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# Experiencing (in) Time

by

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A thesis submitted in partial fulfilment of the requirements  
for the degree of  
Doctor of Philosophy

Department of Philosophy  
University of Warwick  
March, 2019

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## Acknowledgements

In embarking on any project spanning several years one will naturally accumulate certain debts; writing this thesis has been no exception. This thesis was made possible thanks to a doctoral scholarship from CADRE at the University of Warwick. For comments on work that has ultimately featured in the thesis I am indebted to many people. An earlier version of the material that appears in Chapter 1 was presented at conferences in Hertfordshire and Durham. Portions of the material that now forms Chapter 2 were presented at the 2018 Birmingham-Nottingham-Warwick graduate conference in Nottingham, and at the Open Minds XIII graduate conference in Manchester. Material from Chapter 5 was also presented at the 2018 ESPP meeting in Rijeka. I am thankful to the audiences on each occasion for their thought-provoking questions and useful suggestions. Chapter 2 is an expanded discussion of my paper ‘Minima sensibilia: Against the dynamic snapshot model of temporal experience’, forthcoming in the *European Journal of Philosophy*. I am grateful to an anonymous reviewer for the journal for their constructive comments on earlier versions of the paper, which have contributed to the quality of the chapter in its current form.

Having spent almost a decade at the University of Warwick, I am indebted to many members of the philosophy department and to other graduate students, especially those I have shared office S2.35 with. Michael Luntley’s lectures on the philosophy of mind and language, Christoph Hoerl’s graduate seminars on experience and time, and Matt Soteriou’s lectures on several figures in the history of philosophy, have all played a role in shaping the questions I am interested in and in my approach to answering them. Various reading groups and work-in-progress sessions have allowed me to discuss my research and the research of my peers. To single out a few further people for their influence, from stimulating seminars, to detailed feedback on presentations and written work, and for all of their encouragement and generosity over the past few years, I am particularly indebted to Naomi Eilan, Hemdat Lerman, and John Michael.

I have been lucky enough to read and respond to the work of many great philosophers while writing my own thesis. Responding to conference presentations from Barry Dainton (Warwick, 2016), Carla Bagnoli (Milan, 2017), and Louise Richardson (Warwick, 2018), has provided me with stimulating conversations and first-hand experience of how others ‘do’ philosophy. Organising two conferences has allowed me to discuss issues relating to my research with many people I otherwise would not have been lucky enough to have met, and I am thankful to the funding bodies that made this possible. Thanks also go to the administrative staff in the philosophy department, who have made organising events and the teaching of seminars far more of an enjoyable experience than it would have otherwise been.

I have benefitted enormously from the time and effort of two supervisors, Christoph Hoerl and Matt Soteriou. It will be obvious upon reading my work that Christoph and Matt have played a role in shaping my thinking on the issues discussed herein – which is not to say that they would agree with every claim I argue for! – and their feedback has helped to give far greater structure and clarity to my writing than would have been possible otherwise. Having both Christoph and Matt pushing me to think through issues in greater detail over the past few years, and having each of them read the entire manuscript, has been invaluable. Each has also had an impact upon me that goes far beyond the material contained within this thesis, from how philosophy is to be done and how it is to be taught, to how we are to juggle the various pulls on one’s time in a life spent in an academic environment. Matt was also good enough to continue discussing my work with me after taking up the Chair in Philosophy of Mind at KCL. Thanks also must go to my two examiners, Thomas Crowther and Ian Phillips, for an engaging discussion of the thesis.

And a special mention to the most important people. Particular thanks go to my parents for all of their encouragement and support; thanks also go to Claire, and to my nieces and nephews, for reminding me during any difficult moments that there is more to life than philosophy, and thank you for everything else.

## DECLARATION

I, Jack Shardlow, confirm that the work presented in this thesis is my own. Where material has been derived from other sources I confirm that this has been indicated in the thesis. The thesis has not been submitted for a degree at another university.

## Abstract

In this thesis I present a phenomenological investigation of our experience of time – of things as they fall within time – and suggest that something important goes missing in recent debates. This is the notion of a *point of view*. I believe that articulating the sense in which we have a point of view in time, and what this is a point of view upon, is crucial to an account of how things are for an experiencing subject.

In the first chapter, I elucidate the *specious present*. I argue that theorists appeal to the specious present under two guises without explicitly distinguishing between them; yet these two conceptions are not identical, while one entails the other the reverse is not true. In the second chapter I defend an appeal to the specious present (as developed in the first chapter) against proponents of what I refer to as *snapshot models* of temporal experience. I argue that perceptual experience minimally presents something of some non-zero temporal extent as such.

In the third chapter I discuss how we are to characterise experience over intervals of time of a greater extent than the specious present. I offer a proposal on which a subject is invariably presented with a positive temporal extent, with this interval marking the partition between the past and the future for the subject. In the fourth chapter I compare and contrast our experience of objects and events, and our experiential point of view in space and in time. Among other things, I argue that getting right how things are for the subject requires an appeal to the subject's asymmetrical awareness of times either side of the specious present. In fifth and final chapter I demonstrate that appeal to an experiencing subject's tensed temporal perspective can explain the sense in which time seems to pass.

## Introductory remarks

“And you run and you run to catch up with the sun but it's sinking;  
Racing around to come up behind you again;  
The sun is the same in a relative way, but you're older;  
Shorter of breath and one day closer to death.”

– Roger Waters (Pink Floyd)

Sitting in the midday summer sun, I feel my skin getting warmer and a bead of sweat run down my back. Looking out of the window in the autumn, I see leaves trembling on the branches of a tree as the wind blows. Working in the office on a winter's day, I hear the pitter-patter of raindrops against the window. Smelling a bouquet of flowers in the spring, one fragrance gives way to another and to another and so on. On a day-to-day basis I watch the second-hand of my watch sweep around the clock face as I impatiently wait for the bus. I lie in bed, unable to see or hear anything in the darkness, frustrated at how much time seems to have passed since my waking; I think about how the morning alarm is drawing closer in time as the previous evening recedes into the past. Time is *the* dominant feature of our lives.

We represent time on clocks and calendars; we plot the change in seasons and record upcoming deadlines. Time is not merely a constant in how we plan our lives, it is also a pervasive feature of our wakeful experience (as the above examples bring out). It has long been thought that our conscious experience brings with it a particularly intimate relation to time (for example, see Kant, A34/B50-51, quoted below). Yet, this intimacy can also be a source of puzzlement. Among other things, theorists have questioned how time (and/or temporal relations) features in experience, with some theorists denying that it does.<sup>1</sup> People have questioned the ways in which our experience of time is

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<sup>1</sup> For example, see Reid (1785). Strictly speaking, Reid denies that we can perceive any temporal relations other than simultaneity. He does not deny that we can recall, perceive, or imagine occurrences as things which occur in time.



supposed to differ from our experience of space; and what our experience can tell us about how we seem to exist in and over time, in contrast to space.

Motivated by such issues, in this thesis I present a phenomenological investigation of our experience of time – of things as they fill/fall within time. These topics are gaining increased attention in recent philosophical discussion, but in this context something important often appears to go missing. This is the notion of a *point of view*. This is particularly unfortunate because articulating the sense in which we have a point of view in time, and what this is a point of view upon, is crucial to an account of how things are for an experiencing subject. It is not merely that we manifestly experience things that occur in time; we are manifestly experiencing *in* time.

## **1. Present debates**

Many recent debates concerning temporal experience have focused on explaining the perception of distinctly temporal phenomena. In particular, there has been a focus upon the temporal properties presented<sup>2</sup> in perceptual experience – such as change, duration, and persistence – and the temporal properties of experience – whether experiences themselves must be things that undergo change if they are to be experiences of change.

With such a research focus, some theorists provide models of temporal experience on which an experience is said to lack any significant temporal extension, and on which the only temporal relation that can be presented in perceptual experience is that of simultaneity. Such models are often illustrated through an analogy with cinematic depiction, where a movie is presented through a rapid sequence of snapshots being presented. On these models of

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<sup>2</sup> Throughout I will use the term ‘present’ so as to be neutral between various accounts of the nature of perceptual experience. I take it that saying experience ‘presents’  $x$  could be read as experience ‘presents through a relation of acquaintance’, ‘presents through a relation to sense data’, or ‘presents through representation’. I will also mostly drop the prefix of ‘perceptual’, but there is no philosophical significance behind doing so, throughout my focus will remain on perceptual experience unless explicitly stated otherwise. (This is not to say that the arguments presented could not, in some cases, be extended to other phenomenally conscious occurrences.)

temporal experience (discussed at length in Chapter 2) theorists either seek to explain why it is so natural for us to claim that we perceive occurrences unfolding over time, such as change and succession, when in actual fact we do not (as we are, at a time, only perceptually presented with a snapshot of some state of affairs); or else they seek to explain how a sequence of such snapshots can account for our perceptual experience of phenomena such as change and succession.

It is more common in recent debates for theorists to reject the snapshot model – though it has enjoyed some recent support<sup>3</sup> – and to instead claim that that which is presented in experience has temporal extension: the specious present (discussed at length in Chapter 1). The point of contention is then what accounts for such a temporal extent being presented in experience.<sup>4</sup> On one view, experiencing is itself said to be temporally extended, as is that which is presented in experience; there being an explanatory relation between the two.<sup>5</sup> On the opposing view, such an explanatory connection is denied; yet, unlike the snapshot model, that which is presented in experience is said to possess a non-zero temporal extension.<sup>6</sup> Broadly, debates between advocates of either view are concerned with the temporal extent which is presented in perceptual experience (or the *content*); the temporal extent of the perceptual experience (or the *act*); and how the two relate to one another. In these debates, the notion of a point of view is often secondary to more central concerns, if it is considered at all.<sup>7</sup>

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<sup>3</sup> Recent writers such as Arstila (2018), Chuard (2011 and 2017), and Prosser (2013, 2016, and 2017), propose snapshot models of temporal experience (though the latter does not unequivocally support such a model). Their proposals will be discussed in Chapter 2.

<sup>4</sup> On this way of formulating the debate, see Andersen (2014: 26) and Dainton (2016). For a recent discussion which displays scepticism about the differences between apparently competing accounts of the temporal microstructure of the specious present, see Prosser (2016: 147).

<sup>5</sup> In terminology from Dainton (2016), these may be referred to as extensional accounts. Advocates of such accounts appear to include Dainton (2001, 2006, 2008, and 2014); Foster (1979, 1982, and 1991); Hoerl (2013); Phillips (2010, 2011a, 2014a, and 2014b); Rashbrook (2013a); Russell (1992); and Soteriou (2010).

<sup>6</sup> In terminology from Dainton (2016), these may be referred to as retentional accounts. Advocates of such accounts appear to include Almäng (2014); Grush (2007); Kiverstein (2010); and Lee (2014a, 2014b, and 2014c). Such accounts are often described as appealing to punctate experiences that present temporally extended occurrences. Yet, while the retentional theorist denies the explanatory relationship between the temporal profile of experience and that which is presented in experience that the extensional theorist asserts, she need not be read as appealing to *punctate* experiences (this point is pressed by Lee).

<sup>7</sup> Though it may be thought that, when grappling with how to reconcile that perceived events seem to be happening in the present with the fact that events are perceived to happen over an extended temporal interval, some theorists are dealing with the notion of a temporal perspective albeit not in these terms. Classic discussions include James (1890, ch.15) and Husserl (1905).

## 2. A point of view and *what it is like*

Many theorists find themselves in broad agreement with Nagel's claim that "...not all reality is better understood the more objectively it is viewed. Appearance and perspective are essential parts of what there is, and in some respects they are best understood from a less detached standpoint" (Nagel, 1986: 4). Nagel suggests that occupying a given (type of) point of view is essential to how things are for an experiencing subject; that "[i]f we try to understand experience from an objective viewpoint that is distinct from that of the subject of the experience, then even if we continue to credit its perspectival nature, we will not be able to grasp its most specific qualities unless we can imagine them subjectively" (Nagel, 1986: 25). One of the thoughts behind Nagel's discussion appears to be that we need to articulate the sense in which we occupy a given type of point of view in conscious experience if we are to characterise the phenomenology, or in Nagel's terms *what it is like* for an experiencing subject.

Given that I am herein presenting a phenomenological investigation of a subject's point of view in time, it is important to say more clearly what this – and talk of 'what it is like' – involves. Like Nagel, my concern is not merely with what is often referred to as the *qualitative character* of experience. When theorists appeal to an experience's qualitative character they often take themselves to be thereby picking out some number of qualitative or sensuous properties. That is, the qualitative character of experience is often taken to correspond to 'qualia'.<sup>8</sup> For example, looking at and drinking one's coffee might be said to be an experience with a given qualitative character because it involves various sensory qualia, e.g., qualia particular to the coffee's flavour and qualia in one's visual experience of the coffee's colour.

A somewhat broader notion than qualitative character is also regularly appealed to in the philosophy of mind, where it is said that conscious experiences have a *phenomenal character*. The phenomenal character of an experience is how that

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<sup>8</sup> For discussion see Tye (2018) and Van Gulick (2018). There is disagreement about the nature of qualia (Churchland, 1985; Shoemaker, 1990; Chalmers, 1996) and, depending what one says about their nature, there is also disagreement about their existence (for example, Harman, 1990; Dretske, 1995; and Tye, 1995, all suggest that introspection reveals no such qualities).

experience seems from the point of view of the perceiver.<sup>9</sup> Appeal to the phenomenal character of experience is used to pick out what is manifest to a subject in virtue of having a given experience, where this may involve sensory qualia but it is also concerned with the manifest structure of the subject's experience of the world.<sup>10</sup> In appealing to the manifest structure of our experience of the world – and in pursuing a phenomenological investigation of our point of view within and upon time – I share an assumption with much contemporary philosophy: that a typical subject's conscious experiences have a given character that is somehow manifest to her as she undergoes them. Articulating that distinctive character, and any implications which follow for the ontology of experience, is my main focus.

I take it for granted that introspective reflection on one's conscious experience has a substantive role to play in investigating the phenomenal character of one's experience. Of course, there is a great deal that introspective reflection cannot reveal about the nature of conscious experience. Introspection is hardly expected to reveal the underlying biological and physical structures that might be thought to ground or realise conscious experience, yet this is no bar to thinking that introspective reflection plays a central role in articulating what is made manifest in virtue of undergoing conscious experience. The thought behind assigning a central role to introspective reflection is that as self-conscious subjects, granting that there is something it is like for us to undergo a given conscious perceptual experience, we are typically able to reflect on what it *is* like for us to be having the experience. This is not to say that a subject must be self-conscious in order for there to be something it is like for her to have a conscious experience, but given that we are self-conscious, we are in a position to reflect on and articulate what it is like for us to have a given conscious experience.

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<sup>9</sup> 'Seems' is here – and throughout – used in order to pick out some feature of what it is like for a subject, rather than a use which is interchangeable with 'it strikes me that...' or 'it is plausible that...'. This is concerned with a subject's experiential occurrences and phenomenal consciousness quite generally, and not merely perceptual phenomenology.

<sup>10</sup> In what follows I will use 'phenomenology' and 'phenomenal character of experience' synonymously.

### 3. A temporal point of view

Thomas Nagel (1974 and 1986) appeals to *what it is like* for an experiencing subject in conscious experience, where his concern appears to be with the way the world seems from the point of view of that experiencing subject. Given the wider interest in the literature in articulating the phenomenal character of experience and the sense in which a typical subject occupies a type of point of view, one might question why the current discussion is largely restricted to the notion of a *temporal* point of view. There are several reasons. Firstly, it is a matter of practicality. With such complex and widely discussed issues, a single thesis is not nearly enough space to discuss all that may be of interest regarding an experiencing subject's point of view. A restriction in scope thus makes the project more manageable (though that is not to say that I manage to cover all that may be of interest regarding an experiencing subject's point of view in time).

Secondly, insofar as occupying a type of point of view is intimately tied to what it is like to be the kind of experiencing subject one is, so too is the experience of time. Many theorists have found plausible that in perceptual experience, which is often taken to be the paradigm case of phenomenally conscious experience, the subject is confronted with (what appears to her to be) the present time;<sup>11</sup> and in perceptual experience, what we are presented with appears to be in flux and constant change.<sup>12</sup> In order to articulate the sense in which a time seems to be present and yet in flux, we need to articulate how a subject occupies a temporal perspective (so I will argue).

The thought that, in wakefully conscious experience, our point of view is *temporal* in an important sense can also be traced to Kant. In §6 of the *Transcendental*

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<sup>11</sup> For example, Broad claims that "it is the essence of the perceptual situation that it claims to reveal its object as it is at the time when the situation is going on" (Broad, 1925: 145). It is plausible that in order to capture how anything can be presented as present, we need to explain the role played by a subject's perspective in time.

<sup>12</sup> For example, James claims: "Consciousness . . . does not appear to itself chopped up in bits. Such words as 'chain' or 'train' do not describe it fitly as it presents itself in the first instant. It is nothing jointed: it flows. A 'river' or a 'stream' are the metaphors by which it is most naturally described. In talking hereafter, let us call it the stream of thought, of consciousness, or of subjective life" (James, 1890: 159). Geach (1969) objects to the notion of a stream of thought, arguing that the character of thought over time is discontinuous, however he appears to allow that the sensory aspects of mind might be stream-like over time. See Soteriou (2013, ch.2) for a discussion of the different temporal profiles of thought and experience.

Aesthetic Kant argues that time is the condition of all appearances, both inner and outer:

“Time is the *a priori* formal condition of all appearances in general. Space, as the pure form of all outer intuitions, is limited as an *a priori condition* merely to outer appearances. But since, on the contrary, all representations, whether or not they have outer things as their object, nevertheless as determinations of the mind belong to the inner state, while this inner state belongs under the formal condition of inner intuition, and thus of time, so time is an *a priori* condition of all appearance in general, and indeed the immediate condition of inner intuition (of our souls), and thereby also the mediate condition of outer appearances. If I can say *a priori*: all outer appearances are in space and determined *a priori* according to the relations of space, so from the principle of inner sense I can say entirely generally: all appearances in general, i.e., all objects of the senses, are in time, and stand necessarily in relations of time” (A34/B50-51).

If it is thought that whatever we experience, perceptually or otherwise, is experienced as occurring in time, and that this can be contrasted with space, then articulating the sense in which we occupy a temporal point of view is of primary importance in characterising how things are for wakefully conscious subjects.

I have so far suggested two reasons for focusing on the notion of a *temporal* point of view: the first is a matter of practicality, restricting the scope of the present discussion; the second is a reflection of the thought that, in wakefully conscious experience, a subject has a particularly intimate relation to time, as the quoted passage from Kant illustrates. Thirdly, and finally, I take it that the usefulness of this approach – focusing on an experiencing subject’s point of view in time – can be demonstrated in how it can be used in order to solve puzzles that arise in connection with our experience of time. For example, time and time’s supposed passage is often taken to be a particularly pervasive feature of a wakefully conscious subject’s experiential life (discussed at length in Chapter 5); and yet this is also taken to be particularly elusive to inspection. In reflecting on our perceptual experience we are often said to be presented with that which a given experience is an experience *of*, features of experience itself are said to be

‘diaphanous’.<sup>13</sup> It is my conjecture, to be supported through the subsequent five chapters, that in articulating what is distinctive of our temporal perspective in wakeful experience we can explain how time can seem to be pervasive in experience – where a subject is presented with successively present moments – and yet in an important sense transparent to first-personal inspection.

