which I believe is a false implication we can draw from Occurrence (the subsequent section will offer further explanations).

One concession to be made is that the expression that the present experience appears to be the only experience that is occurring may not be perfect, since it seems that we can say the same about space: the experience located here appears to be the only experience that is occurring. It can thus be contended that there is nothing fundamentally disanalogous between the experiences of space and time. Skow (2011,

2015), another B-theorist who thinks Occurrence is an intelligible notion, expresses a concern of this nature.

Skow's argument involves a comparison between someone meditating in a room in different temporal and spatial locations: Suppose I am meditating on two consecutive days, Monday and Tuesday, in a room with only walls, and these walls can change colours. Suppose on Monday, the walls of this room are all white, and on Tuesday, the walls turn red. It seems to be the case that *on Monday*, the only experience available to me (i.e., the only experience that appears to me to be occurring) is the experience of whiteness, and *on Tuesday*, the only experience available to me is the experience of redness. Then Skow considers what would be a "spatial analogue" of the scenario. He suggests that a spatial analogue is this: in Florida, I am in a white room, and in Massachusetts, I am in a red room. Since I cannot simultaneously be in both the room in Massachusetts and the room in Florida, it is the case that *in Florida*, the experience of whiteness is the only experience available to me (i.e., the only experience that appears to me to be occurring), and *in Massachusetts*, the experience of redness is the only experience available to me. Hence, Skow claims that our spatial and temporal experiences are analogous enough in that the availability applied to both is merely location-relative availability. Or, in terms of Occurrence, it seems that the experience now and the experience here both appear to be occurring *simpliciter* (2015, 221–224).

This spatial analogy appears to me to have misjudged the important difference between how we are allowed to experience spatial and temporal existence. Once we look closely at the suggested spatial analogy, we will see that the analogy collapses in at least two aspects.

The first is that "here" and "now" are not analogous in Skow's examples. In the case of time, we do not, say, experience the whiteness of the Monday room all at once. Instead, we experience whiteness at each individual point in time throughout the day. On the contrary, we can experience the whiteness of a room in one perception, and a room can be defined as a single spatial location only in a vague sense. The fact is that it is never easy to distinctly demarcate which portion of space is *here*. Even when we are restricted in an enclosed small room, it is still unclear what counts as here – is it the space our body occupies, a fraction of the room, or the entire room? If we consider the entire room as one single temporal location, then here is hardly analogous to now, since the space of a room encompasses multiple small spatial locations or units (whatever a spatial unit may be). If we consider only the space our body occupies as here, it follows that I can experience the whiteness here (the floor my feet are on) and the whiteness there (the walls at a short distance from me) simultaneously, and thus we might say that both things here and there appear to me to be occurring *simpliciter*. It goes without saying that my body occupies more than one single spatial location. As Skow himself acknowledges, "I am already simultaneously located in two different locations. I am over here, where my left hand is, and I am also over there, where my right hand is." (ibid., 221) In the strictly analogous sense, we never know what it is like to access things and events located in one single spatial location, because a spatial position that is perfectly analogous to a single temporal location is supposed to be an (almost) extensionless part of space. Many things in a small room (such as many different parts of the walls) all appear to us to be existing – this little fact itself is a miracle, compared to how we experience temporal existence.

The second way the spatial analogy fails to hold lies in the reasons why we have a limited experiential horizon – in the spatial case, there can be various reasons collectively resulting in our restricted horizon, all of which are largely contingent, whereas the restriction on temporal experience is not contingent. For instance, the reason why when I am in the room in Florida, only the experience of whiteness appears to me to be occurring is that there are certain contingent conditions that restrain my attention to this room. If I choose to look at things outside the room, I will simultaneously perceive things other than the whiteness of the room. Even if I want to see Florida and Massachusetts simultaneously, there is no fundamental restriction preventing me from doing so – I can see both from a spaceship. Hence, the reasons why only some spatial experiences seem to be available to us are multiple and contingent – the reasons include the scope of human vision, whether there are things blocking our eyesight, where we choose to lay our attention on, and so on. This is fundamentally different from the reason why only the present experience appears to be the only available experience. The latter is not due to any contingent factors, but simply because this is how our perception works. Given that the term "*simpliciter*" suggests an absolute, unqualified, and unconditional sense, it would not be appropriate to apply it to our experiences of the whiteness of the room in Florida, since which things or events in space are experienced by us as occurring is highly contingent and depend on all sorts of conditions or qualifications.

I think the notion of Occurrence effectively captures our different ways of experiencing spatial and temporal existence. While our temporal experience is necessarily confined, there is no equivalent restrictions on spatial experience. Thus it is sensible to say that only present experiences appear to be occurring *simpliciter*, while the same cannot be said to spatial experiences in any sufficiently analogous sense. Though it might sound correct that the experience now and the experience here both appear to be occurring *simpliciter*, it is true only superficially. Taking them as completely analogous will distort the crucial difference between our spatial and temporal experiences.

Whether it is intelligible to say that some things appear to be occurring *simpliciter* is related to the veridicalism-illusionism debate. We have seen in section one how this debate unfolds regarding the alleged experience of temporal passage, which is the primary focus of the debate. Now we may consider how it would play out concerning the purported presentness phenomenology. Presumably, the illusionist position will be that we do have phenomenology of presentness, and yet there is no such thing as objective presentness in reality, and therefore our phenomenology is illusory; the veridicalist view, in contrast, will be that there is no such thing as phenomenology of (objective) presentness, just as there is no such thing as objective presentness.

Once again, I am defending a modest illusionist view: while it is true that objective presentness is not part of the content of our experience, there is something about our experience that gives rise to the impression that we experience the present – this "something" again is the confined temporal horizon of our perceptual experience, and this feature is manifested as the illusory phenomenology that at each time only some things appear to be occurring *simpliciter*. It is illusory because in reality – in the B-theoretic universe – everything exists or occurs equally.

As explained, veridicalism, either the modest or radical version, denies that there is any content of our experience that is at odds with the B-theory's description of the

world. Thus, in the case of presentness, they would claim that there is nothing in our experience that does not align with the B-theoretic present – i.e., there is no such thing as experiencing only some things as occurring *simpliciter* – and to believe otherwise is a cognitive error. In particular, they would consider the source of the belief that we experience the present as purely cognitive, i.e., how we interpret our experiences, instead of phenomenal, i.e., how things appear to us to be via experiences.