#### **4. The project**

My discussion proceeds as follows. In the first chapter I elucidate the notion of the specious present. I explain why it is widely held to be part of the explanation of both our experience of motion/change and the sense in which our experience over time is fleeting and partial. I argue that this widely held view over-simplifies matters. Contemporary and historical theorists frequently appeal to the specious present under two guises without explicitly distinguishing between them; yet these two conceptions are not identical, while one entails the other the reverse is not true. In the second chapter I defend an appeal to the specious present (as developed in the first chapter). Appeal to the specious present has recently been attacked by proponents of what I refer to as snapshot models of temporal experience, such as Chuard (2011, 2017), Prosser (2013, 2016, and 2017), and Arstila (2018). I consider and reject these snapshot models, arguing that perceptual experience minimally presents something of some non-zero temporal extent as such. Yet this is not to answer all questions one might have about experience over time. In particular, this leaves open what we are to say about the phenomenology and ontology of experiencing over greater intervals of time.

In the third chapter I discuss how we are to characterise the experience of events which occur over intervals of time of a greater extent than the specious present – such as plays, concerts, and football matches. I offer a proposal – through

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<sup>13</sup> For example, Moore says: “The moment we try to fix our attention upon consciousness and to see what, distinctly, it is, it seems to vanish: it seems as if we had before us a mere emptiness” (Moore, 1903: 41). Though Moore later adds that with effort and focused attention we can become aware of properties of our conscious experience. Focusing on the temporal case, Hoerl puts a transparency claim as follows. “There is just no scope within a description of our experience of temporal properties for a distinction between those experienced properties themselves and a point in time *from which* they are experienced” (Hoerl, 2018: 143).

developing Russell's construal of what is *given* in experience – on which a subject is invariably presented with a positive temporal extent, with this interval marking the partition between the past and the future for the subject. This brings out a sense in which an experiencing subject possesses a temporal perspective, where that which a subject has a perspective upon is fleeting and partial. I demonstrate that this proposal does not bring with it any principled criteria for individuating between discrete, successive experiences in the stream of consciousness. I suggest that the question of what should count as a token experience is in an important sense interest/context relative.

In the fourth chapter I compare and contrast our experience of objects and events, and our experiential point of view in space and in time. In Noë's *Varieties of Presence* (2012) we get an illustration of some of the ways in which the two are and are not analogous. Developing Noë's proposal, I demonstrate that in the temporal case our experience is not perspectival in the same sense as it is in space. Firstly, in the spatial case objects seem to afford other perceptual perspectives in space, this is to be contrasted with events in the temporal case. Secondly, getting right how things are for the subject requires an appeal to an asymmetrical awareness of times either side of that which is given in experience: that there were immediately preceding times/temporal parts she experienced, and that there will be immediately subsequent times/temporal parts she will experience. Such an asymmetrical awareness in time is to be contrasted with a subject's awareness of the regions of space around that sub-region which is given in experience (which features no such asymmetry).

In the fifth and final chapter I demonstrate that appeal to an experiencing subject's temporal perspective can explain the sense in which time seems to pass. In offering an account of time seeming to pass, I argue that we should not be merely trying to articulate some feature of what is presented in perceptual experience; we should be trying to articulate an aspect of wakeful consciousness that concerns the times which bookend the (interval of) time presented in experience. Reflecting on O'Shaughnessy's (2000) discussion of wakeful consciousness (in addition to the proposals put forwards in Chapters 3 and 4), I further illustrate and motivate the claim that, as well as being presented with



some interval of time in perceptual experience, an experiencing subject has a primitive and asymmetrical form of awareness of what was experienced in the immediate past and what is anticipated in the immediate future. That the subject is aware of what was just experienced and what is anticipated, in this distinctive sense, goes towards explaining how the time an experiencing subject has a vantage point upon seems to be fleeting and incessantly changing, and why time seems to be passing.

## Chapter One

### A Tale of Two Williams: James, Stern, and the Specious Present

*“...whatever we are actually experiencing is always the content of a present moment of experience, which may be called the empirical present, in order to distinguish it from an abstract mathematical moment of time, which, like a mathematical point of space, has in itself no content at all. We have no actual experience which is not included in the content of the empirical present moment...” (Hodgson, 1898: 35).*

*“Gravesen forward. Rooney. Instant control. Fancies his chances... Oh a brilliant goal! Brilliant goal! Remember the name: Wayne Rooney! It’s premiership history, the big league’s youngest ever goalscorer signals his arrival on the big stage!”* It is one of the most iconic pieces of football commentary of the Premier League era. It was October 19, 2002, when football commentator Clive Tyldesley excitedly shouted the words that announced the goal of Everton’s then 16-year-old striker Wayne Rooney. Rooney, now the leading goalscorer for England and Manchester United, came off the bench as a substitute after 80 minutes to score his first ever Premier League goal and in doing so ended Arsenal’s 30-game unbeaten run in the League.

Watching (and re-watching) Rooney’s goal, we see Gravesen hit a high ball forward towards the penalty area, Rooney controls the ball on the edge of the 18-yard-box, swivels, takes one or two touches as the defenders back away, and then curls a strike past a diving David Seaman. Switching mind-sets from football fans to philosophers, there are two particularly interesting aspects of the above case that I am concerned to bring out. Firstly, you experience the football players *moving*; you experience the ball *moving* through the air; and you experience the net *bulging* as the ball hits it. You experience motion and change. Secondly, when you are perceptually aware of the ball in the back of the net you are no longer perceptually aware of the ball being kicked by Gravesen at the halfway

line, which occurred a few seconds earlier. While it is plausible that a subject is perceptually aware of more than a momentary state of affairs (a claim defended in Chapter 2), that which she is perceptually aware of nonetheless seems to be of a quite limited temporal extent.

These two features, that experiencing subjects perceive motion and that what is presented in experience is (in a certain sense) temporally limited, are frequently supposed to be explained by a single phenomenon: the specious present. My main aim in the present chapter is to elucidate the notion of the specious present. Reflection on the historical and contemporary literature reveals two distinct conceptualisations of the notion, to be outlined and explained in what follows, one relating to the perception of motion and the other relating to the sense in which experience is temporally limited. In contemporary discussions theorists often fail to differentiate between these two conceptualisations, which has implications for how debates regarding our experience of temporal phenomena proceed.<sup>14</sup> I begin by looking to the origins of the notion in order to explain why it is widely held to be part of the explanation of the two aforementioned features of our experience. I then turn to the two conceptualisations that need to be pulled apart. While the two are intimately related, I demonstrate that they are nonetheless importantly distinct.

## **1. The specious present introduced**

### **1.1. The origin of the specious present**

The term ‘specious present’ was introduced into the wider philosophical and psychological literature in William James’ *Principles of Psychology* (1890). As developed by James, the specious present is said to be a short duration of which we are *immediately and incessantly sensible*, characterised in contrast to the mathematical present. In his discussion of the perception of time, James says

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<sup>14</sup> Distinguishing between these two conceptualisations provides a fresh perspective on debates in the literature, revealing subtly different explanatory projects. One example, discussed in section 3.i. below and in greater detail in Chapter 2, concerns how some theorists have argued against an appeal to the specious present.

that the mathematical present, the instantaneous point of contact between past and future, “is, in fact, an altogether ideal abstraction, not only never realized in sense, but probably never even conceived of by those unaccustomed to philosophic meditation...” (James, 1890: 406). He says that the mathematical present is not realised in sense because he takes our experience to present something temporally thicker: “The only fact of our immediate experience is what Mr. E. R. Clay has well called ‘the *specious* present’” (James, 1890: 406). In taking the specious present to be the only fact of immediate experience, James can be read as saying that the interval of time picked out by the specious present is that interval which we can become aware of when we reflect on our experience, rather than an abstract conception of what ‘the present time’ denotes.<sup>15</sup>

While James may have popularised the notion of the specious present, he did not coin the term; the genesis of this terminology is credited to Kelly.<sup>16</sup> Kelly introduces the notion in the following passage:

“The relation of experience to time has not been profoundly studied. Its objects are given as being of the present, but the part of time referred to by the datum is a very different thing from the conterminous of the past and future which philosophy denotes by the name Present. The present to which the datum refers is really a part of the past – a recent past – delusively given as being a time that intervenes between the past and the future. Let it be named the specious present, and let the past, that is given as being the past, be known as the obvious past. All the notes of a bar of a song seem to the listener to be contained in the present. All the changes of place of a meteor seem to the beholder to be contained in the present. At the instant of the termination of such series, no part of the time measured by them seems to be a past. Time, then, considered relatively to human apprehension, consists of four parts, viz., the obvious past, the specious present, the real present, and the future. Omitting the specious present, it consists of three ... nonentities – the past, which does not exist, the future, which does not exist,

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<sup>15</sup> We might think that the target here is something like ‘the present’ as it is discussed by St Augustine in Book XI of the *Confessions*. Augustine reasons that the objective present must lack duration because in any temporally extended interval there will be earlier and later parts; being earlier and later these parts would be past-wards or future-wards with respect to one another. In order to move beyond this problem (of parts of what was thought to be the present in fact being past or future) it is suggested that the present must be extensionless. Lacking temporal extension, the present no longer has the temporal breadth for this problem to arise again.

<sup>16</sup> Though Kelly is given the pseudonym ‘Clay’ by James. See Andersen and Grush (2009) and Andersen (2014) for discussion.

and their conterminous, the present; the faculty from which it proceeds lies to us in the fiction of the specious present” (Kelly; quoted by James, 1890: 406).

Kelly offers a suggestive characterisation. To begin, we can highlight what, for Kelly, is supposed to be specious; there are two related ways of capturing this. Firstly, let’s assume – as Kelly does – that an appeal to ‘the present time’ is typically, in philosophical discussions, a reference to what James calls the mathematical present. To the extent that our experience presents an interval as being present – and a whole bar of notes can supposedly be presented within the specious present, according to Kelly – this is specious in that it suggests that something of some temporal extent is present, as opposed to the extensionless moment.

Secondly, we could interpret Kelly as saying that our experience is specious in that what it presents as being present is really part of the past.<sup>17</sup> Being of some positive temporal extent, Kelly suggests that the occurrences presented over the specious present must have already happened, on pain of otherwise saying that what is presented in experience is really part of the future (given the assumption that there is an extensionless present moment). Taking a subject’s experience to present part of the recent past, Kelly says that this is not how it seems to the experiencing subject. There is an important sense in which a subject’s experience seems to present the present (rather than the past or future).<sup>18</sup> That which is presented in experience must therefore be occurrences belonging to the past, speciously given as of the present.

These are two ways in which the interval presented in experience can be taken to be specious, for Kelly. In taking the notion of the specious present from Kelly,

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<sup>17</sup> Part of the datum which Kelly is characterising appears to be that the objects of experience are given ‘as of the present’ where this phenomenological datum – things being given ‘as of the present’ in experience – does not pick out the strict present, as it has some temporal extension. Some theorists might be reluctant to describe the objects of experience being presented ‘as of the present’, rather than simply being presented, but I won’t dwell on this issue here. For reasons to think that there is a sense in which what a subject perceives is presented as present, see the discussion of an experiencing subject’s tensed temporal perspective in Chapters 3, 4, and 5.

<sup>18</sup> This is focusing on *perceptual* experience. The same might be said of a subject’s experiential occurrences more generally, but this would require spelling out how in memory and imagination the subject can seem to have a present representation of a non-present time. In the current context I leave this complication to one side.

James also appears to hold that a subject's experience seems to present the present, and that that which is so presented is of some temporal extent.

Writing shortly after James, William Stern appeals to a similar notion that he terms *presence-time*.<sup>19</sup> Motivated by an attempt to explain perceptible motion and change – Stern appeals to speech perception, the observation of movement, and hearing a sustained or gradually changing tone, as probative examples (see Stern, 1897: 317) – Stern also appeals to a temporal extent that is presented in experience. In similar fashion to James's and Kelly's appeals to the specious present, Stern says that from reflection upon what can be revealed in introspection: "Immediate perception is ... 'present', yet 'present' in a different manner than as in a logical abstraction, neither as a mathematical point nor as the mere limit between what has past and what is yet to come, but rather (and regardless how brief), as a positive and finite stretch of time" (*ibid.*: 325).

Despite any ambiguities and complications with the original characterisations traceable to James and Stern, much of the contemporary literature on temporal experience focuses on a (fairly) agreed upon notion of the specious present. In order to narrow the focus towards what has emerged as the dominant contemporary use of the notion, we can distinguish this from a distinct interpretation which can be read in James's work and some of the discussions that followed.

## **1. 2. Varying interpretations of the specious present**

Contemporary theorists converge on a view of the specious present on which this notion is used to capture a sense in which a wakefully conscious experiencing subject is aware of – or represents – a brief temporal extent in her ongoing experience (I will clarify this suggestion in what follows). The sense in

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<sup>19</sup> His notion of presence-time may be *broadly* similar to the specious present, but this is not to say that they are identical (depending on how one characterises the specious present). Stern appeals to presence-time as the stretch of time over which a mental act can be extended, but he comments that this is not identical with the time during which a presentation persists (in this latter case he appeals to 'primary memory'). He only discusses the term 'specious present' in a footnote (see Stern, 1897: 325, footnote 15).

which a subject's experience is said to present a brief duration is frequently tied to a subject's very ability to experience temporal phenomena such as succession and change. In this context, James has often been taken to task for offering implausible estimates of the length of the specious present. This might suggest that he was – knowingly or unknowingly – using the notion in an ambiguous way, or in order to gesture towards two or more temporal phenomena.

In discussing the experimental findings of Wundt and Dietze, James says that they show that a subject can hear forty strokes, each at around 0.3 seconds apart, remembering them *as a whole* so that they can be identified without error when repeated. James says that these experiments aim to determine firstly “the *maximal extent of our immediate distinct consciousness for successive impressions*” (1890: 408; *emphasis in original*), and secondly the interval that such stimuli have to be separated by in order to be experienced as distinct. From this, James concludes that 12 seconds – 40 multiplied by 0.3 – is the “*maximum filled duration of which we can be both distinctly and immediately aware*” (*ibid.*: 409; *emphasis in original*). Tying this to his discussion of the specious present, James continues: “These figures may be roughly taken to stand for the most important part of what, with Mr. Clay, we called... the *specious present*. The specious present has, in addition, a vaguely vanishing backward and forward fringe; but its nucleus is probably the dozen seconds or less that have just elapsed” (*ibid.*: 409; *emphasis in original*).

Wundt and Dietze's experiments appear to be designed in order to demonstrate the maximum interval of time over which one can retain certain discriminatory abilities – being able to accurately recall a number of discrete strokes in order. Regardless of whether or not the figure of 12 seconds is an accurate measure of such an interval, this is not the only – or even the most straightforward – way of understanding what is picked out by talk of time as it is realised in sense. This may show that the term ‘immediate awareness’ is not, for James, simply a matter of awareness of what is presented in perceptual experience (in apparent contrast to contemporary usage of the specious present).<sup>20</sup>

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<sup>20</sup> Such a use of the notion of the specious present – one which seems to be used to capture something like a temporal interval which can be retained in consciousness – with some role for what can be accurately recalled in memory, appears to be employed by James at some points in his writing, and it has since been used this way by others. One example is Pockett (2003), who considers (and repeats) a series of psychophysical experiments from the Twentieth Century.

The original characterisations Kelly and James offered of the specious present appear to be open to multiple interpretations.<sup>21</sup> However, despite any ambiguities or complications, much of the contemporary literature on temporal experience converges on an understanding whereby the specious present is taken to play an explanatory role in accounting for the experience of motion/change; this is generally taken to further entail that a limited interval is presented in experience.<sup>22</sup> It is this understanding which I will focus on in what follows. As it is used in the contemporary literature, there are at least two distinct ways of interpreting an appeal to the specious present when so understood. As a result it is unclear how to interpret some of the arguments concerning the specious present, and it is not entirely clear what estimates<sup>23</sup> of its temporal extent are actually estimates of.

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Pockett's concern is with Husserlian phenomenology and the validity of the phenomenological project. In this context she speaks of a perception "remain[ing] immanent for some considerable period of time" (*ibid.*: 67), connecting this with James' discussion of Wundt and Dietze, where this concerns the maximal temporal extent of our immediate distinct consciousness – to use James's terms – for successive impressions.

Mabbott (1951: 156) also derives an estimate of the length of the specious present from experiments conducted by followers of Wundt in the 1880s. These experiments were set up to determine the interval that subjects could estimate most accurately, without over- or under-estimating the length of the interval in memory. Similarly, Pöppel (2009) – concerned with what he refers to as the *subjective present* – suggests that "[a] numerical answer [to the question of the length of the subjective present] can be derived from a number of different experiments which all converge to a value of approximately 2 to 3 seconds" (Pöppel, 2009: 1891). (That Pöppel refers to James and Stern as psychologists who were also interested in the subjective present as "a basic temporal phenomenon" (Pöppel, 2009: 1891) highlights how Pöppel's *subjective present* can be taken to be broadly analogous to the specious present.) The evidence Pöppel goes on to cite in support of this claim concerns the accuracy of a subject's recollection, appealing to scenarios designed to investigate the maximum interval over which subjects can most accurately reproduce presented auditory or visual stimuli.

<sup>21</sup> Fraise (1984) suggests that three different intervals are often of interest in such discussions. There is an appeal to something akin to the simultaneity threshold ("less than 100 msec, at which perception is an instantaneity" (Fraise, 1984: 30)), the interval of separation between two stimuli which is necessary for a subject to be able to discriminate between their temporal locations – discriminating their non-simultaneity. There is an appeal to something which may be akin to the specious present ("100 msec – 5 sec, perception of a duration in the perceived present" (*ibid.*)); this appears to be somewhat similar to the time said to be given as intervening between past and future. Finally, there is a further measure which will involve recollection ("above 5 sec, estimations of duration involving memory" (*ibid.*)). It is to Fraise's credit that he distinguishes between several temporal intervals which may be of interest in this context, yet it is not clear what significance the phrase 'the perception of a duration' holds for Fraise, and as a result it is not clear how we should interpret the claim that the *perceived present* is between 100msec-5sec. There may, of course, also be further ways of interpreting Kelly and James which I have not explored here. My intention has been to demonstrate some of the ambiguities; not all of them.

<sup>22</sup> See, for example, and despite their many differences, the specious present theories of: Broad (1938); Dainton (2001, 2006, 2008, and 2014: 109); Foster (1979, 1982, and 1991); Grush (2007); Hoerl (2009 and 2013); Kiverstein (2010); Lee (2014a, 2014b, and 2014c); Phillips (2010, 2011a, 2014a, and 2014b); Rashbrook (2013a); and Russell (1992).

<sup>23</sup> Most theorists who have made estimates about the length of the specious present – at least those who appear to have in mind the understanding of the notion currently being discussed – have speculated that its extent is somewhere between a couple of hundred milliseconds to a



In order to dispel this ambiguity, it is necessary to introduce some novel terminology. In the following section (2.1.) I focus upon one conceptualisation of the specious present that can be read in William Stern's discussion (1897). In this context the specious present is to be characterised in terms of the explanatory role it is introduced to serve: accounting for those cases of motion which are perceptible and those which are imperceptible. I will proceed to refer to this as the Explanatory notion of the Specious Present (the ESP). This notion is invoked as part of an explanatory account of why, for example, typical experiencers perceive the motion of the second-hand of a clock, but not of the hour-hand.

In section 2.2. I demonstrate that there is a different way of characterising the specious present, which can be read in Kelly's original discussion of the notion.<sup>24</sup> Kelly, quoted approvingly by James, says that "[a]ll the notes of a bar of a song seem to the listener to be contained in the present" (Kelly; quoted by James, 1890: 406). This is to be contrasted with the whole song, which does not seem to be present to the experiencing subject in this sense. The thought behind Kelly's appeal to the bar of music appears to be that what is given in experience seems to be of some non-zero interval, and yet of some limited temporal spread. In keeping with this thought, James can be read as offering a characterisation of the specious present which is appealed to in order to express the idea that we are perceptually presented with things as they fall within a given interval (such that we are aware of things within this interval in a way in which we are not aware of things which occur over a greater interval). I will refer to this notion as the Phenomenal notion of the Specious Present (the PSP).<sup>25</sup> Much of the philosophical literature in the Twentieth and Twenty-First Century does not distinguish between these two conceptualisations; I will emphasise the utility of doing so in section 3.

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whole second (or at most two). See, for example, Dainton (2006) for an estimate of 0.5secs; Grush (2007) for an estimate of a few hundred milliseconds; Lockwood (2005: 381) for an estimate of 1-2secs; and Strawson (2009: 298) for an estimate of around 300msec.

<sup>24</sup> This is not to say that the ESP cannot also be traced to Kelly. See Andersen & Grush (2009) and Andersen (2017) for the suggestion that James and Kelly did have the very possibility of the perception of motion (partly) motivating their appeal to the specious present. Also see Andersen & Grush (2009) for a discussion of the genesis of these ideas in writers prior to James and Kelly; in particular Hodgson (1878 and 1898).

<sup>25</sup> To use the labels ESP and PSP in this way is not to assume from the outset that these are distinct phenomena; I will discuss the relationship between these two in the rest of this chapter.

## **2. Two conceptualisations of the specious present**

### **2.1. The specious present as the ESP**

In order to characterise and motivate an appeal to the ESP, consider how Stern introduces his notion of *presence-time*. Stern says that we do not typically take ourselves to *only* infer motion and change, saying that – in at least some cases – we take ourselves to perceptually experience motion and change: “Duration, succession, rhythmic patterns, speed, and acceleration can be perceived directly...” (Stern, 1897: 323). However, he recognises that this claim does not sit well with the claim of the momentariness of consciousness,<sup>26</sup> where this is the idea that experience does not present anything of a non-zero temporal extent, or that the only temporal relation experience can present is that of simultaneity.

In this context he says that “[o]ne must renounce either one or the other: the direct perception of time or the momentariness of consciousness” (*ibid.*: 321). He claims that “for those who cannot and do not want to give up simultaneity, there is only one consequence: a direct apprehension of time as such must be repudiated entirely” (*ibid.*). That is, a theorist who endorses the momentariness of consciousness – who denies that a brief duration is presented in perceptual experience – must deny that we can perceive temporal phenomena such as motion/change. Stern takes such a denial to be unacceptable, given a subject’s introspective evidence in favour of the claim that she perceptually experiences motion. Stern’s proposed solution is to reject the claim of the momentariness of consciousness.

The temporal extent of the specious present/presence-time – the ESP – is then taken to do explanatory work in accounting for a subject’s perceptual experience

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<sup>26</sup> Stern refers to this as “[t]he dogma of the momentariness of a whole of consciousness...” (1897: 321); according to which “only those contents can belong to a whole of consciousness that exist together and are simultaneously present at any given time and, therefore, that an ideal cross-section at any given moment in the life of the soul would have to contain every element belonging to that whole of consciousness” (*ibid.*: 313).

of dynamic temporal phenomena such as continuous<sup>27</sup> motion and change.<sup>28</sup> The temporal extent of the ESP is sufficiently great for the spatial displacement of a given stimulus to be discriminable within this interval;<sup>29</sup> this is why an experiencing subject can experience the movement of the given stimulus. Stern also takes it that such a temporal measure, which plays an explanatory role in accounting for the perceptibility of motion, entails that there is a temporal extent (*this* temporal extent) which is presented in perceptual experience.<sup>30</sup> The ESP is that interval of time over which an object must move a discriminable distance in order to be seen as moving – to give rise to this ingredient of the perceptual phenomenology. If an object does not move a discriminable distance over this interval it will not be seen as moving. If it is nevertheless moving, albeit slowly, the subject will only later be able to infer that it has moved.

Writing after Stern, Broad (1923) also uses the distinction between perceptible and imperceptible motion, and the case of a second-hand and hour-hand of a clock, in order to motivate an appeal to the notion of the specious present. He says: “If a change takes place slowly [such as the movement of the hour-hand of a clock], this means that closely adjacent events are qualitatively very little different from each other. It may therefore happen that two events are not qualitatively distinguishable by us unless they are separated by more than the duration of a Specious Present. If this be so, these two qualitatively

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<sup>27</sup> The same thought might apply to discontinuous change – see Soteriou’s discussion of experiencing instantaneous events (2013, esp. Chapter 4.5) – but this is more contested – see Prosser’s discussion of experiencing discontinuous change (2016, esp. Chapter 5.6).

<sup>28</sup> This is not to say that Stern was ignorant of, or against, an alternative understanding which will be outlined and motivated in what follows. However, without clearly distinguishing between the two – something Stern does not do – it is not always entirely clear what Stern would take to be at stake in his discussion when it is cast in terms of the ESP and the PSP (for more on Stern, see Dainton, 2017).

<sup>29</sup> The talk of two states of affairs being discriminable should not be read as implying that the subject deliberately engages in the task of judging when the second- or hour-hand has moved. To say that it is in virtue of a stimulus being in two discriminable positions within the ESP – plus some other conditions concerning the typical functioning of the subject’s visual mechanisms – that motion is perceived is not to say the subject is making personal level judgements about the relative positions of a stimulus.

<sup>30</sup> I will put pressure on this claimed entailment, in light of a recent argument presented by Prosser (2016). Rather than discussing Prosser’s positive proposal in detail I demonstrate that the existence of an explanatory unit in psychophysics, to be expressed in temporal terms, does not necessarily entail that anything temporally extended is presented in experience. (The purpose of considering Prosser’s argument in this context is not to engage with his positive proposal – see my Chapter 2 for this – it is because he provides us with the material to break the connection between an explanatorily relevant interval of time and the interval of time presented in experience.)

distinguishable sections of a single long event are too far separated to be sensed together [i.e. we will not experience it as moving]” (Broad, 1923: 352). In this and surrounding passages, Broad<sup>31</sup> is highlighting an apparent phenomenological difference between our experience of the second-hand of the clock and the hour-hand of the clock.<sup>32</sup> Assuming the clock has hands which sweep around the clock face in uniform motion, rather than ticking, first-personal reports (from reflection on the phenomenal character of experience) reveal that subjects see the second-hand moving, but do not see the hour-hand moving. If the subject was to stare at the clock face without looking away for a whole hour, there would be a time at which she could see that the hour-hand had moved from its earlier position, but she would not see the hour-hand moving.

An interpretation of the specious present in terms of this explanatory role is prevalent in contemporary discussions. As succinctly captured by Hoerl: “[T]he notion of the specious present, as introduced by James, and subsequently understood by others, is supposed to be a notion that plays a fundamental explanatory role in accounting for our very ability to perceive motion and change” (Hoerl, 2013: 394).<sup>33</sup> Discussions by contemporary authors also capture the claim, which appears to be widely assumed in the literature, that in order for

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<sup>31</sup> Russell, writing in his *An Outline of Philosophy* (1927) shortly after Broad, similarly claims: “...you cannot see the minute-hand of a watch moving, but you can see the second-hand moving. That is because it is in several appreciably different places within the short time that is required for one visual sensation to fade, so that you do actually, at one moment, see it in several places... Thus not only an instant, but a short finite time, is sensibly present to you at any moment. This short finite time is called the ‘specious present’” (Russell, 1927: 205). This, again, is to take the specious present to play the explanatory role captured by the ESP, *and* to maintain that, as a consequence, this limited interval must be presented in experience.

<sup>32</sup> This distinction is denied by Plumer, who (pace Broad) states: “[Broad] claims that he cannot see either the minute- or the hour-hand moving... I suspect he did not look at them very long (who does?)” (Plumer, 1985: 28). However, Plumer is certainly adopting a minority position in denying this distinction; based on my own idiosyncratic experience, the phenomenology certainly favours Broad’s account.

<sup>33</sup> Kiverstein (2010: 161-2) considers how altering the length of the specious present could make our experience of the second-hand like that of the hour-hand, by decreasing the interval (where motion could become imperceptible in both cases), or by increasing the interval (such that motion will be perceptible in both cases). Like Kiverstein, Phillips (2011a) considers what would result from increasing or decreasing this interval, suggesting that “if we are to perceive change at all, a certain amount of change must take place within the temporal field” (Phillips, 2011a: 819). The authors acknowledge both that there is a distinctive phenomenology associated with the experience of motion/change and that there needs to be an explanatorily relevant interval which accounts for the distinction between perceptible and imperceptible motion: the ESP. It is possible to also read Kiverstein and Phillips as acknowledging a role for the PSP – this may be what the latter refers to as the temporal field – and suggesting that the PSP also plays the role of the ESP. See section 3.2. for the development of this line of thought.

the ESP to play this explanatory role, it must be an interval presented in experience. This appears to align with Grush's interpretation of the specious present, when he claims: "Since motion only manifests over an interval, then on the assumption that we can perceive motion, the content of perceptual experience, what is experienced, must include a temporal interval. The specious present doctrine... is one way to capture this" (Grush, 2007: 29). These authors appear to be taking the specious present to play an explanatory role in accounting for our experience of motion, further taking it to be an interval presented in experience; seemingly taking the former to entail the latter.

An interesting result of characterising the specious present as the ESP is that it leads some theorists to suggest that it may be modality-specific. This possibility is explicitly entertained by Barry Dainton – in a supplementary document concerning the specious present to his *Stanford Encyclopaedia of Philosophy* entry, 'Temporal Consciousness' (2016) – who suggests that it would be wrong to assume that the specious presents of different sense modalities (and of different subjects) are of exactly the same extent. Theorists might suppose that the auditory, visual, and tactual temporal measures would be more or less similar intervals, but Dainton says that this is something that we should not automatically assume.

## **2. 2. The specious present as the PSP**

The ESP is not the only conceptualisation of the specious present and an explanatory account of how we perceive motion and change is not the only motivation for invoking the specious present. From James' discussion of the notion we can bring out an alternative conceptualisation, based upon a phenomenological claim about what we seem to be confronted with when we reflect on our ongoing experience: that it *seems to be* of some limited interval. This is, I suggest, of interest in articulating the phenomenal character of experience. On the assumption that conscious experience has a phenomenal character which is manifest to an experiencing subject when she undergoes the experience, James

can be read as saying that in an effort to articulate what it is that is manifest to us we must appeal to something of some interval.

That an interval is presented in experience is, on this conceptualisation, to be motivated through reflection on what it is like to experience temporally extended phenomena, rather than coming as the entailment of a line of reasoning concerning perceptible motion. Reflecting on what it is like for a subject experiencing a temporally extended occurrence – such as listening to a piece of music or watching a football match – it is suggested that there is a sense in which she seems to be perceptually aware of some limited but non-zero temporal extent. This conceptualisation of the specious present is suggested in the writing of two authors who appeared to shape James' thoughts on the perception of time, Kelly and Hodgson.

While James takes the terminology of 'the specious present' from Kelly, his chapter on the perception of time draws significant influence from Hodgson's discussion of experience and time, evidenced in part by the number of quotes from Hodgson included in James' discussion.<sup>34</sup> Hodgson certainly appears to offer a proposal which is in line with the PSP, taking reflection upon one's experience to support the claim that experience presents some limited temporal extent:

“...whatever we are actually experiencing is always the content of a present moment of experience, which may be called the empirical present, in order to distinguish it from an abstract mathematical moment of time... We have no actual experience which is not included in the content of the empirical present moment...” (Hodgson, 1898: 35)

Operating with a phenomenologically driven methodology – in some ways a precursor to the methodology better known from the writing of Husserl<sup>35</sup> –

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<sup>34</sup> I cannot do justice to what Hodgson has to say about the relationship between experience and time in the current context. See Andersen (2017) for a discussion of how Hodgson's writing relates to current debates regarding temporal experience; see Mander (2014) for a detailed account of Hodgson's philosophical position as set out in his *The Metaphysic of Experience* (1898).

<sup>35</sup> Such as Husserl's (1905) *On the Phenomenology of the Consciousness of Internal Time*. Spicker (1973) offers a detailed comparison of the writing of Husserl and Hodgson, noting how much of Hodgson's work anticipates ideas taken up by Husserl.

Hodgson suggests that the *empirical* present moment is all that is available for analysis, and that this moment, which is presented in experience, is of some temporal extent.<sup>36</sup> Such claims about the time presented in experience are taken up by James in his discussion of the specious present.

Both Kelly and James make claims about the minimum temporal extent an experiencing subject is aware of in reflection upon her experience, and a maximal temporal extent. Regarding the former James claims, like Hodgson, that the mathematical present is an ideal abstraction which is never realised in sense. In bringing out the sense in which there is an upper temporal limit to what is given in ongoing experience, James appeals to Kelly and his example of a bar of music (quoted previously). The point to draw out for present interest is simply the idea that what is presented in ongoing experience seems to be of some limited temporal spread; that all the notes of a bar of a song seem to be contained in the present, but that all of the notes of the song (which is of a greater temporal extent) do not. This was also brought out, though focusing on visual experience, by the example at the beginning of the chapter. When watching a football match and a goal is scored, as you become perceptually aware of the ball in the back of the net you are no longer perceptually aware of the ball being passed at the halfway line, which occurred a few seconds earlier; over greater intervals of time, we appear to experience what we do in virtue of what is presented in experience over sub-intervals within that greater interval. What a subject is aware of in perception, what is presented in perceptual experience, is in this way temporally limited. This temporally limited interval is what the PSP picks out.

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Much like the conceptualisation of the specious present I am suggesting we can read in James, Miller (1984) suggests that Husserl's 'temporal field' is not introduced in order to fulfil an explanatory role, such as accounting for our experience of motion. Miller claims that "[t]he limitations on our retentive and protentive spans [like the extent of the specious present]... have no significance for [Husserl's] epistemological account of our temporal awareness" (Miller, 1984: 174). To the extent that this is true of Husserl (and it would be beyond the scope of this paper to consider all that Husserl has to say in this context, or all that Miller has to say concerning Husserl), then his interests and concerns align more closely with those present in the discussion of the PSP – capturing the phenomenal character of experience and the interval a subject *seems* to be aware of – than the ESP – accounting for how we experience motion.

<sup>36</sup> This can also be read in how Hodgson says: "The lowest conceivable empirical moment of experience contains both time and feeling, and the lowest empirical moment in experience as it actually comes to us contains both sequence in time and difference in feeling" (Hodgson, 1898: 64-5).

Contemporary theorists also, at least at times, take the notion of the specious present to be so characterised. Dainton says that “...a typical specious present is populated by experiences belonging to several (or all) of the sensory modes, along with bodily and emotional feelings, conscious thoughts, memory images, imaginings – all these (and more) can co-exist within *the confines of a brief phase of a stream of human consciousness*” (Dainton, 2013: 396; *emphasis added*). This is a claim about a temporally limited interval presented in ongoing conscious experience. In a similar vein, Dainton also stresses the distinction between ‘present experience’ and the strict present, as it is presented by James, saying that the former is to be characterised as “a stable, invariant *structural* feature of our consciousness: it is that which remains unchanged while many and varied contents stream through it” (Dainton, 2013: 391; *emphasis in original*).<sup>37</sup> This is to pick out the PSP, something to be appealed to in capturing the manifest image of experience.<sup>38</sup> Granting that an interval is presented in experience, many debates in the contemporary literature can be read as disagreements over what accounts for the temporal extent presented.<sup>39</sup>

To summarise, an appeal to the PSP can be read in the passages of Hodgson, Kelly, and James, quoted previously, and is motivated independently of the ESP. That a subject seems to be presented with a temporally extended interval (the PSP) is a claim about the phenomenology which stands in need of elucidation, rather than being an explanatory measure (the ESP) which is appealed to in order to account for some other feature of the phenomenology, such as perceptible motion.

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<sup>37</sup> Despite making much of what I have called the ESP, Kiverstein also writes that “we can be directly and sensibly aware of events that take place within a short duration of time...” (Kiverstein, 2010: 166). He continues by saying that “our awareness *extends* a short distance through time... all events occurring within a specious present are experienced with the same force and vivacity...” (*ibid.*: 167). Kiverstein plausibly has the suggested interpretation of the specious present – the PSP – in mind when he makes reference of the ‘short duration’ of which we can be ‘directly and sensibly aware’.

<sup>38</sup> That we are perceptually aware of things occupying some limited interval of time, the PSP, is one way of interpreting Soteriou’s claim that “...the things we perceive are perceived as filling, occupying, or having some location within, an interval of time, just as the objects we see are generally seen as filling, occupying, or having a location within a region of space” (Soteriou, 2011: 195). I will say more about the comparison between the PSP and the visual field in Chapter 4.

<sup>39</sup> As highlighted in the Introductory Remarks, albeit briefly, this can be seen to be a point of contention in the debate between retentional and extensional theories of the specious present.



### **3. The relationship between the ESP and the PSP**

#### **3.1. On what follows from the ESP**

Having distinguished between two ways in which theorists might motivate an appeal to the specious present, it remains to be shown that the ESP and the PSP are conceptually distinct. In section 2.1. I said that some theorists have supposed that it follows from the ESP – from the very ability to perceive motion and change – that a brief duration must be presented in ongoing experience. While such a further claim might appear to be implicit in how the ESP has been characterised, it does not follow from the ESP. To grant that there are variables of some temporal extent that play an explanatory role in accounting for why we experience what we do is not yet to make a claim about the duration presented in experience; granting a role to something akin to the ESP, some theorists have argued that it does not follow that such a temporal extent need be presented in experience. This provides us with a pressing reason to distinguish the ESP from the PSP.

Prosser (2016) has recently presented an attack on the idea that the phenomenology associated with the experience of motion/change entails that our experience does present a temporally extended interval.<sup>40</sup> Prosser does not wish to deny that we experience motion/change. He looks to block the inference from the claim that there is a required rate of change (relative to a sensory modality) for some stimulus in order for it to be experienced *as* moving/changing to the claim that perceptual experience presents a subject with something of some temporal extension.

Prosser argues that we only have to hold that experience presents an interval in order to account for the perceptual experience of motion/change if we make a further assumption: that in presenting a punctate state of affairs, the state of affairs must also be presented as static. Prosser objects that this is simply to assume that “[a]n instantaneous content cannot include anything that can only

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<sup>40</sup> Also see Arstila (2018), Chuard (2011 and 2017), and Le Poidevin (2007). I critically engage with these theorists in Chapter 2, so I will keep my comments here brief.

be detected over a non-instantaneous interval”, but in making such an assumption one “conflates the properties of the stimulus that are necessary for motion detection with the content of the resulting experience” (Prosser, 2016: 121-2). Drawing the distinction between the properties of the stimulus that are necessary in order for our perceptual mechanisms to detect motion and that which is subsequently presented in perceptual experience, Prosser says that one can maintain that a momentary state of affairs can be presented as dynamic.

In what he takes to be a probative analogy, Prosser appeals to how we define instantaneous rates of change when talking about the velocity of moving bodies. In this case an object may need to be moving for some period of time if it is to be moving at all, but its velocity can be represented by an instantaneous vector rate of change. In a similar vein, Prosser grants that a stimulus might need to be moving for some period of time in order for a subject’s perceptual mechanisms to detect that the object is in motion, but he suggests that in this case there could also be a representation of motion at an instant. Keeping in mind the explanatory work the ESP is introduced to serve, Prosser sketches a proposal on which theorists can appeal to the ESP – where this is taken to be the relevant interval in perceptual processing (for example), that interval over which a stimulus needs to move a discriminable distance in order to be detected and subsequently represented as moving by a subject’s perceptual mechanisms – without thereby claiming that a non-zero temporal extent is presented as such in experience.<sup>41</sup>

Within the context of accounting for the phenomenology of experienced motion/change, there appears to be a position in logical space where one can accept that there is a role for the ESP – for an explanatorily relevant interval of time – without accepting that this interval is presented in experience. This demonstrates that an appeal to the ESP does not entail that *this interval* is presented in experience. The ESP does not entail the existence of the PSP, the

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<sup>41</sup> There is a possible ambiguity in talk of a non-zero temporal extent being presented as such. In the present context, one might suppose that an object may be presented as the kind of thing that has a non-zero extent, or may be presented as engaged in an activity, where engagement in such an activity occurs over time. Prosser could grant that this is presented in experience. This is not what I mean when I talk of a non-zero temporal extent being presented as such. In what follows, talk of a non-zero extent being presented in experience is to be understood as talk of an interval of time being presented in ongoing perceptual experience.

two are conceptually distinct. This does not speak to whether the PSP entails the existence of the ESP.