Navigating the distinction can be delicate. On the one hand, it is true that no phenomenological element in our experience particularly corresponds to the objective, metaphysically privileged present as the A-theory describes, and it would be a cognitive error to think we experience such an A-theoretic present. On the other hand, however, it should also be true that our experiential present does not feel like the B-theoretic present, which is supposed to have the same status as the spatial here. If it is merely a cognitive issue that the experiential present does not feel like the B-theoretic present, then we should be able to rectify it once the relevant knowledge is in place. The reality, however, is that we cannot change the fact that our experiences are restricted to events occurring at a specific time, and in this sense, time somehow feels like the A-theoretic time, where there is always one uniquely "special" moment.

It is one thing whether we attribute Occurrence or presentness (defined in terms of appearing to be occurring *simpliciter*) to the world itself and take it as something objective, and it is another thing whether we experience the world as if only some things and events were existing or occurring. Whether we think the Occurrence or presentness pertains to the objective world is a cognitive issue, and it is influenced by people's prior conception of the nature of time and is thus subject to amendment: once someone accepts the B-theory of time or special relativity, they probably will abandon the belief that the way things appear to us reflects the reality itself. However, even if one clearly knows that the way we experience things does not reflect how they are in themselves, there is still no way that we can experience the world any differently – we can never experience time in the same way as we experience space.

Among philosophers who have argued for the veridicalist position on the purported passage phenomenology, few have explicitly articulated a parallel stance on the issue of presentness. Deng is one such philosopher who has clearly expressed the veridicalist stance on presentness, and I have explained what is inadequate about her argument. I presume Hoerl, another philosopher who maintains a veridicalist position regarding passage, might be more open to accepting my view that the origin of the belief that we experience the present lies in phenomenology rather than (solely) in how the experience is interpreted. As introduced in the previous two sections, Hoerl maintains that our perceptual experience has the feature of lacking temporal viewpointedness. It may be dubious that this feature of perceptual experience will manifest as the phenomenology of some things occurring *simpliciter*. But I believe if we accept that this feature of perceptual experience results in a difference between how things appear to us and how things exist in themselves, it would be a reasonable conclusion that we do have such (illusory) phenomenology.

2.4. The Argument from Experience Revisited

In the previous section I argued that the notion of Occurrence accurately captures the particular way we experience the world and can serve as an effective description of the representational content of the alleged experience of the present. I will now move on to argue that this phenomenology nevertheless does not directly lend support to the A-theory of time or any particular form of the B-theory.

Note that everything I shall say in this section also applies to the phenomenology related to the passage of time, namely, the phenomenology of dynamic change in things' states. This is because the latter can be understood in the sense that what appears to be existing or occurring is constantly changing in a dynamic manner, i.e., what currently appears to be existing or occurring will cease to do so, while what currently does not appear to be existing or occurring will begin to appear so.

As mentioned above, the irrelevance between the phenomenon of Occurrence and metaphysical theories of time is the second line of objection that can be raised against Balashov's account of the Occurrence, the line that I think is correct. This line of objection is conveyed in Callender's following comment: "Critics of the token-reflexive account like Balashov have a point, but it is misdirected if thought to bear directly on the metaphysics of time." What then is the point that Callender thinks Balashov makes correctly? Callender continues, "The critics are undoubtedly right that the token-reflexive account doesn't account for the psychology of an experience itself." (2017, 188) So it seems that what Callender agrees with is that the token-reflexive account does not take into account the psychological aspect of our experience of the present.[35]

However, as Callender correctly indicates, this omission does not undermine the primary objective of the B-theorist's token-reflexive treatment of the present. The B-theorists who adopt this approach, such as Mellor (1998), use the token-reflexive account of the present to reject the A-theorist's claim that only the objective present can provide truth conditions to now-statements.[36] As Mellor writes, "Whoever I am, and whenever I believe my experience to be present, that now-belief is true. This is the inescapable presence of experience that we B-theorists must explain away." (1998, 44) And as generally acknowledged, the token-reflexive account of the present has effectively fulfilled the task of establishing that the objective present is not necessary for the truth of now-statements and clarifying in what sense now-statements are true in the B-theoretic reality. Therefore, the ignorance of the "psychology of an experience itself" does not undermine the primary claim of the B-theorists who advocate the token-reflective account in the debate, the debate concerning the true metaphysical theory of time.

Also, while the token-reflexive account of the present does not explicitly address the subjective feeling of the experiential present, it does not deny that there can be such a

[35] It can be controversial what the psychological aspect of present experiences is. It could refer to either the phenomenology or the understanding. I have argued in the previous section that Occurrence should be taken as a phenomenological issue rather than merely a cognitive one.

[36] A main target of the B-theorist's token-reflexive account of the present is Arthur Prior's (1959) "thank goodness" argument. Prior contends that the objective present is needed to make sense of the feeling of relief that we usually have after a painful dental surgery. The argument is that in the B-theoretic reality there is always the fact that a painful dental surgery happens at *t*, then where does the feeling of relief come from? The explanation that the token-reflexive account of the present provides is this: at any given time *t* I am only conscious of the experience located at *t*. The feeling of relief comes from my belief that I am not being in pain. My belief that I am not being in pain is true at any given time *t* if and only if no painful experience is located at *t*. That is how I can have the feeling of relief at a time after the time of my dental surgery (Mellor 1998, 40–42).

psychological aspect. In the token-reflexive account, the present is just a subjective feature that depends on one's perspective. When someone makes now-statements such as "something is happening now," they are only expressing the temporal perspective they possess at a given time, rather than making a claim about what exists in the objective world. Yet this does not mean that the token-reflexive account leaves no room for the subjective temporal perspective. In Callender's words, what the token-reflexive account is missing is "the existence of a mental token corresponding to the now." (2017, 189)

Then, when the notion of Occurrence is properly understood, i.e., understood as the subjective feeling that only some things appear to be occurring while others do not, what it does is just to capture the "mental token" corresponding to a given time. And this is a separate issue beyond how now-statements are associated with experiences, the issue that the token-reflexive account is devoted to handle, rather than something that the token-reflexive account denies or cannot accommodate. Therefore, even if we accept that the token-reflexive account leaves out Occurrence, the central claim of the token-reflexive account that the truth conditions of now-statements do not require the objective existence of the present time remains untouched. Occurrence provides no obvious evidence for the A-theory.