### **3. 2. On what follows from the PSP**

In appealing to the specious present in the form of the PSP, a theorist maintains that reflecting upon what it is like to experience temporally extended occurrences reveals that such occurrences are perceived as filling and/or otherwise falling within some temporal extent. This can be compared with how a typical subject visually perceives spatially extended objects filling and/or otherwise falling within some spatial extent. Given that there is an interval presented in perceptual experience, this makes plausible the claim that in order to experience motion/change a discriminable amount of motion/change must be presented over this interval; that the conceptualisation of the specious present as PSP also fulfils the role of the conceptualisation of the specious present as the ESP. To demonstrate that this is so, consider the visuospatial analogy.

In visual experience the objects of sight are presented within a spatial region which extends outwards from the subject's position in space. Appeal to this spatial region is typically construed as an appeal to the (spatial) visual field. Of the spatial phenomena that we can experience, one is variation in colour over the spatial parts of an object. Yet, an appeal to the visual field is motivated independently of an account of how a subject comes to visually experience variation in colour over a given spatial extent.

We could imagine theorists debating whether or not an experiencing subject must have a visual field of some spatial extent – whether it need extend along three axes, two, or merely one – in order to visually experience such variation in colour. Regardless of such a debate, given that we are independently motivated to endorse the claim that typical subjects *do* have a visual field of some spatial extent, we can ask about the implications this carries for the visual experience of variation in colour over the spatial parts of an object. To experience such variation in colour it is not enough for a subject to experience one shade of

colour at one location at one time, supposing this colour fills her visual field, and then to experience another (shade of) colour at a different location at a later time, say once the subject turns her head, again supposing that the second colour fills her visual field. This would be to experience different shades of colour at different locations at different times. In order to experience variation in colour over the spatial parts of an object, there needs to be some discriminable variation presented within the visual field.<sup>42</sup> Irrespective of whether the visual experience of variation in colour entails that an experiencing subject has a visual field of some spatial extent, that a subject does have a visual field of some spatial extent carries certain implications for the visual experience of variation: that there must be a discriminable variation in colour over, or within, the spatial extent of the visual field in order for the subject to visually experience such variation.

Given the independent motivation for endorsing the PSP, analogous considerations to those raised concerning the visual experience of variation in colour over a given spatial extent apply in the case of motion/change.<sup>43</sup> To experience motion/change it is not enough for a subject to experience an object occupying a given location or displaying a given property at one time – over the interval of the PSP – and then to experience it occupying a distinct location or displaying a different property at a later time – over a distinct interval, the length of the PSP – as illustrated by Broad's discussion of the hour-hand of a clock.

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<sup>42</sup> There may be further complications. It may be that we have to take into account what is presented in the visual field *over* the interval of the PSP. To illustrate this thought, suppose that a subject is moving at a continuous rate perpendicular to an object (such as a wall) which varies in colour very gradually, keeping her gaze straight ahead at whatever portion of the object is perpendicular to her. It may be that if the subject remained stationary and looked at the object from a given location, she would not be able to visually discriminate any variation in colour (given the portion of the object which falls within her visual field). However, given that she is in continuous motion and the portion of the object she is visually aware of is changing it may be that she is able to visually discriminate some variation in colour as a result of what is presented in the visual field *over* the PSP. For simplicity I leave this complication aside when presenting the case above.

<sup>43</sup> It might be objected that the experience of motion is not analogous to the experience of variation; it could be claimed that experiencing variation in colour across an object is to experience different (shades of) colour(s) at different parts of the spatial extent, while experiencing motion is not merely experiencing a change in location of a stimulus over some temporal extent. Even if this is true, we need to be careful in what we claim are the relevant differences between the experience of motion and the experience of variation. Experiencing motion may not be reducible to experiencing a change in spatial location and yet it might nonetheless be something which seems to be occurring over time, where some discriminable amount of it has to be presented over (or within) the PSP in order for the subject to experience motion at all. If *motion* appears to be a particularly tricky case, focus instead on change more generally (such as the example of change in colour). In order to experience change some discriminable amount of the relevant change must be presented over (or within) the PSP.

Endorsing the PSP entails that there must be a discriminable movement/change over the temporal extent of the PSP in order for there to be the experience of motion/change.

However long we spend stood in front of a deciduous tree in autumn, we do not experience the change in colour of a leaf from green to orange. The change is too slow for it to be discriminable over the PSP and so a typical subject will not experience the colour changing. Contrast this with a particularly vivid experience of a change, such as observing a cuttlefish or chameleon as they change colour. In cases such as these a typical subject will perceive the colours changing, rather than only inferring the colour change, because the change in colour is discriminable over (or within) the interval of the PSP. Once we endorse the notion of the PSP, there are certain clear cases in which the PSP can play such an explanatory role.

In order to experience motion/change there needs to be some discriminable movement/change presented over the PSP. The PSP and the ESP are conceptually distinct; it does not follow from endorsing the ESP that one need endorse the PSP. It does follow from endorsing the PSP that one takes this interval to fulfil the explanatory role envisioned for the ESP.

#### **4. The ESP, the PSP, and variables in psychophysics**

With the PSP fulfilling a certain explanatory role, allowing us to mark a distinction between perceptible and imperceptible motion/change, this raises the question of whether the explanatory role performed by the PSP exhausts the ESP or whether there is some remaining explanatory residue. Is there something in the conception of the ESP which is not captured by that which follows from the PSP? For each sensory modality (at least, each modality within which we wish to say that we can experience dynamic phenomena such as motion and change) is there a further temporal unit of explanation – a single temporal measure, in that modality – the length of which plays an explanatory role in accounting for how a subject experiences occurrences as they fall within time?

There is little motivation for answering this question in the affirmative. To illustrate, consider another spatial analogy.

We cannot perceptually discriminate the smallest spatial portions – spatial slices of zero extent at the limit – of a spatially extended object of experience.<sup>44</sup> Upon acknowledging this claim, a theorist may question how big something has to be in order for the subject to perceptually discriminate it, or how greatly extended some stimulus must be in order for a subject to discriminate variation (in colour, for example) over it. While there are no doubt many ways in which such a question can form the basis of empirical research, it would not appear plausible to suppose that there will be a single spatial measure which such research could arrive at, regardless of other variables. We would need to consider, among other things, whether a subject is supposed to be visually or tactually discriminating this spatial measure. If it is the former, then the spatial measure we arrive at would presumably depend on the relevant lighting conditions, the distance of the object from the subject, the object's spatial orientation relative to the subject, whether the object falls within peripheral or foveal regions, and so on. If it is the latter, then the relevant spatial measure would presumably depend on the part of the body which is coming into contact with the object (the elbow, the fingertip, or the tongue, for example), the orientation of the object relative to the subject, the relative temperature of the subject and object, and so on.

The above considerations extend to cases where the issue of interest is a subject's ability to discriminate between stimuli and their properties – for example, the relative colour or size of two stimuli. A theorist may question how different – in colour or size – two stimuli must be in order for the subject to perceptually discriminate between them. Once again, it would not appear plausible to suppose that there will be a single measure, expressible in terms of a difference in colour or size, which such research could arrive at regardless of other variables. If the concern is with a subject's ability to visually discriminate between size, then whether the stimuli are presented at the same time or sequentially, whether they are close to one another (along left/right and

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<sup>44</sup> I discuss the issue of the spatial and temporal resolution of what is presented in experience, and the related notion of a minimum sensible, in more detail in Chapter 2.

up/down axes), whether they are the same distance from the subject (along a near/far axis), the lighting conditions, and so on, will all be relevant to the measure arrived at.

In discussions of perceptual discriminability in the various sensory modalities there are also frequently discussed temporal measures. For example, it is widely recognised that the sensory systems have different temporal resolutions for the detection of non-simultaneity.<sup>45</sup> Let's suppose that a theorist sets out to empirically determine some of the relevant perceptual minima and maxima. The theorist presents subjects with a hand rotating around a clock face – were the speed of rotation can be increased or decreased in minor increments – and, on the basis of subjective reports, seeks to determine what changes are and are not perceptually discriminable by subjects. One might suppose that, when concerned with whether or not a subject will experience the hand as moving in any given case, there is more to consider than the temporal extent of the PSP. This is certainly true, for example the theorist would need to know what the minimum distance is by which two positions of the hand must be separated in order for this change in spatial location to be visually discriminable.

It does not appear plausible to suggest that such an experiment could determine a role for the ESP distinct from that fulfilled by the PSP. For illustrative purposes, suppose the PSP is 500 milliseconds long. Suppose we also find that when a given hand is rotated 5 degrees in 100 milliseconds, this change in location is visually discriminable. Does it follow that when the same hand is rotated 5 degrees in 500 milliseconds that this change in spatial location will be

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<sup>45</sup> Wittmann summarises: “The highest temporal resolution (the lowest threshold of detection) is observed in the auditory system, where two short acoustic stimuli which are only 2–3 ms apart are detected as non-simultaneous. The visual and the tactile system have a lower temporal resolution with respect to non-simultaneity with thresholds of some tens of milliseconds” (Wittmann, 2011: 2). This highlights a difference across modalities in the temporal extent of what is known as the simultaneity threshold, though, as I have suggested, there is little reason to suppose that there is a single measure which we can specify in each modality as the interval below which a subject cannot discriminate between two stimuli, *regardless* of other variables. And this is not what Wittmann claims, he simply reports the shortest intervals over which non-simultaneity is detected given some control for other such variables. (In this context it is also worth noting that detecting the non-simultaneity of two short events isn't sufficient to for detecting the temporal order of those events. For a subject to be able to reliably report the temporal order of the presented stimuli, there must be a greater interval separating the two stimuli. In other words, for each modality the order threshold is greater than the simultaneity threshold.)

visually discriminable? Plausibly not. Slight changes may be discriminable if they occur particularly quickly but not if they occur more slowly (even within the PSP), just as differences in the relative size of two stimuli may be discriminable when they are close in space but not when they are at some degree of separation (even if the stimuli are simultaneously presented within a subject's visual field). There are various interacting variables, and ratios between degree of difference and time over which that difference occurs, that will play a role in whether some change is or is not experienced as such.

Suppose further the theorist finds that, over all of the intervals tested in the hypothetical experiment, the slightest rotation discriminable by subjects was 2 degrees, i.e. regardless of the interval over which it occurred a rotation of 1 degree was not discriminable as such. I have said that it does not follow that if the hand rotates by 2 degrees over the interval of the PSP, this will be discriminable. This might lead the theorist to ask what the maximal interval is over which the hand can move 2 degrees for this change to be discriminable. Whatever the answer is to such a question, it is not that the interval in question captures the ESP. Rather, such an answer provides an illustration of one of the relevant ratios between the degree of difference (spatial displacement) and the time over which that difference occurs, that determines whether or not the change is visually discriminable. The existence of such explanatorily relevant ratios/variables does not confer plausibility on the thought that there is a single temporal measure, in a given sensory modality, the length of which plays an explanatory role in accounting for the kind of occurrences (such as motion, change in location, change in colour, etc.) the subject experiences.

Granting that there is a role for the PSP, the interval it picks out is also the relevant explanatory interval over which some stimulus must change a discriminable amount in order to be experienced as changing. We can grant that there will also be other minima and maxima to consider in perception, which may be explanatorily relevant to what is perceptible in a given case. However, this is not to say that there is an additional interval of interest, but that there are various ratios between the properties of a scene relative to a given experiencer –



such as relative size, colour, distance (spatial and temporal), and so on, between stimuli – which will be relevant to whether a given change is perceptible.

### **5. Why has the ESP/PSP distinction been overlooked?**

Given the preceding focus on James and Stern, I will end by making some speculative remarks regarding why much of the literature on the specious present – within analytic, anglophone circles – has appealed to what I have called the Stern-inspired ESP rather than the PSP. With both James and Stern maintaining that an interval is presented experience (the latter appearing to take the ESP to entail the PSP), it is not surprising that subtly different conceptualisations of the specious present have been overlooked. I suggest that the time at which this notion was coined may also have much to do with the subsequent focus on the ESP (at the expense of the PSP).

The notion of the specious present was first used in philosophical and psychological discussions at a time when one tradition of philosophical thought was coming to a close – at least in anglophone circles. At the beginning of the Twentieth Century, a new tradition develops in the realism of Moore and Russell in Cambridge.<sup>46</sup> The philosophical landscape that emerged over this period is sometimes characterised by contrast with the phenomenological tradition in terms of the analytic-continental divide. The discussions of James and Stern (in addition to those of Hodgson and Kelly) can be seen to span these two traditions before the split. This is evidenced, in part, by the influence of James' writing on both the analytic philosophers<sup>47</sup> and the phenomenologists<sup>48</sup> in the early Twentieth Century (continuing to the present day).

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<sup>46</sup> While it might be common to trace analytic philosophy to Moore and Russell, this is not to say that its development was their doing alone. See Travis & Kalderon (2013) for discussion of the role of Cook Wilson and the Oxford Realists; also see other discussions in Beaney (2013).

<sup>47</sup> Russell's *The Analysis of Mind* draws on and is influenced by James' doctrine of 'pure experience' (Russell, 1921: 22-6).

<sup>48</sup> This is discussed by Drabinski (1993) and at length in Wilshire's (1968) *William James and Phenomenology*. Cairns (1976) also remarks that Husserl recommended to his American students that they prepare themselves for phenomenology via James's works on psychology and empiricism.

A possible diagnosis of why the notion of the PSP has fallen out of focus<sup>49</sup> in anglophone analytic philosophy is that this conceptualisation of the specious present picks out a phenomenological datum, primarily of interest to those looking to characterise the phenomenal character of experience. The PSP is something appealed to when one sets out to do descriptive phenomenology. The ESP, on the other hand, is a notion which does further explanatory work in discussions of the philosophy of perception. It is plausible that theorists of an analytic slant would favour a more *analytic* explanatory project, of accounting for our experience of motion, hence the subsequent focus upon the ESP. (Yet, this is not to say that such theorists had in mind that there were two such conceptualisations and deliberated on which notion of the specious present to operate with.)

It may be that the dominance of the analytic explanatory project and the failure to distinguish between the two conceptualisations of the specious present – focusing on the ‘Stern-inspired’ ESP – has led to the erroneous supposition that the ESP entails the PSP. It could turn out, as a point of historical fact, that several of the authors who began to popularise the notion of the specious present at the beginning of the Twentieth Century were not aware of Stern’s discussion. It is to be granted that the popular understanding of the specious present in terms of the ESP – in addition to the PSP – could be read in James (and Kelly) by those writing after his *Principles of Psychology*. To a certain extent, this is a moot point. Whether or not Stern’s writing had an influence on theorists discussing temporal experience – and appealing to the specious present – in the early Twentieth Century is matter of historical accuracy, but the larger concern for present purposes is with the very drawing of the distinction between the ESP and the PSP.

Some of the insights of authors such as Hodgson, James, Kelly, and Stern, may have been obscured as a result of the narrowing of interests in the traditions which emerged following their writing. This demonstrates the importance of considering the context and intellectual climate of the time at which authors

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<sup>49</sup> See Andersen (2017) for the related discussion of the dramatic extent to which Hodgson has also fallen out of focus, with very few contemporary theorists appealing to his rich discussions of experience and time.

were writing – rather than viewing it through the lens of one’s own concerns – or else key insights and distinctions can be easily overlooked (whether or not this is the cause of the popular notion of the specious present running the ESP and the PSP together). The diverse interests of theorists writing at the end of the Nineteenth Century and beginning of the Twentieth Century, when read for their own sake, can be of great utility in ongoing debates in the philosophy of mind, as evidenced by the distinction between the ESP and the PSP.

### **Concluding remarks**

This chapter began with the example of watching a football match. When watching the footballers on the pitch, I drew attention to two features of the experience. Firstly, a subject experiences the football players *moving*, she experiences motion. Secondly, when she is perceptually aware of the ball in the back of the net she is no longer perceptually aware of the ball being kicked at the halfway line, which occurred a few seconds earlier; what she is aware of in perception, what is presented in her perceptual experience, is in this way temporally limited. With reference to the writing of James and Stern, I demonstrated that an explanatory account of these two features – the experience of motion and what is given in ongoing experience being (in a certain sense) temporally limited – is supposed to arise from a single phenomenon: the specious present.

The main aim throughout this chapter has been to elucidate the notion of the specious present, to explain why it is widely held to be part of the explanation of the two aforementioned features of our experience, and to argue that the widely held view over-simplifies matters. I argued that contemporary and historical theorists frequently appeal to the specious present under two guises without explicitly distinguishing between them. Firstly, the specious present can be understood as an interval of a given temporal extent which is to be put to work in an explanatory account of perceptible and imperceptible motion: the ESP. Secondly, the specious present can be understood as an interval of time presented in experience: the PSP. This latter terminology is introduced as a

placeholder for an aspect of the phenomenology which needs to be given an account of, rather than being introduced in order to do some explanatory work.

I have argued that while granting a role for the ESP does not entail that an interval is presented in experience, once we grant a role to the PSP this does entail that the interval presented in experience will fulfil the explanatory role of the ESP. This is important to recognise when we consider arguments for and against the claim that there is a specious present; I consider such arguments further in Chapter 2. I ended by offering one explanation of why the ESP has become the orthodox interpretation of the specious present at the expense of the PSP, resulting from the analytic-continental divide which emerged in early Twentieth Century philosophy.

## Chapter Two

# Minima Sensibilia: On the Temporal Breadth of Experience

*“[W]e imagine that consciousness comes to us in drops, minima sensibilia; and involve ourselves in the puzzle, How is time-perception possible? It is like pouring a glass of water away in drops, and then asking how such drops can be united into a mass of water.” – A letter from Shadworth Hodgson to Josiah Royce; quoted by Clendenning (1999: 88).*

*“We normally take experience in larger chunks, and if we try to pulverize it by focusing attention on particles within ... we usually find ourselves puzzled and uncertain” (Goodman, 1977: 203).*

In our wakeful conscious lives, the experience of time and dynamic temporal phenomena – such as motion and change – appears to be ubiquitous. How is it that temporality is woven into our conscious experience? Is it through perceptual experience presenting a series of instantaneous states of the world, which combine together over time – in a sense which would need to be specified – to give us experience of dynamic temporal phenomena? Or are temporally extended occurrences presented in experience as such?

Following the discussion of the specious present in the previous chapter, the main interest in the present chapter is to develop and defend the following claim, which I take to be a claim concerning the phenomenal character of perceptual experience: that the experiencing subject is minimally presented with something of some non-zero temporal extent as such, or to put it another way, that she is presented with something spanning an interval of time (the Duration Claim).<sup>50</sup> This entails a denial of the claim that perceptual experience presents what is the

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<sup>50</sup> The Duration Claim is part of what supports an appeal to the specious present under the guise of the PSP, but the two are not identical claims. It does not follow from the Duration Claim that there is any in-principle upper temporal limit to what is presented in ongoing perceptual experience, though such an upper temporal limit is part of what motivates an appeal to the PSP.

case at an instant in isolation.<sup>51</sup> In order to develop and defend the Duration Claim, I consider and dismiss recent proposals – from Chuard (2011 and 2017), Prosser<sup>52</sup> (2013, 2016, and 2017), and Arstila (2018) – that would reject it. I will refer to such proposals as snapshot models of temporal experience. Prosser and Arstila build upon Le Poidevin’s work (2007) and develop variations of what will be referred to as the dynamic snapshot model of temporal experience (DSM).