It is worth noting that although Balashov argues that Occurrence is left out by the B-theorist's token-reflexive account of the present, he does not argue for the A-theory. What he proposes is stage theory, which is a version of the B-theory. Also, Callender's major target is the arguments for the A-theory from the experience of the present ("even if we found a phenomenal present, that wouldn't automatically be a point in favor of the tensed theory", ibid.). Nevertheless, Callender's statement that "critics of the token-reflexive account like Balashov have a point, but it is misdirected if thought to bear directly on the metaphysics of time" seems to suggest that the experiential present should not be used to argue for any metaphysical theory of time, be it the A-theory or any particular form of the B-theory. Hence it should be fair to say that Callender also rejects Balashov's argument for stage theory from Occurrence. What Callender claims seems to be the more general stance that it is never justified to infer from phenomenology to certain metaphysical theories of time. I too think this is how we should understand the relation between our phenomenology and metaphysical theories of time. Let us revise the Argument from Experience and see how this would proceed:

> P1: We have the phenomenology of *X*.
>
> P2: The ontological existence of *X* is the best explanation for the phenomenology of *X*.
>
> C: The ontological existence of *X* is real.

Why does this line of argument fail? A quick answer is that it is because our experiences can be illusions. If what we experience are mere illusions, then there will be no need to seek explanations for such illusions at the ontological level. As Callender puts it, "Direct appeals to phenomenology are unconvincing…After all, hallucinations exist, yet it's wrong to infer from these experiences that pink elephants do too." (2017, 189)

If it seems too quick to claim that everything that we perceive *could* be illusions (which may not be too quick), another way to see how this argument fails is that *X* has

different meanings throughout the argument – i.e., the (alleged) phenomenology of *X* and the ontological existence of *X* involve different things.

For instance, in the case of presentness, *X* in "the ontological existence of *X*" clearly refers to "the A-theoretic, objective present" (*Xo*). However, the same term cannot be filled into the phrase "the phenomenology of *X*", since, as discussed in section 2.1, no such phenomenology can be identified. At best, we may fill in "the subjective, experiential present" (*Xp*), but, as argued in section 2.2, what is involved in "the phenomenology of the subjective present" is nothing more than having experience – in particular, having experience of things and events that are presented in our immediate perception. That (only) these things are presented in our perception is all that we can learn from phenomenology. It is significantly different from the ontological claim that only these things are existing or occurring (or metaphysically special in a certain way) in reality, which is what the A-theoretic, objective present would claim. As some B-theorists have convincingly argued, the mere fact that I only have experience of these things does not amount to that only these things exist in reality, since there is no logical reason to assume that what I am currently experiencing is all that exists in reality. It is highly likely that other things and events exist, but I am unaware of them.[37] As a result, it is illegitimate to infer from *Xp* to *Xo*.

The same idea applies to Occurrence. Balashov uses Occurrence to capture the phenomenology that only these things rather than others are occurring. However, there is a difference between that only these things *appear to* be occurring and that only these things *are* occurring in reality. I agree that there is the phenomenology that only some things appear to be occurring *simpliciter*, but Occurrence in this sense is only *subjective Occurrence* (*Xp*). It is different from the ontological claim that only these things are occurring in reality, as *objective Occurrence* (*Xo*) would claim. And there is no guarantee that the former implies the latter. What we have in phenomenology is merely subjective Occurrence (the sense that the term "Occurrence" is typically used for), while whether there is also objective Occurrence, i.e., whether it is true in the objective reality that only these things are occurring, is a different issue which we cannot know based on mere phenomenology.

The major explanandum for Balashov is the disparity between present experiences and experiences at other times. As Balashov explains, all experiences exist and are equally mine according to the B-theory, and this means that all times in my lifespan should "have an equal claim to represent my perspective." (2005, 299) The question then is why I am only having this experience but not others. To use Balashov's own example, suppose I experience pain at t_1 and pleasure at t_2. The question is, what can explain why I am experiencing pain *rather than* pleasure? Balashov articulates the issue as follows:

> The quandary is essentially about the origin of the phenomenal disparity among the experiences that are ontologically on a par. It appears that the parity among them must be broken somewhere *en route* from ontology to phenomenology. How exactly does it come to be broken? (What is the parity breaking mechanism?) And why is it broken in this *particular* way, favoring t_1 over t_2? (ibid.)

[37] In particular, Skow (2015, chapter 12) and Prosser (2016, chapters 2 and 3) provide explanations as to how the B-theory can accommodate the fact that only some experiences are available to us.

The A-theory (especially presentism) seems to be able to explain the disparity rather effortlessly: I am having this experience rather than others, or I am experiencing this time rather than other times, because only this experience and this time exists or is occurring. In contrast, there seems to be nothing about the B-ontology that can provide explanations as effective as this. – It cannot be explained by any objective fact such as that now is t_1, since the B-theory does not grant such a fact. Balashov thus claims that "nothing that happens at t_1, in addition to my pain, can explain why it is now t_1 for me and why I am suffering from pain." (ibid.) Thus, in Balashov's consideration, what we need to explain is the fact that pain is occurring *simpliciter*, and he thinks stage theory can provide the explanation, because under stage theory "my t_1-stage's knowledge that pain *rather than* pleasure is occurring is easily explained by the fact that this stage *never* has pleasure." (ibid., 303)

A crucial reason why Balashov's argument is invalid is that we do not need to explain the "fact" that pain is occurring *simpliciter* in the first place. Just because pain appears to us to be occurring *simpliciter*, it does not follow that there is the objective fact that pain is occurring *simpliciter*. As mentioned above, it is misleading to describe Occurrence as some sort of knowledge since it can, in fact, stand for appearances only. Balashov's defective characterisation of Occurrence may have resulted in him picking up the wrong explanandum.

Another way to understand Balashov's error is this: Balashov's aim is to locate where the parity – "among the experiences that are ontologically on a par" – is broken "*en route* from ontology to phenomenology," but the parity does not have to break at the ontological level. The Occurrence aspect of our experiential present, namely the phenomenology of (only) these things rather than other things appearing to be occurring, can be explained by the fact that we only have access to these things but not others, without appealing to any ontological fact. Balashov might be right that nothing about the B-ontology can provide explanations for the disparity as effective as the A-ontology can, but maybe the solution does not need to be found in the B-ontology at all – nor does it have to be found in the A-ontology.

2.5. The Experiential Present: Subjective or Objective?

I have argued that our experiences have the (illusory) content that only some things appear to be existing or occurring, and this phenomenology gives rise to the intuition that we experience the present. I also have argued that such phenomenology does not imply that only some things are existing or occurring in reality. In other words, it is illegitimate to infer from the experiential present to the existence of the objective, metaphysically privileged present that the A-theory requires.

However, the A-theorist could contend that their view is not that we directly experience the objective present, or that there is a direct logical inference from the experiential present to the ontological present; rather, what they claim is that the ontological present is the *best explanation* for the experiential present. I suggested that the phenomenology that only some things appear to be existing or occurring can be explained by the limited access that our perception has to the world, yet it could be complained that this explanation may be sufficient to reject those versions of Argument from Experience that talks about "any *reasonable* explanation" (since it is a reasonable explanation that does not appeal to the ontological present), but whether it is a better explanation than the existence of the ontological present is a different question.

In the next phase of the discussion, I will not directly argue for the superiority of my explanation. Instead, I will have a further exploration of how our experiential present is formed and what it contains. Through this examination, I hope it will become clear that the present we experience is quite different from the objective present assumed by A-theory, and therefore positing an A-theoretic present scarcely provides a satisfactory explanation, let alone the "best explanation", for the experiential present. The experiential present can be understood as encompassing two levels – the individual level, and the intersubjective level. My aim is to demonstrate that neither of them is akin to the objective present.

Firstly, the individual's experiential present. Let us take a moment to think about what is contained in the individual, subjective present that we think we are experiencing. Suppose, for example, right now I am sitting at my desk, and I am seeing the clock on my desk pointing to three o'clock, I am smelling the aroma of the coffee I just brewed, I am hearing a bird chirping on the rooftop several meters away from my room, and I am feeling an itch on my back. All of these experiences seem to be happening at three o'clock, and for me they are all happening *now*. However, a puzzle with my experiential present is that these events may actually happen at (slightly) different times in reality.

It is known to us now that it takes time for signals to travel from where they happen to our sense organs, and it also takes time for the signals to be transmitted and deciphered by our neural system. Different types of signals – visual, auditory, gustatory, olfactory, tactile, and maybe others – travel at different speeds, and each type of sensory information is processed by the neural system at different speeds and thus taking different amounts of time. For instance, light travels at a much faster speed than sound, but after reaching the sense organs, visual data have to go through more complex processing than auditory data, and consequently signals from a visual stimulus have to take longer to reach the brain than an auditory one.[38] Tactile stimuli do not need time to transmit through the air, but signals received by different body parts need different amounts of time to reach the brain.[39] Even in the simplest case where we have visual experience of an object, information about the object's colour, motion, and shape has to be processed by different parts of the brain and thus takes different amounts of time.[40]

Then how is there in our mind a picture of the (subjective) present in which things appear to be simultaneous? The answer is that what is presented to us as the perceived reality at a given time is a picture produced by the brain, by collecting all sorts of

[38] A visual stimulus takes 20–40 milliseconds to reach the brain, whereas an auditory stimulus takes only 8–10 milliseconds (Kemp 1973, 268).

[39] The typical conduction velocity is 55 m/s, so for a person who is 1.6 metres high, it takes about 30 milliseconds longer for signals from the toes to reach the brain than it does from the nose (Keetels and Vroomen 2012, 148).

[40] It is generally acknowledged that distinct parts of the brain are specialized for processing different stimulus attributes. Colour information is processed faster than that of shape and motion, because the parts of the brain responsible for processing colour information are relatively simple, while processing information about shape or motion requires more complex computations and therefore takes longer (see, e.g., Livingstone and Hubel 1988, and Arnold et al. 2001).

signals received by various senses and stitching up a story of what is going on in the world.

We might expect that the brain uses signals that occur almost simultaneously in reality, or signals that reach the brain at nearly the same time, to compose the same "now" picture. However, the process of the brain integrating signals is a complex and highly contingent matter. The phenomenon of thunder and lightning shows that it is not always the case that the brain integrates signals originating at the same objective time into the same picture of now. Scientific research has also revealed that the criteria the brain uses to treat signals as simultaneous depend on many contingent factors.[41] The brain is not concerned with whether its registration of the world is one-hundred-percent faithful. It only cares about faithfulness to the degree in which it can efficiently direct the agent's actions in the world they inhabit.[42] The brain is indifferent to the fact that the state of the coffee cup on your table is slightly temporally displaced from the state of a tree ten meters away from you – these states of affairs can be taken to construct the same picture of now, as long as the time difference between them is not significant enough to cause a cognitive failure threatening our survival.

This is the nature of the experiential present – an *ad hoc* picture that the brain generates by integrating various signals received via various senses.

While things and events presented in our experience may not always occur strictly simultaneously in reality, we often believe they do. We tend to assume that things appearing together within the same perceptual field just occur at the same objective time. This is partly because it is the purpose of our perceptual system to convey to us what is going on in the world at our current temporal location, and also because it is indeed the case that the things and events we perceive generally occur almost simultaneously with our perception of them (with exceptions for very distant objects, like stars in the night sky) (Le Poidevin 2007, 84–86). When we speak and act on the belief that things and events presented together in our experience are really simultaneous, such a belief is rarely falsified. As a result, we are inclined to believe

[41] This is the matter that scientists call the temporal window of integration (for a review, see Vroomen and Keetels 2010). A typical view suggests that evolution determines the width of the window for an organism or a species. Failure to detect a time lag or time difference can be vital to the organism's survival, but picturing extremely fine-grained representations of the world can be metabolically expensive. Thus, the width of the window represents a balance struck by evolution between conserving energy and ensuring the organism's survival in its typical environment (Callender (2017, 218–220) discusses relevant issues).

[42] Many experiments have shown that the brain can make mistakes or even produce perceptual illusions under atypical or rigorous conditions. In some instances, the brain can judge simultaneous events as asynchronous. A typical example is the flash-lag effect, where a moving object and a briefly flashed stationary object are displayed in the same location, but the moving object appears to be ahead of the stationary object in its direction of motion (Nijhawan 1994). In other cases, the brain can judge asynchronous events as simultaneous, even when there is a noticeable time difference between when the corresponding signals arrive. This happens, for instance, when we watch a video where the sound and the image are slightly out of sync. Despite the discrepancy, the brain can still interpret the sound and the image as synchronized (Dixon and Spitz 1980).

that things and events presented in our experience are, or at least appear to be, simultaneous with one another and with the perception itself.