Snapshot models of temporal experience tend to be considered minority positions in current debates. In a nutshell, on such a model the phenomenal character of experience over time is to be characterised in terms of a sequence of independent snapshots of the world.<sup>53</sup> As illustrated in the previous chapter, since the writing of James and Stern it has been widely accepted that, in order to experience motion, a subject must have an experience which presents a non-zero temporal extent. As a result, the experience of motion has been thought to give rise to a phenomenological argument for the Duration Claim (outlined in section 1). Chuard can be read as disputing this and arguing that the phenomenology can be accounted for without endorsing the Duration Claim. I argue that the snapshot model Chuard proposes comes up short (in section 2). The DSM can be read as an attempt at responding to the phenomenological argument for the Duration Claim and to explain the experience of motion without endorsing the Duration Claim (outlined in section 3).

I argue that the dynamic snapshot theorist does not provide us with a plausible alternative model of temporal experience; as a proposal concerning the phenomenal character of experience the DSM is left unmotivated. This argument has three fronts: I argue that the findings from cognitive science discussed by Prosser and Arstila do not provide independent support for the

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<sup>51</sup> I will explain the significance of saying an instant *in isolation* in what follows (see section 5), but briefly, in order to be aware of something in isolation a subject need not be aware of anything else, or anything of a greater extent.

<sup>52</sup> Prosser offers a variant of the dynamic snapshot model, though he does not unequivocally endorse it. In what follows, I will refer to the account put forward as Prosser’s proposal, though it is to be acknowledged that it is a proposal that he is not ultimately satisfied with.

<sup>53</sup> Unless otherwise explicitly stated, I will write assuming that snapshot theorists appeal to a ‘snapshot’ in order to pick out an experiential presentation which is neutral about the duration of the presented state of affairs, rather than presenting a state of affairs as obtaining for an extensionless *instant*, or *point* in time. On the conception of instants as extensionless, see Sorabji (1983: 8) and Moore (2001: 158).

DSM (in section 4); neither does reflection on the phenomenology (argued for in section 5); nor do considerations from certain theoretical claims in the literature (argued for in section 6). We are left without good reasons to adopt a snapshot model of perceptual experience and with good reasons to endorse the Duration Claim.

### **1. A phenomenological argument: from the perception of motion**

Consider seeing fallen leaves blowing in the wind, seeing a dog chasing a ball across a field, or – to stick with the traditional example in the literature – seeing the second-hand of a clock sweep around the clock face. In all of these cases we take ourselves to experience something in motion, where some appeal to motion is required if we wish to do justice to what it is like for us perceptually. (For simplicity, in the present chapter I will continue to focus on visually perceived continuous motion/change.) If our experiential lives consist of a sequence of discrete experiences, each presenting something akin to an instantaneous state of affairs – such as a thrown ball at a position in its trajectory – it would appear to follow that we could not perceptually experience motion. That is, if all we experience – all that is presented in experience – is a static state of affairs at one time, followed at a subsequent time by a subsequent presentation of a static state of affairs, we should not perceptually experience motion. All that would be experienced is one static state of affairs at a time.

When proposed as an account of the phenomenal character of experience, the snapshot model can appear hopelessly confused. Without saying more, far from providing an account of the phenomenology such a view is at odds with the perceptual phenomenology. Against such a view, our experience of motion is often thought to give rise to an argument for the claim that experience must present some non-zero temporal extent. As discussed in the preceding chapter, a succinct presentation of this line of argument against the snapshot proposal can be constructed from Stern's (1897: 321-323) writing on temporal experience. Stern highlights what is *prima facie* an inconsistent triad of claims about our experience:

1. **The Snapshot Claim:** Experience over time consists of a sequence of snapshots, each of which is neutral on whether it presents anything of a non-zero temporal extent (or – though this is a more committal claim – a snapshot only presents *instantaneous* content).<sup>54</sup>
2. **The Static Claim:** Any snapshot must be static; we cannot experience motion/change in a single – non-temporally extended – snapshot presented in experience.
3. **The Motion Claim:** Reflection on the phenomenology of experience contradicts the idea that we have to infer motion and change, we perceptually experience motion and change.

This triad of claims also appears to be captured in a succinct paragraph by Dainton when he discusses the visual experience of a bird swooping across the sky, although in Dainton’s discussion such a clear distinction is not drawn between what I am calling the Static and the Snapshot Claims:

“Even the briefest discernible phases of these visual experiences have a content that presents (or represents) *a bird in motion* [the Motion Claim]. This is one reason for supposing that such contents cannot be reduced to contents that are entirely static and motion-free [a denial of the conjunction of the Snapshot Claim and the Static Claim]: motion is a fundamental and irreducible feature of much visual experience...” (Dainton, 2014: 109).

We appear to have a phenomenologically motivated claim, that we do experience motion/change, and two other claims which conjunctively make this impossible. That is, those accepting the Static and Snapshot Claims must, Stern thinks, deny that we can experience motion/change (see Stern, 1897: 321). Stern’s proposed solution – and where most proponents of the specious present follow<sup>55</sup> – is to reject the Snapshot Claim.

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<sup>54</sup> Stern refers to this as the dogma of the momentariness of consciousness. Using the terminology of ‘atomic contents’, rather than snapshots, Grube expresses this claim as follows: “basic experiences only represent events, or properties instantiated in events, that have a duration at or below the coincidence threshold, which precludes the representation of perceivable temporal relations between non-simultaneous events” (Grube, 2014: 18).

<sup>55</sup> See, for example, the specious present theories of: Broad (1938); Dainton (2001, 2006, 2008, and 2014); Foster (1979, 1962, and 1991); Hoerl (2009, 2013); Grush (2007); James (1890); Lee (2014a, 2014b, and 2014c); Phillips (2010, 2011a, 2014a, and 2014b); Rashbrook (2013a); and Russell (1992).



If we wish to do justice to the temporal phenomenology (that we seem to perceptually experience motion and change), then it appears we can dismiss the snapshot model as being at odds with the datum. This is not to deny the possibility of there being further considerations which could, on reflection, force us to adopt an error theory,<sup>56</sup> but in the absence of such considerations, or without arguments to support them, we can reject the Snapshot Claim and endorse the Duration Claim. Yet such an approach is not universally accepted, and the utility of posing the argument as a response to an inconsistent triad of claims is revealed when considering how some theorists have sought to maintain the Snapshot Claim.

## **2. Chuard's snapshot model of temporal experience**

Chuard (2011 and 2017) makes a case for what he calls the snapshot conception of temporal experiences. Minimally, the view he espouses is a combination of two claims. Firstly, “our streams of consciousness only contain short-lived experiential events, arranged in succession” (Chuard, 2017: 121); secondly, “no temporal relation between non-simultaneous perceived events figures in the content of any such short-lived experiential event” (*ibid.*). It isn't clear that such a view need be committed to any claim about ‘instants’ as such. It need only be that perceptual experiences present no temporal information – what is presented in ‘a short-lived experiential event’ is a static state of affairs – as this, I take it, is the import of the claim that there is no temporal relation between non-simultaneous perceived events presented in perceptual experience.

Chuard is quick to clarify that he does not wish to “rule out the continuous and dynamic phenomenology we can introspect when hearing melodies or seeing changing facial expressions” (*ibid.*). He continues speaking of the distinctive phenomenology “when seeing motion” (*ibid.*: 125). It would therefore be uncharitable to interpret Chuard as endorsing the Snapshot and Static Claims while rejecting the Motion Claim, thereby taking his talk of ‘seeing motion’ to

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<sup>56</sup> Reid appears to have something like this in mind when he claims that perception (the operations of the senses and consciousness, in his terms) is limited to the present instant (Reid, 1785, Essay III. Chap.V).

be a slip of the tongue on his part. Yet, insofar as there is such a thing as perceptually experiencing motion, it isn't clear that Chuard manages to provide an account of it.

In an effort to go beyond an error-theory of perceptual experience – which would deny that we do perceive motion/change, even if it strikes us as plausible that we do – Chuard says that “the phenomenology we seem to introspect... [when we experience motion] *reduces* to those features of successions of snapshots... the experiential properties of snapshots, their temporal arrangement, the gradual transitions in their successive contents, our memories of previous experiences, and inability to detect gaps and jumps” (*ibid.*). Yet he also insists that memory is not what accounts for the phenomenology when experiencing dynamic phenomena, such as motion. He says: “Memories, too, play a role: not in accounting for the dynamic phenomenology of sequences of snapshots, but our cognitive access to [the phenomenology]...” (*ibid.*). There is a potential confusion here, as – depending upon what *cognitive access* refers to<sup>57</sup> – it is not obvious what it would be for there to be phenomenology a subject did not have cognitive access to. If memory plays a role in accounting for our cognitive access to the phenomenology on Chuard's account, the reader might suppose that memory just does play a role in accounting for the phenomenology. At least for the sake of argument, in what follows I will go along with Chuard's statement to the contrary (unless explicitly stated otherwise).

We are left with a view on which the experience of motion is to be accounted for in terms of “the experiential properties of snapshots [where ‘no temporal relation between non-simultaneous perceived events figure in the content of any such short-lived experiential event’], their temporal arrangement, the gradual transitions in their successive contents... and inability to detect gaps and jumps”

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<sup>57</sup> If cognitive access is taken to refer to some form of psychological awareness, were this need not entail belief, then it might be thought that for there to be such phenomenology there must just be such awareness (without this awareness, there would be nothing *it is like* for the subject). However, if cognitive access refers to the subject holding a belief concerning what it is like for her, then it may be thought that there can be such phenomenology without the subject holding a belief about it; where memory may play a role in forming such a belief.

(*ibid.*).<sup>58</sup> In this view Chuard appears to closely parallel the view of Locke<sup>59</sup> (1690), whom he quotes approvingly as saying that, when seeing motion, we can introspect “a constant train of successive ideas” (1690, 14, 6).<sup>60</sup> Following Locke, Chuard appears to commit himself to a view whereby the experience of motion is to be accounted for on the basis of a succession of experiences (/ideas), whose temporal structure resembles that of the events a subject appears to perceive.<sup>61</sup>

Returning to the triad of claims highlighted by Stern, Chuard appears to deny that it is inconsistent to appeal to the Static Claim, the Snapshot Claim, and the Motion Claim. Yet it is not clear why our experiences, if they are successive snapshots presenting static scenes in the way in which Chuard describes, should ever lead to the apparent phenomenological datum – the experience of motion/change. Chuard tries to account for the experience of motion/change through appeal to the temporal arrangement of the snapshots and the gradual transitions in what they successively present. Such an account faces a dilemma. On the first horn, Chuard would need to grant a role for memory in order to explain our awareness of motion – despite his protests to the contrary – where this would appear to entail denying that we strictly speaking perceive motion;<sup>62</sup> even then, he would appear to be left unable to explain the distinction between perceptible and imperceptible motion. On the second horn, Chuard would need to introduce something like an inner-perceptual mechanism which is presented

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<sup>58</sup> Without appealing to a role for memory, Chuard offers a position on which “all there really is, is just a succession of short-lived or instantaneous sensory experiences... The phenomenology of temporal awareness is to be fully explained, on this view, as a result of the successive phenomenology of single experiences enjoyed in close succession” (Chuard, 2011: 9-10).

<sup>59</sup> One may also find the idea in Locke that we come to experience motion through a combination of perception and memory (an idea which is taken up by Reid, in his critique of Locke, who recognises that this must push us to denying that we strictly speaking perceive motion). However, this appears to be ruled out by Chuard’s explicit claims about the absence of a role for memory in our experience of motion.

<sup>60</sup> We might question the introspective evidence Locke and Chuard appear to be appealing to here, as they seem to be suggesting that when we reflect upon the nature of our experience, we become aware of a series of discrete particular experiences/ideas. This may encounter resistance from those theorists, such as Tye (2003), who would deny that we could become aware of any properties of the experience itself on the basis of claims about the transparency of experience.

<sup>61</sup> This should be read as the claim that if A occurs before B, and B before C, then the experiential snapshot presenting A occurs before the snapshot which presents B, and so on. It is not to claim that the subject’s experience and the occurrences she is experiencing structurally match in all relevant temporal properties, such as duration. Experience is said to occur in discrete snapshots, whereas the occurrences one is experiencing may be thought to be continuous.

<sup>62</sup> This is the case if we assume that memory – and what is presented in experiential recollection – is to be characterised as a mental occurrence distinct from perceptual experience. I will clarify what the appeal to memory might amount to in what follows.

with successive experiential snapshots. As well as being a questionable postulate, this would result in a problematic regress rather than an explanatory account.

*The first horn.* One way to understand the claim that the temporal arrangement of snapshots – and the gradual transitions in what they successively present – leads to an awareness of motion is by introducing a role for memory. Recall that, on Chuard’s view, no temporal relation between non-simultaneous perceived events can figure in any given perceptual snapshot. Therefore, in order to be aware of motion and any other change *over* time, it is not sufficient to merely be aware of the simultaneous events presented in a single snapshot in isolation. When invoking an awareness stretching across such snapshots, we appear to reprise a role for memory.

We could mean one of several things when we claim that there is such a role for memory. Firstly, and perhaps most obviously, we could take ourselves to be singling out episodic memory, claiming that motion is experienced because of a comparison that is drawn between what a subject episodically recalls and what she is currently perceiving. Appeal to the temporal arrangement of the snapshots and the gradual transitions in what they successively present would, on this understanding, require holding that memory plays a role in contrasting what an earlier perceptual snapshot presented with what is currently presented in perceptual experience. On this construal of the role fulfilled by memory we cannot strictly speaking be said to perceive motion, as Reid recognised. As Chuard wishes to allow that we do perceive motion, we can reject this interpretation.

Secondly, we could take the relevant form of memory to be something which operates alongside perceptual experience in order for temporally extended occurrences to be presented in ongoing experience under different temporal modes of presentation. On this understanding, a subject is perceptually presented with an experiential snapshot (as that which is *present* or *occurring now*) in addition to be experientially presented – through this form of memory – with what was perceptually presented immediately previously (though this is, unlike what is perceptually presented, presented as having occurred immediately

previously/*pastisibly*). Through what a subject perceived immediately previously being retained, in this sense, a subject may be said to experience motion. However, if such a proposal can account for the phenomenology, it does so by becoming unrecognisable from a retentional<sup>63</sup> account of temporal experience. This abandons the core of the snapshot model as the subject is now said to be experientially presented with some positive temporal extent, albeit under differing temporal modes of presentation. As a result, we can reject this suggestion from current consideration.

Finally, an appeal to memory could be made on the snapshot proposal in order to highlight a role for the causal influence of prior experiential snapshots on subsequent experiential snapshots. This is not to be confused with the causal role we may believe different stages of visual perception play in a subject coming to experience some state of affairs, were – roughly – we may think of a first stage (light hitting the lens) causing and then giving way to a second (the lens focusing the light onto the retina), and then to a third (an electrical impulse travelling from the retina along the optic nerve), and so on. Rather, the suggestion may be that what is presented in an experiential snapshot may be retained in some form, where this may be exploited at a later time. Rather than thinking that the information/experiential snapshot has played its role and is done, it may be claimed that there is an important sense in which it is still available in working memory (in contrast to the stages in the simplified model of how our eyes work, above). Through being retained, in this sense, a previous experiential snapshot may exert some causal influence on a later experiential snapshot, resulting in the latter presenting a stimulus as being in motion. On this reading we are presented with an account which appears to be a version of the dynamic snapshot model of temporal experience; as such, we can delay evaluating whether or not this proposal is successful until the subsequent discussion of the DSM (in sections 3-6).

When granting a role for memory, a theorist would also have to explain how her account is fit to face a further challenge. Recall how Broad highlights the

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<sup>63</sup> On a retentional account, the experiencing of motion/change occurs within experiential episodes lacking temporal extension – or having minimal temporal extension – which present greater temporal intervals (see the brief discussion in section 1 of the introduction).

difference between our experience of the second-hand and the hour-hand of the clock. This highlights a commonly accepted distinction between perceptible (experienced) motion and imperceptible (inferred) motion. How we construe the role fulfilled by memory will, on this first horn, alter the account's explanation of the difference between the case of the hour-hand and the second-hand.

On the first proposed understanding of a role for memory, one worry is that Chuard's snapshot model would predict that there is no in-principle distinction between our experiential awareness of the movement of the hour-hand and the second-hand – that both should be experienced as moving. The awareness of motion in the case of the second-hand would be explained in virtue of seeing the second-hand at different points in its rotation – within some relative degree of spatial proximity – at different times, while remembering its earlier location(s); but, of course, the hour-hand will also have been seen at different (discriminable) points in its rotation at different times while its earlier location(s) is remembered. Hence, we should expect to be experientially aware of the hour-hand as moving in some sense, be it experienced as moving uniformly, like the second-hand (albeit more slowly), or only when it comes to occupy a discriminable spatial location in its rotation (where this may be an experience of discontinuous or 'jumpy' motion, but an experience of motion nonetheless).

An account which makes use of the second or third readings of the role of memory may allow Chuard to avoid this problem. There would, on these readings, be a difference between the case of the second-hand, when change is discriminable between two successive snapshots (where there is no felt gap), and the case of the hour-hand, when change is only discriminable after many snapshots (where there is a felt gap). While these readings may allow us to explain the distinction between perceptible and imperceptible motion, they both risk abandoning the version of snapshot model that Chuard appears to favour.

On the first horn of this dilemma the role fulfilled by memory appears to have one of three possible consequences: that we cannot, strictly speaking, perceive motion; that we abandon the core of a snapshot model, becoming a retentive

model of temporal experience instead; or that we allow a role for the causal influence of prior experiential snapshots on later experiential snapshots (a suggestion to be developed in the subsequent section).

*The second horn.* The only way in which a theorist can explain how the temporal arrangement of snapshots – and the gradual transitions in what they successively present – can lead to an experience of motion *without* appealing to some form of memory, appears to be by introducing an inner-perceptual mechanism (or homunculus). If motion is not presented within a single snapshot – and recall that, for Chuard, it seems it cannot be – the experience of motion could only arise through a series of such experiential snapshots. For such a series of experiential snapshots to be *experienced*, we need to posit an *experiencer*.

To be clear, in this context to be *experienced* does not merely mean to be lived through, or to be an event of which one is the subject, which would be to use Hinton’s *very general notion* of experience (Hinton, 1973). We want to account for the phenomenology of motion, for the distinctive phenomenology which arises from perceiving smooth succession, rather than merely claiming that a subject lives through such a succession. There are serious questions about how such experienced motion is supposed to arise on a snapshot model, which Chuard recognises:

“It’s here that the snapshot view resorts to cinematic metaphors: not by assuming some sort of projector, let alone some ‘Cartesian’ spectator, but only in the sense that the *pace* of successions of experiential states... is crucial in accounting for their phenomenology...” (Chuard, 2017: 125).

In the analogy with cinema, through *experiencing* a series of static snapshots, presented at the relevant pace, we are said to experience motion. Yet, for there to be a probative analogy with the case of cinematic depiction, there would have to be an inner-perceptual mechanism directed at the successive experiential snapshots, for which the pace of successions makes some difference.

Chuard’s insistence that we needn’t introduce a spectator serves as little consolation. As spectators, the pace of the transitions and the similarities in what

is presented by successive snapshots explains why we experience motion in the cinematic case when supplemented by contingent facts about our visual mechanisms. There is an empirical story to be offered concerning our visual apparatus which explains why the pace of successive stills makes a phenomenological difference (experiencing seamless movement rather than merely experiencing depictions of bodies in similar – but slightly different – positions in succession). Only when positing such a spectator is there a probative analogy with the pace at which experiential snapshots are supposed to be presented, and the gradual changes in content, making a difference as to whether motion is experienced or not.