However, upon close examination, we can see that not only things and events presented in one perception do not occur objectively simultaneously, but it is erroneous to think we experience them as objectively simultaneous with each other and with the experience itself. What we do experience is only that things are *being experienced along with each other* – we might call this subjective simultaneity. Subjective simultaneity is nothing like objective simultaneity, which refers to being in the same location in objective time.

There are two ways to see why we do not experience objective simultaneity. The first is that there is no phenomenological element in our experience that can be recognised as corresponding to the objective temporal location of things experienced or the experience itself, and therefore there is no way we can have phenomenology of them being located at the same temporal location.[43] The second is that our knowledge of the world can affect the content of our phenomenology.[44] In this case, it is very likely that our knowledge of the time lag and the time difference of perception is sufficient to restrain us from thinking that we experience things as objectively simultaneous with our perception.

Thus, although we usually believe that we experience things as simultaneous, it is only a cognitive error. Then, since the objective present requires that everything within it is strictly simultaneous (I cannot see it any other way), the individual's subjective present is importantly different from the objective present.

Now let us move on to the experiential present at the intersubjective level. It is almost an underlying assumption in our lives and daily interactions that everybody shares the same present. This is demonstrated by contrasting our attitudes towards spatial here and temporal now.[45] Spatial here and temporal now are essentially comparable in that they are both *egocentric*, i.e., they are both defined in terms of the spatial or temporal location that we occupy. However, they differ in that there is no intersubjective agreement about where is here, whereas everybody seems to share the same now. – We think of something as here if we regard it as sharing the same spatial location as ourselves and something as not here if we think there is a noticeable distance between its location and ours. One thing is here for me but there for other people – this is commonly accepted by everyone, and it is highly unlikely that someone will claim that their here is the sole, objective here. On the contrary, we usually do not regard now as something relative and relational. Rather, we are accustomed to thinking that people all have the same now. The assumed universality of now is demonstrated in the fact that we do not need to specify whose now it is when we talk about now, whereas here always has to be indicated or implied as relative to whom for it to be sensible. Similarly, when we talk about a time in the past or future, we also do not need to specify whose past or future it is relative to, while we always have to specify

[43] As we saw in some of the arguments examined in section 2.1. In particular, in Hoerl's (2008) rejection of the view that temporal experience constitutes a violation to the transparency thesis.

[44] See, e.g., Braddon-Mitchell (2014) and Deng (2017).

[45] The following discussion on spatial here and temporal now mainly refers to Callender (2017, 206–210).

whose left or right, up or down, we are talking about, otherwise these terms have no sense at all.

It seems that the intersubjective disagreement on here is so apparent that we encounter it everywhere in our daily life, whereas there seems to be no intersubjective disagreement on now. However, the question of why we generally agree with each other on now is complex. It might be tempting to think that such consensus is due to the fact that we truly have the same now, but the actual reason is much more complicated, highly contingent, and hardly has much to do with the mind-independent world itself.

In particular, the major reason why we usually do not have intersubjective disagreement on now is that our interactions with the world and other people require only a coarse-grained sense of time. For example, suppose a coffee cup is one metre away from me and two metres away from you. In that case, it will take different time for the light to travel from the coffee cup to your eyes and mine, and this means that at exactly the same time we are in fact seeing the coffee cup's states at different times: say, at time *t*, what I am seeing is the state of the coffee cup that happened at approximately three nanoseconds before *t*, while you are seeing its state at six nanoseconds before *t*. This time difference is just too small to be noticed by us. Meanwhile, it also takes time for the visual system to process the signals it receives, which costs a much longer period of time than the time it takes for light to travel, and different people can process images at different speeds, thus costing different amounts of time. Yet even taking all these factors into account, the time difference between what you see and what I see is still negligibly small. In the world we live in, a few tens of milliseconds are just not worth noticing, since "the speeds of information exchange both from object to observer and from observer to observer tend to be much faster than the rate at which most observable things change." (Le Poidevin 2007, 86) Errors of this magnitude are not enough to cause any consequence, at least not in the environment in which our cognitive system has evolved, and consequently we are wired to form beliefs and communicate without taking into account the tiny time lag of perception or the tiny time difference among different people's perceptions. Since the discrepancy between different people's now is practically undetectable, we usually agree on what time is now and what is happening now.

Furthermore, as Balashov suggests, we have been conditioned by evolution to agree on "what is the case." Suppose a group of people are in a jungle together and suddenly a tiger appears. Each person's "relevant dispositional state, including [one's] readiness to do certain things and avoid others" is associated with one's belief about whether there is a tiger approaching or not (Balashov 2019, 126). The success of typical behaviours such as escaping or hunting will heavily depend on people sharing the same belief – it will cause severe consequences if some people believe that the tiger is still far away while others insist that it is already in front of us. Therefore, although in reality there might be some small time differences among people's views on what exactly is the present moment and where the tiger is (say, a swift tiger can move several metres in less than one second, so given the time differences in people's perceptions of the tiger, there can be some differences in people's views on the exact location of the tiger), we are still apt to agree on what is going on right now – we tend to agree, roughly, that there is a tight and it is approaching us.

Balashov also points out that such agreement on now is typically implicit. The intersubjective agreement is demonstrated in, say, our consensus about remarks

concerning what is going on, e.g., "it is raining," "a tiger is approaching," and our responses to certain stimuli, e.g., we run into a shelter when the rain comes down, and we activate the hunting trap when we spot the tiger is approaching. We do not usually check with each other when the first raindrop falls or where exactly the tiger is now. As a matter of fact, even if we do check, we do not really have the means to determine the exact answers, especially in the prolonged period in which our cognitive system evolved.

The result of all these factors is that we are accustomed to agreeing with each other on what is now and what is going on now. This experiential present shared across individuals is what theorists call the common now or the common present. It is an intersubjective realm constructed on the basis of the approximation of each individual's experiential present.