We not only depend on the idea of some inner-perceptual mechanism observing experiential snapshots, on this reading of Chuard’s proposal, we also have the further question of how this inner-perceptual mechanism gives rise to the experience of motion. Suppose the snapshot theorist is happy to appeal to an inner-perceptual mechanism which is, in some sense, presented with some number of snapshots at a time. The inner-perceptual mechanism is in a sense thereby presented with occurrences of a non-zero temporal extent. If the theorist is willing to accept this in order to accommodate the experience of motion, it is tempting to think that we should provide this explanation one stage earlier and say that a non-zero temporal extent is simply what is presented in experience – rather than a single snapshot at a time – thereby rendering an appeal to an inner-perceptual mechanism redundant.

Suppose that the snapshot theorist is not willing to invoke an inner-perceptual mechanism that is presented with some number of experiential snapshots (and thereby a non-zero temporal extent). To appeal to an inner-perceptual mechanism which is not presented with a non-zero temporal extent – it only being presented with a snapshot at a time – merely pushes the explanatory project a step further back. We would then require an explanation of how such inner-perceptual snapshots give rise to the experience of motion; to insist upon there being ‘snapshots all the way down’ would only present a problematic regress. To simply insist that we do not require such an inner-perceptual mechanism appears to result in the account providing no explanatory



contribution: the subject would simply be perceptually aware of a given static state of affairs at one time and another static state of affairs at a subsequent time. When we ask *how* this series of experiential static snapshots can give rise to the phenomenology associated with perceived motion, simply telling us that it is through their being presented at a pace is insufficient.

The second horn of the dilemma can be summarised as follows. Without depending on the cinematic analogy we do not appear to be given any reason to think that such a series of experiential static snapshots would give rise to the experience of motion. In cinematic depiction the role of the perceiver is crucial, and yet Chuard appears to recognise that introducing a perceiver of experiential snapshots leads to a questionable theoretical posit (the inner-perceptual mechanism presented with some number of snapshots at a time) or a perilous regress ('snapshots all the way down').

Chuard's snapshot model falls foul of one of two horns. Without granting a role to memory, we appear to depend on a problematic analogy with cinematic depiction. Granting an irreducible role for memory we appear to have three alternatives. First: deny that we can perceive motion or change. Second: abandon the idea that no temporal relation between non-simultaneously perceived events figure in the content of any short-lived experiential event; this is no longer to offer a snapshot model. Third: hold that there is an important role for the causal influence of prior experiential snapshots on subsequent snapshots. In the following section I turn to consider the DSM; this can be read as an attempt to develop the latter proposal.

### **3. The dynamic snapshot model**

In recent work Prosser (2013, 2016, and 2017) presents a DSM of temporal experience which accepts the Snapshot Claim, but – in an effort to accommodate the Motion Claim – rejects the Static Claim. The DSM is an interesting proposal in and of itself, as it presents an account of how the inconsistent triad of claims can be resolved which has gone under-appreciated throughout much of the

Twentieth Century (in part because the Snapshot and Static Claims are rarely explicitly distinguished between). In the current context the DSM is particularly interesting because it illustrates one way of blocking the Stern-inspired argument for the Duration Claim.

As discussed briefly in Chapter 1, Prosser presses back against the argument for the Duration Claim from the inconsistent triad of claims, saying that such an argument assumes that “[a]n instantaneous content cannot include anything that can only be detected over a non-instantaneous interval”, but that this “conflates the properties of the stimulus that are necessary for motion detection with the content of the resulting experience” (Prosser, 2016: 121-2).<sup>64</sup> That is, in more crude terms, it simply assumes that such an experiential snapshot would have to be static without argument.

Prosser appeals to how we define instantaneous rates of change when theorising about the velocity of moving bodies. He suggests that, in an analogous way, that which is presented in perceptual experience could involve what is the case in the external world at a time, such as the spatial locations of various stimuli, as well as including something like an instantaneous vector rate of change assigned to those stimuli.<sup>65</sup> Prosser argues that this experiential vector could feature in what is presented as being the case at a time, even if there needs to be a temporally extended external stimulus in order to produce this (perhaps requiring the causal influence of prior experiential snapshots on later experiential snapshots).

Valtteri Arstila (2018) has independently developed a DSM of temporal experience, taking inspiration from discussions in the empirical literature (Di Lollo, 1980; Di Lollo & Wilson, 1978), as well as Le Poidevin’s (2007) discussion. Like Prosser, Arstila says that the motivation typically given for the Duration Claim is that, without it, experiences of continuous motion and change cannot

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<sup>64</sup> Prosser says that arguments of the Stern-inspired form “...fail because they mistakenly assume that an experience with an instantaneous content can have, in its content, only that which could occur instantaneously” (Prosser, 2017: 148).

<sup>65</sup> It is worth noting that Prosser only needs something roughly analogous to this notion, but which has application in the experiential case. Prosser need not be read as suggesting that mathematically defined vectors feature in experience.

be accounted for.<sup>66</sup> Against this, Arstila suggests that “the experience of motion [can be] explained in a framework where the contents can, subjectively speaking, be confined to an instant. *This follows from* the fact that... we can have an experience of motion without an object appearing to us as being in different places at different times” (Arstila, 2018: 290; *emphasis added*).<sup>67</sup>

A common thread in Arstila’s and Prosser’s proposals is an appeal to Le Poidevin’s discussion of the waterfall illusion. The waterfall illusion is a particular type of visual illusion – a form of motion aftereffect – which a subject can experience after watching a moving stimulus for some period of time (remaining stationary and looking straight ahead), such as a waterfall, and then fixating her gaze on some stationary stimulus, such as a riverbank. At this point the stationary stimulus is described as seeming – illusorily – to be moving in the opposite direction to the originally perceived moving stimulus, while also seeming to stay in the same position.<sup>68</sup> That is, the illusion is described in terms of the subject’s experience presenting an object/stimulus – the river bank – as remaining in the same spatial location while yet being in motion. Prosser follows Le Poidevin in suggesting that cases such as this demonstrate a potential role for two perceptual mechanisms: the perception of successive states of the world – like static snapshots – and the perception of pure movement – adding dynamism to the static snapshots.<sup>69</sup> Prosser suggests that the latter might operate independently of the aforementioned perception of successive states.

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<sup>66</sup> Arstila argues that even if the specious present – or, any account endorsing the Duration Claim – is supposed to describe the phenomenology, rather than explaining it, the dynamic snapshot model he offers undermines this motivation for appealing to the Duration Claim (see Arstila, 2018: 297). I argue that this is not the case in sections 4, 5, and 6.

<sup>67</sup> Distinguishing his view from that of Prosser and Le Poidevin, Arstila claims that “all temporal phenomenology can be explained ... by appealing to the existence of automatic, encapsulated, and domain-specific mechanisms” (Arstila, 2018: 290). From here onwards, unless explicitly indicated otherwise, I focus upon what is common between Arstila’s and Prosser’s DSMs.

<sup>68</sup> Gregory (1966) describes such illusory cases as ‘paradoxical’. Discussing a number of aftereffects, he reports: “The illusory movement may be paradoxical: [a stimulus] may *expand* and yet *not get any bigger*. Or, *shrink* but *not get any smaller*. It is changing and not changing. This sounds impossible, and it *is* impossible for real objects; but ... what holds for real objects may not hold for perception once we suffer illusions” (Gregory, 1966: 109; *emphasis in original*).

<sup>69</sup> Empirical support can be found in sources such as Nakayama and Tyler (1981), who try to isolate visual movement sensitivity from visual position sensitivity in a series of psychophysical studies. On the basis of their results, the authors conclude that “[b]ecause differential motion sensitivity is so much better than position sensitivity when the comparison is made over [what is, within the study, considered to be] very large distances... it is unlikely to be derived from the psychophysically measured position sensitivity... [and it is] best seen as a system wired in parallel to position sensitivity” (Nakayama & Tyler, 1981: 432). However, further empirical studies appear to suggest that, though there may be something akin to a mechanism for detecting pure

Postulating two distinct perceptual mechanisms, the waterfall illusion can be explained in terms of the mechanism for perceiving pure movement operating while the subject looks at a stationary state of affairs. This gives rise to the illusion that the riverbank is in motion while remaining in the same spatial location. Regardless of whether an interlocutor is satisfied with this explanation of the waterfall illusion, Prosser suggests that if there is such a mechanism for the perception of pure movement, then the perception of motion would not *necessarily* require some interval to be presented in perceptual experience.<sup>70</sup>

The reasoning goes as follows: That there is such a system for perceiving pure motion entails that “experiencing motion does not essentially involve experiencing the object as being at different places at different times” (Prosser, 2016: 124). The position of some stimulus (and hence any change in its position), and that it is in motion, would be independently specified by distinct perceptual mechanisms. As acknowledged in Chapter 1, a subject need not, therefore, have an experience presenting an object at two distinct spatial locations at two times in order to experience motion.<sup>71</sup> As a consequence, Prosser argues that we needn’t suppose that experience presents a subject with some minimal interval in order to explain the experience of motion;<sup>72</sup> we should not simply assume the Static Claim.

If it has been assumed that in order to experience motion an experience must present an object at two discriminable locations at two times (plausibly within some other specified limits), proponents of the DSM use the waterfall illusion

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motion (irrespective of positional sensitivity), there may also be a role for the detection of motion based on positional sensitivity (Tayama, 2000, and Lappin *et al.*, 2009).

<sup>70</sup> At least on a representational account of perceptual experience. Prosser says that this could also be accepted by other accounts of perceptual experience, though more might have to be said in this regard.

<sup>71</sup> It may be that the subject needs to be experiencing over a temporally extended interval of time, but what is presented in experience need not – for Prosser – be temporally extended. The former claim is acknowledged by Prosser, when he says: “It would, of course, take time for the brain to *detect* motion...” (Prosser, 2017: 149).

<sup>72</sup> I will argue that this does not straightforwardly follow (in section 4), but there might be a further problem here. Prosser appeals to distinct visual mechanisms for position sensitivity and motion detection in order to suggest that we may be experientially presented with a snapshot with a vector ‘painted’ onto it. Even if such distinct mechanisms could play an explanatory role, it is not clear that there are distinct mechanisms corresponding to each sensory modality, to be appealed to in all cases of experienced change; it is also not obvious that such mechanisms allow for an explanation of other *visually* perceived changes, such as changes in colour.

to reject this assumption, as reasoned above. Their riposte is to say that such a change in location is what is (usually) required in the world in order to lead to an experience of motion – this is necessary for the stimulus to be in motion and is typically required in order for a subject to experience motion – but it does not follow that this is presented in experience.

It is worth stressing that, for all that has been said, the DSM might outline a possibility in logical space, but this is not to say that the reader is motivated to endorse this account rather than an account which endorses the Duration Claim (thereby rejecting the Snapshot Claim). In the following three sections, I argue that there is an absence of motivation for the DSM: that the empirical literature does not provide independent support for endorsing the Snapshot Claim; that reflection on the phenomenology and comparisons with the visuospatial case supports endorsing the Duration Claim and *not* the Snapshot Claim; and finally, that there are no persuasive theoretical considerations which pressure theorists towards endorsing the Snapshot Claim.

#### **4. Mechanisms and phenomenology: no support from cognitive science**

Arstila, Le Poidevin, and Prosser each argue that the perception of motion is not reducible to the perception of a change of spatial location, using empirical findings in order to suggest that there is “some degree of independence between the computation of motion and the computation of position” (Prosser, 2016: 125). These theorists claim that there are distinct perceptual mechanisms for tracking the location of a stimulus and for the detection of motion; the further claim appears to be that such findings in cognitive science support an appeal to the DSM. I foresee two broad concerns with this argumentative strategy.

Firstly, a proponent of the Stern-inspired argument need not disagree that there are such distinct mechanisms. It remains far from obvious what an empirical story on the level of such mechanisms can tell us about how we should characterise the phenomenal character of experience. This appears to be Flanagan’s (1998) point, when he says: “Suppose that neuroscientists discover

that consciousness is in fact realised like a movie reel consisting of individual images, the moments of consciousness, with small separations between them, the gaps. It is not clear that this would or should have any impact upon what we say about how consciousness seems from a first-person point of view” (Flanagan, 1998: 89). Accepting that there are two distinct perceptual mechanisms for tracking location and for detecting motion does not provide any *independent* motivation for endorsing the Snapshot Claim over the Duration Claim, as these are claims concerning phenomenology. The second issue concerns the appeal to the waterfall illusion.

#### **4. 1. The waterfall illusion**

The snapshot theorist asserts that cases such as the waterfall illusion demonstrate that the experience of motion can occur without the experience of a change in spatial location. However, granting that a subject need not be presented with an object changing its spatial location in order to experience motion, it does not follow that a subject could be perceptually presented with motion without being presented with an occurrence of a non-zero interval. Contrary to what Prosser and Arstila suggest, it simply does not follow that the experience of motion is not in and of itself something with a fundamentally temporally extended phenomenology; that motion/change as it is experienced seems processive, as something occurring over time. All that cases such as the waterfall illusion demonstrate is that motion can be experienced in the absence of an experience of a change in spatial location; it *does not* entail that motion can be experienced in the absence of an experience presenting a temporal extent.

The dynamic snapshot theorist will want to insist that a subject can be perceptually presented with motion without being presented with a non-zero temporal extent. The disagreement here depends on how we are to cash out the phenomenology in cases of perceived motion as well as cases such as the waterfall illusion. The dynamic snapshot theorist appears to assume that the waterfall illusion is to be cashed out in terms of something like a stimulus being presented as occupying a position at a time, and subsequently being presented

as occupying that position at subsequent times, while seeming to be in motion at each time. This might not be quite right. We might instead characterise the waterfall illusion in terms of apparent motion and stasis *over time*; motion and stasis (apparent or veridical) being phenomena which seem processive and to be occurring *over time*.

The pertinent issue concerns what could decide between these two ways of characterising the phenomenology. It would support the claim that motion seems to be processive and occurring *over time* if there is a distinction to be drawn – from reflection upon the perceptual phenomenology – between cases like the waterfall illusion and cases in which a subject veridically perceives motion. The snapshot theorist’s proposal is not well placed to account for such a phenomenological distinction, because in each case – the veridical experience of motion and the waterfall illusion – they would postulate an experiential snapshot which presents a subject with a spatial arrangement of stimuli and an experiential motion vector (assigned to certain stimuli). Whether there is a change in location or not – whether the experience is of motion *and* a change in location, or a case such as the waterfall illusion where there is motion *without* a change in location – would only be revealed across some series of snapshots.

If the waterfall illusion is best described in terms of the riverbank seeming to be in motion while seeming to *remain* in the same spatial location, we have to say that there is something it is like for an object to be presented *as remaining* in a given spatial location or *as changing* its spatial location. Because the snapshot model appears to rule out the very possibility of a change of location being presented in perceptual experience, if this is the best way to characterise the phenomenology then the snapshot model would be poorly placed to account for the very illusion that is often used in order to motivate its introduction. It would be no help to characterise the illusion in terms of perceiving motion while also *failing* to perceive an object changing location. Talk about failing to perceive an object changing location would suggest that there can be success in perceiving an object changing location, which is something that the proponent of the DSM denies. Put another way, on the DSM all perceptual experience could be equally characterised as failing to perceive an object changing location; so this

characterisation cannot account for a phenomenological difference between the illusion and the veridical perception of an object in motion.<sup>73</sup>

#### **4. 2. Arstila and Di Lollo**

Arstila appeals to the empirical findings of Di Lollo in order to bolster his argument for the DSM. The relevant findings concern an experiment in which Di Lollo (1980, and Di Lollo and Wilson, 1978) presented subjects with twenty-four dots/ashes on a five-by-five matrix. The subjects' task was to identify the missing dot. In the most relevant experiment, the dots were shown in two flashes. The leading display comprised of twelve dots, chosen at random from twenty-five possible ones; after its offset an empty screen was displayed for 10 milliseconds, followed by the trailing display comprised of twelve dots, chosen at random from the thirteen remaining possible dots, which was also displayed for 10 milliseconds. Di Lollo and colleagues investigated subjects' success in identifying the missing dot when the duration of the leading display varied (10, 40, 80, 120, 160, 200 milliseconds).

The results showed that the subjects performed almost without error in the conditions where the leading display lasted 80 milliseconds or less; for longer leading display durations, the performance was markedly worse and decreased quickly. When the leading display lasted 120 milliseconds, almost eighty percent misidentified dots belonging to it. Di Lollo's finding is that success in this task (which he takes to be dependent upon the perceptual availability of the stimuli<sup>74</sup>) depends on the interval separating the leading and trailing stimulus' onset – the time that has passed since the stimulus was first presented/noticed – rather than

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<sup>73</sup> Perhaps the snapshot theorist would wish to appeal to vectors for change in location, in addition to 'motion' vectors, in order to account for the waterfall illusion. If it makes sense to appeal to vectors for change in location and vectors for motion – and I am not convinced that appeal to location vectors in addition to motion detectors does make sense, as I am not convinced that a stimulus could seem to be changing its location without seeming to be in motion – perhaps the DSM can account for the waterfall illusion. But this alone has no positive dialectical force; it does not speak in favour of the Snapshot Claim as opposed to the Duration Claim.

<sup>74</sup> Di Lollo claims that performance in this task “depends critically on the simultaneous perceptual availability of all twenty-four dots” (Di Lollo and Wilson, 1978: 1607). This is accounted for by making perceptual availability a matter of processing that begins with the onset of a stimulus and takes a certain amount of time.



the interval separating the leading stimulus' offset and the trailing stimulus' onset.

Arstila takes from Di Lollo the suggestion that “the presentation of a stimulus triggers sensory coding mechanisms responsible for processing and identification of the stimulus. These processes last roughly 100 milliseconds and the stimulus is perceptually available to a subject during that time” (Arstila, 2018: 293). Di Lollo plausibly demonstrates a relationship between the duration of a visual stimulus and the duration of the perceptual availability of that stimulus for a subject. If we take perceptual availability to be determined by the stimulus onset (and duration of the stimulus), we might say that any given stimulus is perceptually available for minimally 100 milliseconds,<sup>75</sup> and if the stimulus is presented for 100 milliseconds or more then it is simply perceptually available for the duration that it is presented. For example, a 10-millisecond presentation of a stimulus is perceptually available for 100 milliseconds, a 100-millisecond stimulus is perceptually available for 100 milliseconds, a 150-millisecond stimulus is perceptually available for 150 milliseconds.<sup>76</sup>

Arstila takes this finding to be problematic for specious present theorists: “The doctrine of the specious present... seems to be committed to the view that what matters for the perceptual or intentional availability of the stimulus is its offset” (Arstila, 2018: 293). However, there are at least two readings of perceptual availability to be pulled apart; neither should worry the specious present theorist who is at pains to maintain the Duration Claim. First, if we take perceptual availability to be a matter of informational persistence,<sup>77</sup> i.e. the persistence of representations posited in an information processing account of perception, then it is not clear what bearing the duration that this information persists for has on either the Snapshot or Duration Claims, these being claims concerning the phenomenology. Arstila may be assuming that the specious present is to be

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<sup>75</sup> Arstila says “...if a stimulus lasts only 10 milliseconds, it is perceptually available for an extra 90 milliseconds or so” (Arstila, 2018: 293). On the minimum duration of visual experience also see Efron (1970).

<sup>76</sup> This is an oversimplification and it is not precisely what Di Lollo's findings support (for critical discussion see Coltheart, 1980: 20), but it is an acceptable model for the purpose of the present illustration.

<sup>77</sup> On the distinction between informational and phenomenal persistence, see Coltheart (1980) and Phillips (2011b).

appealed to on the level of information processing (see Arstila, 2018: 297), but this is not obviously how most theorists appealing to the specious present should be interpreted and importantly it is not how we are to understand the PSP or the Duration Claim in the present context.