This common present, again, is fundamentally different from the objective present. The objective present is supposed to be strictly instantaneous, and everything that occurs within it is supposed to be strictly simultaneous. This common present, however, is nothing like that. The individual's experiential present is already vague and imprecise; what is constructed on its basis can be no less so.

Vagueness and impreciseness are essential to the formation of both the subjective present and the common present. This is evident if we consider some examples: Suppose in a given frame of reference, I am forming a subjective present at *t*; this subjective present of mine might consist of the location of a person passing by that occurs at 40 milliseconds before *t*, a bird chime that occurs at 80 milliseconds before *t*, and so on. Then it is rather vague which moment really is the present time for me. It could be tempting to say that *t* is my present time, but it will follow the difficulty that no event that I consider as occurring now is really occurring *now*, i.e., at *t*. Similarly, the bird chime that another person hears at *t* may happen 70 milliseconds before *t* since that person stands closer to the bird. When we have the same belief that there is a bird chiming now, we will agree with each other, but it is in fact rather vague what time we are talking about.

Accordingly, in short, the present we experience at both the individual and intersubjective is just a vague thing with an indefinite time span, and therefore is fundamentally different from the objective time, which is supposed to be strict and extensionless. For this reason, positing the latter can hardly explain the former.

We easily take the individual's experiential present as objective, largely because it is difficult for us to notice that things standing within it do not occur strictly simultaneously. This erroneous belief is further reinforced by the apparent fact that we share a common present. We easily take the common present as objective, because when our cognition of a thing lacks intersubjective disagreement, it is natural for us to believe that thing pertains to the objective reality independent from us. However, as argued, both beliefs about the objectivity of the experiential present are erroneous – they both result from complex contingent reasons and both are corrigible.

The fact that things and events we encounter in our present experience all occur at different times in the past gives the B-theory an advantage in explaining the experiential present, since the B-theory posits that all things at all times equally exist, and thus it can comfortably accommodate the idea that things from different times in

the past can impact the present.[46] It is not necessarily the case that the A-theory is unable to offer any explanation for our experiential present, but at the very least, as Balashov points out, that would add a lot more complexity to their theories (2019, 131–133), as the alleged natural affinity between the experiential present and the A-theoretic, objective present has been proven untrue.

[46] Balashov (2019) suggests that the individual present is naturally suited to the A-theory, whereas the common present fits better with the B-theory. However, based on the above analysis, I think there is no fundamental difference between the common present and the individual present regarding their natural suitability with the A-theoretic, objective present – neither of them naturally fits with the A-theory.

3. From Illusory Phenomenologies to Erroneous Beliefs

In the preceding two sections I explored what is involved in the alleged phenomenologies of the passage of time and the present, which are two major phenomenological data that are traditionally considered to provide direct support for the A-theory of time. I argue that the phenomenology associated with the purported passage phenomenology is that of dynamic change in things' states, while the phenomenology related to the purported presentness phenomenology is that of (only) some things and events occurring *simpliciter*. Given that everything in the B-ontology is all "out there," our experiences are indeed systematically illusory, and this is why I take my proposal as a version of illusionism, albeit a modest one.

Both illusionism and veridicalism aim to explain where the beliefs that we experience passage and presentness come from, given that there is no objective temporal passage nor presentness in reality. Traditional illusionism believes that we simply have experiences of passage and presentness, so the illusionist only needs to explain how such illusory experiences systematically arise. On the other hand, veridicalism contends that we do not really have phenomenologies of passage and presentness and it is some cognitive errors that lead to the false beliefs about the content of our experiences, and the veridicalist's task, therefore, is to explain why we misunderstand the content of experiences. Despite my proposal being a version of illusionism, it does not acknowledge the phenomenologies of passage and presentness, and thus my explanatory burden will be twofold: I need to explain both how the phenomenal illusions arise and how they lead to the belief that we experience passage and presentness. Although these explanatory tasks are not the major goal of this dissertation, I do not want to exempt myself from them entirely and will briefly address them here.

I have argued that both phenomenologies of dynamic change and some things occurring *simpliciter* stem from the feature of our perceptual experience of having a confined temporal horizon. Then the next question will be why our perceptual experience has such a feature. A comprehensive answer to this question presumably will extend far beyond the scope of pure philosophical enquiries and demands intensive scientific investigations. But just as an initial consideration, I think Le Poidevin's (2007) account of our perception being a causal process can provide some insights into the nature of the matter.

According to Le Poidevin, perception is a causal process, where the object in the world is the cause, and the perceptual state in our mind is the effect. (More specifically, it is because our perceptual experience is essentially an image of the world that the brain produces by integrating data received via sense organs, and the function of the sensory system is causal.) Our perceptual receptivity (sense organs) can only receive signals corresponding to one infinitesimal fragment of reality at a time, and at each time which state's data is received and processed is decided by the spatial distance between the object and the perceiver. Since "there is no unmediated action at a spatial and temporal distance," the states of things that enter our sensory system are those that have no spatial or temporal intervals from us (Le Poidevin 2007, 85). To illustrate, suppose it takes duration *m* for the signal to travel from an object *O* to our brain, then at any given time *t*, the state of *O* that can be perceived by us is the one that occurs at *t* minus *m*. Any state of *O* that happens before or after that time cannot be presented in our perception at *t*. For example, it takes 100 years for light to reach us from a distant star, so the state of the star that we perceive *now* is the one that

occurred 100 years ago; in contrast, since it takes just a few nanoseconds for light to reach us from a tree several metres away, the state of the tree we perceive is the one that occurs a few nanoseconds ago (without taking into account the time the brain needs for processing information).

Though it is not logically required that once the information reaches our perception, it has to fade away at once, this is nonetheless how our perception works. The reason why it functions in this way, according to Le Poidevin, is largely practical. That is, retaining a large amount of outdated information would be biologically disadvantageous. Organisms need to respond to their immediate surroundings. Their limited memory storage capacity requires that once an item of information is registered, it must be removed right away to make room for new information. An organism that continuously perceives past events would struggle to respond to the most recent occurrences in its environment and would likely not survive natural selection (ibid., 86).