Second, if we take perceptual availability to be a matter of visual/phenomenal persistence, i.e. the duration a stimulus is presented as persisting in one's perceptual experience, then this need not trouble the theorist wishing to maintain the Duration Claim either. We can maintain the Duration claim and grant that a stimulus, despite only being displayed on a screen for 10 milliseconds, is presented as persisting for 100 milliseconds. We need to distinguish between the properties of the stimulus and that which is subsequently presented in perceptual experience (as Prosser says in his discussion). Since the Snapshot and Duration Claims are presented as claims about the latter, we might say that what matters is not the offset of the stimulus, but rather the 'offset' of that which is presented in experience. The specious present theorist can allow that stimuli displayed for 10 milliseconds are presented as persisting for 100 milliseconds in experience. Given that the leading display, though only displayed for 10 milliseconds, is presented in experience as persisting for 100 milliseconds, it may be presented in experience as overlapping in time with the trailing display (given a 10 millisecond delay between the offset of the leading and onset of the trailing display). We can therefore allow that all 24 flashes will be simultaneously perceptually available for a finite interval; this may explain the subjects' success in identifying the missing flash. This is a simplified model, but importantly all of the above could be granted without being in any tension with the Duration Claim.

### **4. 3. Additional findings**

Aside from the studies Prosser and Arstila explicitly discuss, VanRullen and Koch (2003) may be read as an additional influence behind the DSM. Among other empirical findings, the authors appeal to a minimal interstimulus interval for which two successively presented stimuli are consistently judged – in

subjective reports – as being presented simultaneously<sup>78</sup>. The authors suggest that such stimuli, which are presented successively within this interval and are yet judged by subjects as being presented simultaneously, can be thought of as “occurring within a single discrete ‘epoch’ of processing time” (VanRullen and Koch, 2003: 207). However, regardless of the merit of this suggestion, the question of whether or not that which is presented in experience is temporally extended is orthogonal to the question of whether perceptual experience (or perceptual processing) is discrete or continuous. The Duration Claim is neutral as to whether what is presented in experience is presented continuously or in discrete pulses.

Crick and Koch (2003) might be read as a further source of support for the DSM, insofar as they claim “... that conscious awareness (for vision) is a series of static snapshots, with motion ‘painted’ on them” (Crick and Koch, 2003: 122). Note, however, that this is followed immediately by the following claim. “By this we mean that perception occurs in discrete epochs” (*ibid.*). As said previously, the question of whether perception is discrete or continuous is orthogonal to the question of whether a temporal extent is presented in perceptual experience.

The evidence that Crick and Koch cite in support of the claim that conscious experience (for vision) is a series of snapshots (Zihl et al., 1983, and Hess et al., 1989) are clinical discussions of cerebral akinetopsia (visual motion blindness).<sup>79</sup> These discussions provide further empirical support for the claim that the visual experience of motion is dissociable from the visual tracking of location. Zihl et al. also demonstrate that cerebral akinetopsia cannot be attributed to an impairment in temporal acuity, as other temporal measures are not diminished<sup>80</sup>. Having already granted that the experience of motion is dissociable from an experience of a change of location, this evidence does not speak in favour of either view regarding the temporal extent of that which is presented in

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<sup>78</sup> This is to say that the stimuli were presented successively in the experimental paradigm. I do not mean to claim that they are presented as successive in experience and are yet judged by the subject as being experienced simultaneously.

<sup>79</sup> See Zeki (1991) for a review of the syndrome.

<sup>80</sup> One example of a temporal measure that is not impaired in the motion blind subject is the critical flicker fusion measure. As discussed by Hirsch and Sherrick (1961), the critical flicker fusion measure is the minimum temporal interval that must separate two visual stimuli in order for the perceptual experience of temporal order.

perceptual experience. Such clinical discussions of visual motion blindness do not provide support for the DSM, insofar as this is expressed as a proposal concerning the temporal extent, or lack thereof, of what is presented in perceptual experience.

One final point worth considering is whether the empirical literature might weigh against the DSM. In Alan Johnston's (2017) discussion of motion perception, he appeals to the wagon wheel effect in cinematic representation.<sup>81</sup> At a frame rate of 24 per second, stagecoach wheels can appear to the audience to rotate in the reverse direction to their true direction. This effect is explained by the fact that the shortest path between the spokes in subsequent frames is in the physically reversed direction. In unmediated viewing of rotating wagon wheels there does not appear to be a rate of rotation at which we typically experience such a reverse in direction.<sup>82</sup> On this basis, Johnston says: "The idea that our visual experience is made up of a series of instants is not supported, otherwise the experience of the wagon wheel effect would be just as salient and persistent for wheels in the real world as it is for moving wheels seen in the cinema" (Johnston, 2017: 280).<sup>83</sup>

If the wagon wheel illusion in cinematic representation is to be explained by the fact that the shortest path between the spokes in subsequent frames is in the physically reversed direction, then, assuming a snapshot model of temporal experience, we might expect that, in unmediated viewing of rotating wagon

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<sup>81</sup> It might appear as though Johnston could support an appeal to the DSM, when he says that "measures computed at an instant can provide information about the recent past, present and the future" (Johnston, 2017: 278). Yet he takes this to be a claim about computation and not about the visual representation which results from any such computation, and so does not appear to take this claim to support an appeal to DSMs.

<sup>82</sup> This claim is consistent with evidence that some rotating patterns can appear to reverse their direction of rotation under some conditions. As put by Johnston: "Real wagon wheels do not typically appear to reverse at a particular rate of rotation, so it is unlikely that the retinal image is temporally sampled in any direct sense (Kline *et al.*, 2004). However, rotating patterns can appear to reverse their direction of rotation in some conditions (Schouten, 1967; Purves *et al.*, 1996; VanRullen *et al.*, 2005). These reversals are not sustained but rather alternate with periods of forward motion" (Johnston, 2017: 279).

<sup>83</sup> VanRullen and Koch say that "motion reversals are difficult to explain without assuming a discrete processing component acting during, or before, the perception of motion" (VanRullen and Koch, 2003: 208). One can accept such an assumption regarding components of the perceptual processing without thereby assuming the Snapshot Claim. As put previously, the Duration Claim is neutral on the issue of whether what is perceptually presented is presented continuously or in discrete pulses.

wheels, there would be a rate of rotation at which the shortest path between the spokes in subsequent perceptual snapshots is in the physically reversed direction. This does not appear to be the case. That there is no particular rate of rotation at which we typically experience such a reverse in direction in unmediated reviewing reveals an absence of evidence in favour of the DSM where one might expect to find it. While the waterfall illusion is often taken to motivate an appeal to the DSM, the absence of the wagon wheel illusion, in unmediated viewing, appears to weigh against such an appeal.

Findings arising from the empirical literature do not support a version of the DSM over an account which endorses the Duration Claim. That there may be two distinct perceptual mechanisms – one for tracking location and one for detecting motion – does not tell us how we are to characterise the phenomenology. It does not follow from the claim that a subject can experience motion without experience presenting a stimulus changing its spatial location that a subject can experience motion without experience presenting some temporal extent. If anything, reflection on the phenomenology in cases of perceived motion supports adherence to the Duration Claim; the Snapshot Claim remains unmotivated.

## **5. Minima sensibilia: no support from phenomenology**

One may wonder whether the DSM is supported by reflection on the phenomenology, if not by the empirical literature.<sup>84</sup> I argue that quite the contrary is true; reflection on the phenomenology reveals an absence of evidence for the Snapshot Claim where one would expect to find it. As a result, there is

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<sup>84</sup> It may be thought that claims such as those from Chuard and Locke (see section 2) suggest that such support is there to be found. This also appears to be implicit in how Kelly sets up what he calls the puzzle of temporal experience: “How is it possible for us to have experiences as of continuous, dynamic, temporally structured, unified events given that we start with (what at least seems to be) a sequence of independent and static snapshots of the world at a time?” (Kelly, 2005: 210). It is not forced upon us to start as Kelly does. I argue that it is incorrect to claim that we seem to be presented with a sequence of independent and static snapshots of the world; this would also appear to go against the motivation we have for invoking the metaphor for our ongoing experience as ‘stream-like’ (see James, 1890: 159, and Rashbrook, 2013b, for discussion).

no compelling reason, from reflection upon the phenomenology, to posit such experiential snapshots.

When theorizing about temporal experience, Prosser warns us not to confuse the properties of the stimulus necessary for detection by one's perceptual mechanisms with the properties presented in experience. Although there may need to be a temporally extended stimulus in order for a subject to subsequently undergo an experience presenting motion (and plausibly in order for there to be an experience presenting anything, be it light, a sound, or a tactual sensation), Prosser says that it does not follow that there must be a temporal extent presented in experience. Regardless of whether or not this follows, we might wonder how plausible the alternative is. To demonstrate, consider what we can say about the visuospatial analogue.

The visuospatial variant of Prosser's warning would be as follows. Though it is plausible that there must be a spatially extended stimulus in order for a visual experience of a phenomenon such as variation in colour over some spatial extent, it does not follow that experience presents a spatial extent. Rather than holding that a subject has an experience presenting some variation in colour over the surface of a desk (a spatially extended object), the suggestion could be that a subject has many experiences (at the same time), each presenting something akin to a colour at no spatial extent (or at some minimal spatial extent). Call this a form of phenomenal atomism,<sup>85</sup> where together a number of experiences each presenting no spatial extent – or some minimal extent – account for the subject's perceptual phenomenology (even if this is pretheoretically described as an experience of variation in colour over a spatially extended desk). Irrespective of

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<sup>85</sup> I use the terminology of 'phenomenal atomism' to pick out a view on which the experience of some particular thing, spatially or temporally extended (such as the desk, or the wave of a hand), is to be accounted for in virtue of multiple experiences each presenting no positive extent, or the extent of the minimum sensible. Such an appeal to experiential/phenomenal 'atoms' is also made, and put to a similar purpose in a discussion of snapshot models, by Grube (2014). However, in the context of the current discussion I believe that Grube grants too much to the snapshot theorist (particularly, allowing that Chuard's appeal to the pace at which snapshots are presented and the gradual transitions in content is sufficient to account for the experience of motion/succession). The lack of an explicit distinction between the properties of the stimulus necessary for perceptual detection and the properties subsequently presented in experience may also leave Grube open to a counter-argument from Prosser (along the lines of the argument Prosser offers against the Stern-inspired argument, above). This is something I pre-empt in the line of argument I offer, in a manner I imagine Grube would be happy with.

what follows from the possibility of perceiving variation in colour over some spatial extent, what would be the motivation for denying that experience presents a spatial extent? It does not appear as though there is any motivation for supposing the alternative picture of phenomenal atomism.

In fact, there is motivation for not supposing such phenomenal atomism, which is evident when we turn to consider the spatial minimum which can be discerned in isolation. In addition to there being a question concerning the minimum size necessary in order for a stimulus to be detected by a subject's perceptual mechanisms, there is also a question regarding the minimum sensible perceptually *presented* in isolation. We can see objects such as books and desks, these provide a good example of the "moderate-sized specimens of dry goods" – to use Austin's (1962: 8) terminology – that philosophers of perception regularly discuss. Yet (and this is a different claim to that of perceptual acuity) we cannot discern extensionless spatial points/slices in isolation when reflecting on our experience, when visually perceiving a book or desk for example. We are only introspectively aware of such extensionless slices insofar as we are aware of some extended chunk. We can nonetheless be said to be visually aware of the edge of the desk – taking the edge to be an extensionless line, where the desk stops – but only insofar as we are visually aware of some portion of the desk and plausibly some portion of the space beyond this.

Reflecting on the previous example we can make a negative claim in descriptive phenomenology: we are not introspectively aware of anything point-like (or line-like<sup>86</sup>) in isolation, when we reflect upon our experience. Whatever the minimum sensible – the minimum presented in isolation – is, there is no introspective support for suggesting that it is of *no* spatial extent. Furthermore, it is important to recognise that whatever estimates empirical studies could offer of the extent of the visuospatial minimum sensible, this does *not* lend plausibility to the claim that in visual experience a subject has many experiences (at a time), each presenting this minimum (spatial) sensible. As stressed above, there is no compelling reason to accept the sort of phenomenal atomism which would follow from this claim. Considering the minimum visuospatial sensible gives us

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<sup>86</sup> As put by Moore, points, lines, and surfaces are not of any extension (see Moore, 2001: 158).

reason *not* to posit experiences presenting no spatial extent; and there is no additional compelling reason to posit discrete experiences each presenting the minimum visuospatial sensible. The simplest hypothesis, consistent with what one experiences and the awareness of one's experience afforded by introspection, is that there is *an* experience<sup>87</sup> presenting something spatially extended – such as a visual experience of variation in colour over the surface of a desk. Similar claims hold in the temporal case.

As discussed in Chapter 1, in his discussion of the perception of time James claims that the mathematical present – an extensionless instant – is “never realized in sense” (James, 1890: 406); one plausible interpretation of his claim is that an experiencing subject is not experientially aware of an isolated instant. This is not to claim that some events will be so brief – perhaps instantaneous – that we may not perceive them, it is not a claim about a necessary temporal feature of the stimulus in order for it to be perceived, and it is not a claim about the interval which must separate two events in order for us to experience them as successive (to be able to discriminate between their relative temporal locations). Rather, James's thought can be expressed as the following negative claim: we cannot, in introspection upon what is presented in our experience, discern below a certain positive duration in isolation.

The qualification ‘*in isolation*’ is important. In order to be aware of something in isolation a subject need not be aware of anything else, or anything of a greater extent. On the account to be offered, we need not deny that there is something it is like for a subject at a time, or at a point in space (point of the subject's visual field), as long as we hold that there is only something it is like at that time, or point, in virtue of what it is like *over* that time, or across that point. Considering our experience of spatially extended phenomena, I said that a subject can be visually aware of the edge of the desk as such – taking the edge to be an extensionless line – but only insofar as she is visually aware of some portion of the desk and plausibly some portion of the space beyond this. An analogous example in the temporal case may be the onset or offset of a sound. In this case a subject can be said to hear the onset of a sound as such, but only insofar as

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<sup>87</sup> I'll return to the issue of how we are to think of *token* experiences in Chapter 3.



she is auditorily aware of some preceding interval of silence and some subsequent interval of the sound.<sup>88</sup> We can accept that something is presented in experience as occurring at a time, such as the onset of a sound, but it is so presented in virtue of what is presented in experience as occurring over that time. This is what I take the DSM (and its spatial analogue) to deny.<sup>89</sup>

To demonstrate that we cannot, in introspection upon what is presented in our experience, discern below a certain positive duration in isolation, and how a proponent of the DSM may respond, we can turn to Phillips' discussion of perceiving constant motion (Phillips, 2011a: 821). For our purposes, we can cast what he says in terms of perceiving a constant change in location. One of the changes we typically take ourselves to experience is a change in location. That is, in addition to the experience of pure motion, we can also experience a stimulus as constantly changing its spatial location – with the discussion of the waterfall illusion demonstrating that the former is dissociable from the latter. If we grant that we can see a clock hand (which sweeps around the clock face, rather than ticking) as constantly changing its location, we can take it from Phillips that it must be that during all sub-periods of its movement we experience it as changing its location.

On the plausible assumption that our powers of discrimination are finite, there are some periods of time over which we see the clock hand sweeping out an angle only just large enough for our powers of visual discrimination to discern.<sup>90</sup> In such a case we cannot perceive finer-grained facts about the change. To put

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<sup>88</sup> James proposes this thought through his example of “silence ... broken by a thunder-clap” (James, 1890: 159). James says the following about his example. “Into the awareness of the thunder itself the awareness of the previous silence creeps and continues; for what we hear when the thunder crashes is not thunder pure, but thunder-breaking-upon-silence-and-contrasting-with-it. Our feeling of the same objective thunder, coming in this way, is quite different from what it would be were the thunder a continuation of previous thunder” (*ibid.*).

<sup>89</sup> For example, this appears to be explicit in Prosser's claim that: “According to the dynamic snapshot theory, what is experienced as happening at  $t$  is in no part constituted by what is experienced as happening at other times close to  $t$ ” (Prosser, 2017: 150).

<sup>90</sup> Regarding the minima that can be perceptually discriminated, it might be thought that reflection on auditory experience provides a strong counter to the DSM: that we cannot make sense of any auditory content which does not seem to possess a temporal extent (see Judge, 2018: 232, for example). I do not wish to press this point here, as proponents of the DSM do claim that we can appeal to the DSM for other modalities (see Prosser, 2016: 134) and simply denying this claim may result in a dialectical standoff. Another reason not to put too much weight on an appeal to the auditory case is that the proponent of the DSM might claim that it is solely a view concerning vision as Crick and Koch (2003) do.

this in Phillips's terms: "the content of our experience at these timescales [below the minimum change we can discern] is of some [change] *continuing to unfold*" (Phillips, 2011a: 821; *emphasis in original*). In these circumstances, we see the hand changing its location constantly, without perceiving its determinate time-course. It is not that we are aware, at immediately subsequent times, of the stimulus as occupying a determinate discrete location. Rather, we are aware of it as constantly changing its location.

Faced with such a case, a snapshot theorist would have to either deny that we are so introspectively aware of constant change (in location), taking each experiential snapshot to present a given spatial arrangement of stimuli which a subject can become aware of as such,<sup>91</sup> or she would have to appeal to acuity measures in our introspective awareness of our own perceptual experience. A problem with the first response is that the subject appears to be attributed implausibly fine-grained powers of discrimination. On this response the subject would appear to be attributed with introspective awareness of any given experiential snapshot, of some state of affairs at a time (rather than over some minimal interval). On the second response, it could be said that perceptual experience over time consists of a series of experiential snapshots, but in reflecting upon our experience we are only ever aware of some series of such snapshots. As a result, the temporal minimum we can be introspectively aware of may include a stimulus changing its location – revealed over some series of snapshots – even though this is not what is presented in a given perceptual snapshot. This avoids attributing subjects with implausibly fine-grained powers of introspective discrimination, but it is not obvious what there is to motivate the drawing of such a distinction between what is presented in experience and our introspective awareness of what is presented in experience, apart from an ad hoc defensive manoeuvre.<sup>92</sup>

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<sup>91</sup> It need not follow that the stimuli are presented as determinately located in such an experiential snapshot, but regardless of whether the spatial relations are presented with some degree of indeterminacy, it follows that we cannot perceive a stimulus changing its spatial location.

<sup>92</sup> This would appear to require a distinction between *what it is like* for experiencing subjects, and *what it seems to be like* for them. Against the drawing of such a distinction, see Tye (2009: 260); and Nanay (2010a: 268).

Prosser appears to take the first route while trying to avoid the attribution of implausibly fine-grained powers of discrimination to experiencing subjects. When it comes to the issue of the temporal minimum a subject can discern, Prosser says: “if  $\Delta t$  is the minimum discriminable duration we should say that all durations shorter than  $\Delta t$  are experienced as being of indeterminate duration within the range between zero and  $\Delta t$ . ... Perhaps, then, we should say that... the experienced present is... an interval of indeterminate duration between zero and  $\Delta t$ ” (Prosser, 2016: 135; also see 145-6). There are two problems with this explanation, one concerning the sub-intervals of the minimum discriminable duration; another concerning the relevance of the minimum discriminable duration when individuating between experiences.

First, it is not clear in the context of Prosser’s discussion why  $\Delta t$  is not simply taken to be the temporal minimum sensible. Suggesting that what is presented in experience is an interval of indeterminate duration between zero and  $\Delta t$  appears to bring unnecessary additional commitments (and it would appear as though something must be experienced to be at least of the duration of  $\Delta t$ , or else  $\Delta t$  would not be the minimum discriminable duration). If the phenomenology can speak to there being a change (in position, for example) over  $\Delta t$  – as I have suggested – then this leads us to a rejection of the Snapshot Claim and an endorsement of the Duration Claim.