These descriptions should shed some light on why our perceptual horizon has a confined temporal horizon. In particular, I think they offer plausible explanations for why only a tiny fragment of things can be presented in our immediate perception (limited access) and why which part of reality is given to us is out of our control (involuntariness), though the irresistible directionality of perception may remain a more mysterious aspect to explain. Ultimately, a complete explanation of why our perception works in the way it works may require contributions from a wide range of fields. Yet I hope my current discussions can illuminate that the confined temporal horizon of our perceptual experience is neither a mysterious phenomenon – since it is very likely to be scientifically explained – nor a trivial aspect to overlook – since it is a fundamental aspect of our lives, shaping our perspective of the world and influencing all our behaviours and thinking patterns.

Now the second question, how we transition from the phenomenologies of dynamic change and things occurring *simpliciter* to the beliefs that we experience the passage of time and that we experience the present. I mentioned that such beliefs can be understood as a projection of the peculiar way we experience the world, I will now elaborate a little on this idea.

Projection typically means that we mistake certain subjective perceptions or feelings for objective qualities of the world. Kail (2001), however, provides a wider definition of projection. According to Kail, projection in philosophy and psychology is an *explanatory* concept, that "is invoked to explain why the subject takes the world to be a certain way (either on the level of phenomenology or belief) when it is not possible to invoke the world *being* that way to explain why the subject takes it to be so." (Kail 2001, 27–28) Specifically, a subject's commitment is a projection when:

a) the best explanation of the commitment does not advert to the putative facts or properties corresponding to the commitment;

b) the commitment is not derived or sustained by inference;

c) the explanation of the commitment essentially involves appeal to psychological facts about the subject;

d) the phenomenology of the commitment does not intimate to the subject its best explanation. (ibid., 27)

It seems quite suitable to use this broad sense of projection to account for the beliefs that time passes and the present exists or that we experience so (designated as *B*), since (a) *B* are not best explained by the putative facts of passage and presentness (either because there are no such facts or because positing such facts do not provide the best explanation); (b) there is no logical inference from certain ontological facts or certain phenomenologies to *B*; (c) *B* can be explained by – as I suggest – our confined temporal horizon and the resulting phenomenologies (though the explanation involves no logical inference); and (d) it is not obvious, solely based on *B*, what their best explanations should be.

It is nevertheless not easy to articulate how exactly the projection works. Mellor (1995, 1998) is one of the theorists who clearly holds a projectivist view on time awareness, according to whom the notion of the passage of time is a projection of change in our belief states. Mellor's explanation consists of two steps.[47] In the first step, we gain the idea of time order from the awareness that each of our perceptions comes in sequence and seems to causally affect one another. In Mellor's consideration, our experiences are inherently "tensed" – what is immediately perceived is the present, while what the present experience is built on is the past and what is anticipated based on the present experience is the future. The second step is that our beliefs about what is past, present, and future are constantly changing because of external situations being different, and we thus mistakenly think external things also have pastness, presentness, and futurity. In other words, we project the change in our belief states onto the world, believing that pastness, presentness, and futurity objectively exist, and time objectively passes.

According to Adrian Bardon (2010), what is crucial to Mellor's account is that he believes that the notion of temporal sequence is something we directly become aware of by having experiences.[48] However, it may not be no obvious that we really perceive time order directly. Bardon cites Augustine to argue that we only perceive the present moment at each time, and this means that time order cannot be directly presented in perceptions. On the contrary, if we are to conceive of the present perception as standing in time order, such as in a succession or duration, we need to connect it to memories of past states or events, and in order to do so, we must already have a precedent notion of time order (2010, 66).

If we accept that perceptions themselves do not contain time order, another way to interpret how the projection works may be a view that takes time as a framework that we use to give order to our perceptions. This approach can be connected to some psychologists' claim that we rely on spatial metaphors to understand abstract concepts, among which time is included.[49]

Lakoff and Johnson, for instance, suggest that the whole human conceptual system is structured around a small set of concepts that emerge directly out of our basic

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[47] I adopt Bardon's (2010) interpretation of Mellor.

[48] For instance, Mellor writes: "We perceive time order all the time, whenever we see motion or any other change: thus to see a clock's second hand is moving clockwise is to see for example that it passes the figure '1' on the clock before it passes the figure '2.'…We are constantly perceiving time order in the world around us, as well as in our own experiences." (1995, 238)

[49] See, e.g., Clark (1973), Lakoff and Johnson (1980/2003), and Boroditsky (2000).

physical experiences, such as spatial relations (e.g., up and down, back and front), physical objects (e.g., entity, container) and some of our interactions with the environment (e.g., moving, eating, manipulating objects). While these concepts are "structured clearly enough and with enough of the right kind of internal structure to do the job of defining other concepts" and thus can be understood directly, the less concrete concepts, those that do not immediately arise from physical experiences, have to rely on these concepts to be defined and to get "the right kind of structure" in order to be comprehensible. The latter group of concepts thus are metaphorical in nature. The experience of time, according to Lakoff and Johnson, "is understood almost entirely in metaphorical terms." In particular, such understanding is achieved by "the spatialization of time," along with other spatial metaphors such as "time is a moving object" (1980/2003, 118).

Lakoff and Johnson seem to suggest that time, as we conceptualise it, is practically a space-like framework that we use to organise, or give structure to, our temporal experiences. Presumably, in spatial experiences we observe things as though they were standing in a framework and ordered within the framework in relation to each other, and the brain somehow finds it useful to think of things as ordered in a space-like framework and thus create a "timeline" to organise all the occurrences we come across in experiences as well as ourselves. By doing so, we come to think of time as a moving object, or more precisely, a movable object, like the background landscape in which the train passes by, which can be taken as fixed and we move relative to it or as moving relative to our stationary self. Once we have such a space-like framework of time, we can think of ourselves and other occurrences as standing within it and keeping changing locations, and this gives rise to the notions of presentness and passage.

There is, however, one potential problem that may arise from this approach. That is, pushing the idea that time is a mental fabrication that we use to organise things and events we perceive to its limit could end up implying that the time that we think we experience may be a very different thing from time as an ontological existence, or even that time does not exist independent from the human mind. Kant's conception of time is an example of this direction. For Kant, space and time are both precedent frameworks in our mind necessary for arranging the data we receive through sensation. Time, in particular, is a space-like line, through which only can we comprehend changes in things' states. See this passage from the *Critique of Pure Reason* for example:

> Alteration is the combination of contradictorily opposed determinations in the existence of one and the same thing. Now how it is possible that from a given state an opposed state of the same thing should follow not only cannot be made comprehensible by reason without an example, but cannot even be made understandable without intuition, and this intuition is the motion of a point in space, the existence of which in different places (as a sequence of opposed determinations) first makes alteration intuitable to us; for in order subsequently to make even inner alterations thinkable, we must be able to grasp time, as the form of inner sense, figuratively through a line, and grasp the inner alteration through the drawing of this line (motion), and thus grasp the successive existence of ourself in different states through outer intuition…(1787/1998, B291–292)

Here Kant suggests that we have to understand changes (including changes in external things and changes in our mind, such as our perceptions, feelings, and thoughts) by metaphorically "drawing" them onto a space-like line of time as if they were a progression along this timeline.[50] Kant famously claims that time is "nothing other than" a mental framework necessary for ordering all of our perceptions – in his words, the form of human sensibility (ibid., A33/B49). This seems to suggest that time does not exist in the world "in itself" independent from our mind. This notion of time is often criticised as neglecting the possibility that time is *also* a property of things in themselves or time itself is an objective entity independent from human mind.[51] This may be true.[52] However, it also seems true that even if there is such a thing as objective time independent of human mind, it could be something very different from the time that we think we experience or we are justified in thinking we experience, since the latter is more of a tool we use to make sense of what we have in experiences – as repetitively noted, in experiences we only encounter things, events, and their changes, not some specific thing called time.

Here are just a few possible projectivist explanations for how we transition from experiencing things and their changes to believing that we experience presentness and temporal passage. Each explanation may have its own difficulties, and determining which one offers the best explanation is beyond the scope of this dissertation. What I hope to have highlighted is that the discourse of experiencing time or experiencing passage and presentness is far more dubious than we usually assume. Although such discourse is not empty or groundless – it is indeed grounded in our experiences – it is dangerous to take it literally. – The major danger, as we have seen, is that it can lead us to conflate phenomenological issues with metaphysical ones, and mistakenly believe that how we experience things is just how things exist.

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[50] Kant argues that temporal experiences have to presupposed on spatial experiences (in his own words, "the determination of my existence in time is possible only be means of the existence of actual things that I perceive outside myself." (1787/1998, B275)). It is, for sure, a much more nuanced theory than that we use spatial metaphors to make sense of changes we experience, and it is definitely not his view that we first observe how things exist in space and then metaphorically use it to conceptualise time, since for him both space and time are the prerequisites of all of our perceptions. But the details of Kant's theory are not crucial for my current purpose. I will leave it there.

[51] See, e.g., Lisa Shabel (2010), where this possibility is referred to as the "Neglected Alternative" (109).

[52] Nonetheless this does not necessarily constitute a flaw of Kant's conception of time, since it is his view that it is not worth considering how the objective world, independent from us, is like: "what the things may be in themselves I do not know, and also do not need to know, since a thing can never come before me except in appearance." (1787/1998, A276–277/B332–333) Furthermore, Kant can be read as upholding a stronger claim that time is not something that can be talked about separately from the condition of human sensibility. If this is true, then "time does not exist in the world in itself" will not be his claim, and there will also be no "Neglected Alternative."

Conclusion

The primary purpose of this dissertation is to clarify the phenomenological ground of our intuitions that we experience time passing and that we experience the present, two major intuitions that are conventionally believed to support the A-theory of time. I argued that the phenomenology corresponding to the purported passage phenomenology is that of dynamic changes in things' states, and the phenomenology corresponding to the purported presentness phenomenology is that of (only) some things and events occurring *simpliciter*. I also explained that these illusory phenomenologies are products of the feature of our perceptual experience of having a confined temporal horizon, which includes three aspects – limited access, involuntariness, and directionality.

Given that everything in the B-ontology is all "out there" and do not change, our experiences do have illusory representational contents, and it is such illusory phenomenologies that give the A-theory of time the natural appeal to many people. Nevertheless, I argued that it would be erroneous to think that our phenomenologies, despite having contents not part of the B-ontology, really support the A-theory. This is because, firstly, there is no logical guarantee that the way the world appears in our experiences must reflect its true nature; secondly, while our experienced world does not resemble the B-ontology, it does not entirely align with the A-theory's depiction either. To further clarify, I also provided potential explanations as to why our perceptual experience has a confined temporal horizon and how the ideas that we experience temporal passage and presentness arise from phenomenologies.

Throughout my analysis of what is involved in the purported phenomenologies of passage and presentness, I have assumed the truth of the B-theory of time for the convenience of discussions. I believe, nevertheless, my descriptions of the content of those phenomenologies does not rely on any particular metaphysical theory of time and should be acceptable to both the A- and B-theorists. As far as methodology is concerned, I believe the task of suitably recognising the content of experiences should be independent of the theorising of the nature of objective time.

Some theorists, primarily those who subscribe to veridicalism, suggest that our inclination to think that we experience temporal passage and presentness results from the widespread influence of the A-theory of time. It is thus understandable why they tend to purge terms that carry A-ontological implications from the descriptions of experiences. Such efforts, however, could backfire if they result in downplaying the distinctiveness of our perceptual experiences. Whether the view that the content of our experiences intimately aligns with the A-theory of time, or the attempts to establish that the way we experience the world has nothing at odds with the B-ontology, both cases, in my view, are instances where our understanding of experiences is contaminated by metaphysical conceptions.

Ideally, we should discuss metaphysical and phenomenological issues using entirely separate vocabularies to avoid messing up with each other, but it is not easy to do so. Many words in our language have habitually been used to discuss both metaphysical and experiential topics, maybe because those issues have never been adequately segregated. Yet, at least, if we have to use terms that carry potential ontological implications to discuss phenomenologies, we should be mindful that these terms are not directly relevant to the ontological issues and may have very different meanings from their metaphysical counterparts. For example, when we use "passage" and "presentness" to talk about experiences, the term "passage", as I argued, only refers to

our experience of things undergoing dynamic change, and the term “presentness” refers to our subjective feeling that certain things are existing or happening – both have importantly distinct connotations from objective passage and objective presentness. Perhaps terms such as passage and presentness should not be used to talk about phenomenologies at all, but since we have been using them already, it is crucial to recognise these nuances. Likewise, many other terms, such as “change”, “simultaneous”, and “time”, can also have very different meanings between discussing metaphysical and phenomenological matters. I hope my discussions in this dissertation have helped to clarify some of these confusions.

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