As his argument is presented in the context of a discussion of the specious present (Prosser, 2016: 134-135), Prosser says that such minima do not vindicate appeal to a specious present, which is generally characterised as being of a greater temporal extent than such minima. However, and this is the second problem, given that there are such temporal-minima it does not follow that what is presented in perceptual experience is limited to the temporal extent of such minima. Compare to how the visual field is not limited to the spatial extent of such visuospatial minima. When some subject experiences a temporally extended occurrence, such as the second-hand sweeping around the clock face, we can ask whether there is *an* experience of something temporally extended, or whether there are many experiences (successive in time) each presenting no temporal extent or presenting the extent of the minimum sensible. In the

temporal case there is an absence of introspective evidence for supposing that, when some subject experiences a temporally extended occurrence, there are many experiences (successive in time) each presenting no temporal extent, or the extent of the minimum sensible; this is analogous to the visuospatial case. The simplest hypothesis, consistent with what one experiences and the awareness of one's experience afforded by introspection, is that there is *an* experience presenting something temporally extended – an experience of the temporally extended occurrence.

To summarise: if over  $\Delta t$  what is presented in experience speaks to there being a change (in position, for example), then this motivates appeal to the Duration Claim and rejection of the Snapshot Claim. Furthermore, as in the visuospatial case, whatever we say regarding the temporal minimum sensible, this does *not* lend plausibility to the claim that in experiencing a temporally extended occurrence a subject has many experiences (successive in time), each presenting the temporal extent of the minimum sensible. There is no more compelling reason from reflection upon the phenomenology to accept this sort of phenomenal atomism in the temporal case than in the spatial case. Issues concerning the phenomenology and ontology of experience over time will be returned to in Chapter 3, in the current context we can conclude that reflection on the phenomenology provides no support for the Snapshot Claim.

## **6. Miller's PPC and PSA: no theoretical pressure**

It is plausible to suggest that those theorists who are disposed to treat snapshot models as an intuitive starting point in theorising about our experience of temporal phenomena are motivated to do so by something more basic than explanations arising out of the empirical sciences. Although I have argued that reflection on the phenomenology does not motivate an appeal to experiential snapshots, one remaining alternative is that theorists feel that there is theoretical pressure which motivates appeal to the Snapshot Claim. In what follows I suggest that there is one place in which theorists might suppose that there is such pressure, but upon closer inspection this pressure dissipates.

Many theorists have found plausible the idea that a subject's experience seems – to the subject – to be concurrent with that which it is an experience of. This is often expressed in terms of Miller's (1984) Principle of Presentational Concurrence (PPC). As put originally by Miller: “the duration of a *content* being presented is *concurrent* with the duration of the *act* of presenting it... the time interval occupied by a content which is before the mind is the very same time interval which is occupied by the act of presenting that very same content before the mind” (Miller, 1984: 107; *emphasis in original*). In experiencing temporally extended phenomena our experiences *seem* concurrent with the temporally extended phenomena they are experiences of (insofar as PPC is a phenomenological claim). Endorsing PPC, a theorist might endorse the claim that at a time some subject experiences what seems, to the subject, to be the case at that time. (Note that this alone is not equivalent to the claim that there are experiential snapshots.<sup>93</sup> One could accept the former without thereby endorsing the Snapshot Claim<sup>94</sup> – for example, if one takes what occurs over temporally extended intervals to have some form of metaphysical and explanatory priority over what occurs at instants falling within those intervals.<sup>95</sup>)

One source of the apparent intuitive pull towards a snapshot model might be found if we take PPC together with Miller's further notion of The Principle of Simultaneous Awareness (PSA). Miller says, regarding hearing successive tones as forming a melody, that “the continuous occurrence of the aural sensation during [the time over which the melody is experienced] cannot by itself account for my continual awareness of a tone *as enduring* during that interval of time...” (*ibid.*: 108; *emphasis in original*). This leads Miller to claim that “[a]n awareness of succession derives from simultaneous features of the structure of that awareness” (*ibid.*: 109). His claim is that a succession of awarenesses cannot on its own account for an awareness of succession; in order to experience some

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<sup>93</sup> Though it may be that some theorists slide in their reasoning here, supposing that we must have something like an experiential snapshot, at a time, which presents something which *seems* concurrent with the experience. This is to assume that a characterisation of how things are for the subject is homogenous down to instants (how things are for the subject over some interval is to be cashed out in terms of how things are for the subject at the instants which fall within the interval); I argued against such an assumption of phenomenal atomism in section 5.

<sup>94</sup> This is what extensional theories of temporal consciousness can be characterised as claiming (see Dainton, 2016).

<sup>95</sup> See Soteriou (2013, esp. Chapters 4 and 6) and Phillips (2014a).

phenomenon *as* a temporally extended phenomenon, we must do so at some moment.<sup>96</sup>

Snapshot theories of temporal experience might be presented in a *prima facie* plausible light because of how they meet *both* of Miller's claimed data regarding temporal experience: PPC and PSA (and are the only one of the main three<sup>97</sup> types of model of temporal experience to do so). Insofar as theorists are either explicitly or implicitly influenced by PPC and PSA, the snapshot model can gain some plausibility from being a model on which one can readily accept both,<sup>98</sup> where a momentary experience presents what is the case at a moment. While there may be much to criticise in the rough characterisations of PPC and PSA I have offered, I will keep my comments brief.

Does it positively appear as though the occurrences we experience unfold over the same interval, concurrent with our experience of those occurrences? Over longer timescales, an affirmative answer certainly has *prima facie* plausibility. I can recall the ball being kicked and now see it in the goal, and I am confident in saying that I experienced it being kicked earlier – hence why I am now in a position to recall it – and that I am now seeing it in the goal (supposing this is several seconds later). Prosser questions what evidence we have for supposing such structural matching over shorter timescales, saying that in such cases “I do not think introspection can be assumed to be reliable. I find I have no clear feeling about the timing of the experiences in cases in which I am aware of the second event before I have had time to react to the first event. One can certainly say which of two events occurred first (provided they occurred at least 30ms apart); but it is much harder to see what one’s introspective evidence could be for the claim that one or other experience occurred first” (Prosser, 2016: 146). Prosser’s suggestion is that over short timescales we may be perceptually aware

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<sup>96</sup> This also appears to be the motivation behind the ‘divergence’ principle Frischhut appeals to. “**Divergence:** In order to have experiences as of temporally extended items at all, the duration of experience in which an item X is represented must diverge from the duration that X is represented as occupying” (Frischhut, 2014: 36).

<sup>97</sup> In Dainton’s (2016) terms: extensional, retentional, and cinematic/snapshot theories (the former two endorsing something akin to the Duration Claim). Roughly, extensional theories can be characterised as accepting PPC but rejecting PSA, while retentional theories can be characterised as accepting PSA and rejecting PPC.

<sup>98</sup> See Dainton (2016) for an overview of these issues; see Phillips (2014a) for a discussion of some of the theoretical problems surrounding the appeal to PSA.

of the temporal structure of the occurrence being experienced, but we are not independently aware of the temporal structure of that perceptual awareness. As a result, the two cannot be fruitfully compared.

Prosser's suggestion can be supported. In a discussion of the transparency of perceptual experience, Hoerl similarly says: it "isn't that both of these locations [the apparent temporal location of the object of perceptual experience and the apparent temporal location of the perceptual experience itself] figure in the phenomenology of experience, and are experienced as being identical, but rather ... there is no such thing as the felt temporal location of the experience forming part of the phenomenology of experience. There is just no scope within a description of our experience of temporal properties for a distinction between those experienced properties themselves and a point in time *from which* they are experienced" (Hoerl, 2018: 143).<sup>99</sup> This is to say that we are not in a position to affirm PPC when we are concerned with such short timescales. To make such a positive claim would require an awareness of the temporal properties of our perceptual experience that it is plausible to suggest we lack.

This is not to deny that PPC could be stated in a more plausible form. We could, for example, state it as a negative claim: that we are not aware of any divergence between the temporal structure of the occurrence being perceived and the temporal structure of that perceptual awareness. We might take this to be related to the sense in which "one's perceptual access to an interval of time doesn't seem to one to be perspectival" (Soteriou, 2013: 131), in contrast to one's visual-perceptual access to a region of space. If we construe PPC in these terms (or only take it to be a positive claim about greater timescales<sup>100</sup>) we need not deny it. Yet once the PPC is qualified in this way it no longer provides theoretical

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<sup>99</sup> See Frischhut (2014) for similar considerations, phrased in terms of the relation between the temporal duration of an experience and the temporal duration of what is (re)presented by that experience. The notion of temporal transparency will be discussed at greater length in Chapter 3, section 1.

<sup>100</sup> One might think that Hoerl's point is entirely general and so may be in tension with the claim that such matching can be supported over longer timescales. But note that Hoerl's point here is one concerning perceptual experience. It is entirely consistent with Hoerl's point that at a later time,  $t_{10}$ , when a subject is perceiving some state of affairs, she can recall what occurred earlier, at time  $t_1$ . When depending upon recollection, she can judge that what she is now perceiving, at  $t_{10}$ , seems to be occurring as she is perceiving it in contrast to what she earlier perceived, at  $t_1$ , which she is now recalling. Over such timescales, with an appeal to what one can recall and what one is perceptually aware of, there is a sense in which there seems to be some such matching.

support for an appeal to the DSM. Versions of the three main models of temporal experience may be characterised in such a way as to satisfy such a negative claim (or a claim about structural matching over greater timescales). As a result, the DSM does not gain any theoretical plausibility over its competitors by virtue of accommodating the PPC, so understood.

### **Concluding remarks**

Temporally extended occurrences are presented as such in experience, rather than instantaneous states of affairs. This is a denial of what lies at the core of the snapshot models of temporal experience: the claim that perceptual experience presents no temporal content, or that it presents what is the case at an instant in isolation. Having presented the traditional argument against snapshot theories – that they fail to account for the experience of motion/change – in the form of an inconsistent triad, I turned to consider Chuard’s snapshot model of temporal experience. I argued that Chuard’s position might not allow us to move beyond the traditional argument. To avoid the criticism raised, I suggested that the most charitable interpretation of Chuard’s position would present his proposal as a DSM. The DSM is partly motivated, by Arstila and Prosser (following Le Poidevin), by appeal to temporal illusions such as the waterfall illusion and the role envisaged for two independent perceptual mechanisms, one tracking the spatial location of stimuli and the other detecting motion. I provided a three-part argument against an appeal to the DSM.

First, I argued that the findings from cognitive science discussed by the authors do not independently support the DSM. It does not follow from cases such as the waterfall illusion – where there is an experience of motion in the absence of an experience of a change in location – that motion is not to be characterised as something which is experienced *as occurring over time*. Second, I argued that reflection on the phenomenology does not support endorsing the DSM. There is an absence of evidence for supposing that, when some subject experiences a temporally extended occurrence, there are many experiences – experiential snapshots, successive in time – each presenting no temporal extent. The simplest



hypothesis, consistent with what one experiences and the awareness of one's experience afforded by introspection, is that there is *an* experience presenting something temporally extended – an experience of the temporally extended occurrence. Third, I ended by arguing that considerations from theoretical claims in the literature do not support an appeal to a snapshot model of temporal experience either.

I have not, of course, been able to discuss every possible motivation behind an appeal to a snapshot model of temporal experience. However, I have demonstrated that there is a lack of supporting evidence for such a proposal where one would expect to find it. As such, we can dismiss snapshot models of temporal experience and endorse the Duration Claim. Having argued that we do not have compelling reasons for accepting the Snapshot Claim – arguing that, on the contrary, experience presents a positive temporal extent – this raises the question of whether there is an upper temporal limit to what is presented in experience. This question is a focus of Chapter 3.

## Chapter Three

### Time of Our Lives: Experiencing over Time

*“Where or How are the limits of an empirical present moment to be drawn, or What are we to include in it? Taking this question to refer to limits actually found in experience... the answer is plainly this: It is any content of experience, simple or complex, from the moment of its rising into consciousness to the moment of its disappearance out of consciousness... The fact that particular contents of consciousness appear and remain in consciousness for a certain time, and then disappear from it, is a fact of immediate observation or experience” (Hodgson, 1898: 36).*

In the first chapter I outlined some of the ways in which the specious present is often characterised; in that chapter I brought out one particular conception of the specious present, which I refer to as the PSP. When theorists appeal to the PSP under the guise of the specious present, they do so in order to express the following thought. We are perceptually presented with things as they fall within a given interval (the PSP), such that we are aware of things within this interval in a way in which we are not aware of things which occur over a greater interval.

In the preceding chapter I was concerned with sub-intervals of the PSP. I discussed snapshot models of temporal experience, which characterise our experience over time as a sequence of snapshots, each individual snapshot being neutral on whether it presents anything of a non-zero temporal extent. I argued that there is no motivation for supposing a snapshot model of temporal experience and maintained that perceptual experience minimally presents some non-zero temporal extent as such. Anything of a temporal extent of less than the minimum sensible (the minimum presented in isolation) is experienced in virtue of something greater being presented in experience.

To offer an explanation of what is presented in experience as occurring at a time in terms of what is presented in experience as occurring over that time is not to answer all questions one might have about what is presented in experience over

time. In particular, this appears to leave open various questions concerning what we are to say about the phenomenology and ontology of experiencing over greater intervals of time. In particular, if there is no reason to think that there is a sequence of discrete experiential snapshots, are there nonetheless reasons from reflection on the phenomenology to think that there is a sequence of discrete experiences presenting some invariant temporal extent? Contemporary discussions of this question, and related issues, are often framed in terms of the relationship between the specious present and the stream of consciousness.

In the current chapter, the issue of interest is how we are to characterise our experience of occurrences that unfold over intervals of a greater temporal extent than the PSP (call them super-intervals, in contrast with sub-intervals) – such as experiencing plays, concerts, and football matches. In order to arrive at a satisfying position, in the following three sections I will turn to consider three extant accounts of the ontology and phenomenology of experience over super-intervals of time, from Tye (2003); Husserl (1905) and Kiverstein (2010); and Hoerl (2013). After presenting reasons to be sceptical of these existing accounts,<sup>101</sup> I offer a phenomenological characterisation of the PSP through developing Russell’s construal of what is *given* in experience. Given the phenomenological characterisation of the PSP developed, we can characterise our experience of occurrences that unfold over super-intervals without arriving at any principled way of individuating between discrete experiences. I end by suggesting that the question as to what should count as a token experience on a particular occasion may be somewhat context or interest relative.<sup>102</sup>

### **1. The stream of consciousness as *an* experience**

In his discussion of the unity of consciousness, Michael Tye (2003) says that it is a mistake to assume that there is a principled way to individuate between discrete experiences in the stream of consciousness. On the view Tye proposes,

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<sup>101</sup> As will become obvious, I do not take myself to show that certain views of the ontology of experience are flawed from within, but rather that we can solve certain puzzles without making the ontological commitments of such views.

<sup>102</sup> Such a response, at least to Tye’s one experience view, is suggested in Bayne’s (2005: 498) review of Tye’s *Consciousness and persons* (2003).

there is *a role* to be played by something akin to the PSP over super-intervals. Tye says that the “experienced present – the so-called specious present – has a brief but finite duration. It allows us to experience an extended event, such as a continuing sound or a word... all in one as a whole” (Tye, 2003: 87). Tye takes an appeal to the specious present to be necessitated by reflection on the phenomenology. However, Tye wishes to stress that it does not follow that in order for there to be an experience of succession there must be a succession of experiences; to this extent, I am sympathetic with Tye’s claims.

Considering an experience of a red flash which is succeeded by a green flash, Tye says: “Granted, I experience the red flash as before the green one. But it need not be true that my experience or awareness of the red flash is before my experience or awareness of the green one... In general, represented order has no obvious link with the order of representations. Why suppose that there is such a link for experiential representations?” (Tye, 2003: 90). Tye is here concerned with what is represented within a specious present; in this context he claims that our experience is transparent in at least the following sense: we are aware of the red flash being succeeded by the green flash, but we are not aware of a discrete experience of the red flash being succeeded by a discrete experience of the green flash.

Tye appeals to the transparency of experience in order to suggest that while a change is represented in experience – from red flash to green flash – it need not follow that there is a change in representation.<sup>103</sup> What we are aware of being successive, for Tye, is the flashes rather than one’s experience(s) of those flashes. Regardless of whether one wishes to grant (or take issue with) this claim, it is worth stressing that this is a claim which is so far only concerned with occurrences of a brief extent – within the PSP. Yet Tye goes on to make related claims about our experiences of occurrences of a much greater temporal extent.

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<sup>103</sup> In similar fashion Frischhut says, from considerations on the basis of the transparency of experience, that “when we introspect our own experiences we only ever find the objects of experience, not features of the experience itself” (Frischhut, 2014: 53). However it should be noted that Frischhut does not clearly support Tye’s ‘one experience’ view, as she appeals to how we can introspect our own experiences over time (though if we were to think that there is ‘no access’ to one’s experience over and above one’s access to the objects of experience, it is not obvious what supports Frischhut’s appeal to ‘our own experience’ over time).

Over super-intervals of time Tye says we cannot merely appeal to specious presents following on from one another in objective time, as this would not account, for example, for “the experienced continuity of the [continuing] sound [one hears] *from* one present *to* the next” (Tye, 2003: 92; *emphasis in original*). He says: “The basic intuition with respect to unity through time is surely that *things and qualities we experience* at successive times are experienced as continuing on or as succeeding one another” (Tye, 2003: 96; *emphasis in original*). Here he appeals to a further phenomenological datum – experienced continuity, over time – in order to cast doubt on an account of the ontology of experience over time which merely appeals to discrete specious presents, or discrete experiences, which follow successively from one another in objective time.

We might question whether there is any ingredient of the phenomenology which is to be picked out as ‘occurrences seeming to follow one another with strict continuity’. Rashbrook (2013b) presses the point that we may be absent of an awareness of discontinuity, though this is not to say that we are aware of there *not* being discontinuity. Perhaps we would therefore best put matters more neutrally and say that we are not typically aware of our experience over greater intervals, where there is no break in consciousness, as discontinuous. Tye may wish for the stronger reading on which what is experienced is positively characterisable as seeming continuous, but, even on what I have called the more neutral reading, we might think that the absence of an awareness of any discontinuity still provides *prima facie* plausibility to a view which does not posit discrete successive experiences. (At least, any view which postulates such discrete experiences has the burden of explaining the absence of awareness of discontinuity.)

Offering his positive view of the ontology of experience over super-intervals of time, Tye says: “The simplest hypothesis compatible with what is revealed by introspection is that, for each period of consciousness, there is only a single experience—an experience that represents everything experienced within the period of consciousness as a whole” (Tye, 2003: 97). The force of Tye’s claim is that the only experiences we have are entire streams of consciousness, which

span between breaks in consciousness.<sup>104</sup> Tye says that his proposal is motivated, in part, by the difficulty we have in individuating experiences through time. “Consider an ordinary visual experience and suppose that it is exclusively visual. When did it begin? When will it end? As I write now, I am sitting in a library. Looking ahead, and holding my line of sight fixed, I can see many books, tables, people in the distance walking across the room, a woman nearby opening some bags as she sits down. Is this a single temporally extended visual experience? If not, why not?” (Tye, 2003: 98). Tye’s claim is plausibly related to Travis’ thought, that ‘experience’ is “a far from innocent count noun” (Travis, 2004: 57). The difficulty we have in arriving at any principled criteria for individuating between discrete experiences in the stream of consciousness, from merely reflecting upon the phenomenology, is taken by Tye to support his contention that the only such criteria are breaks in consciousness.

Tye’s case for his ‘one experience’ view involves further argument and more nuance than I have space to consider. The worry with Tye’s view which I wish to focus on is as follows.<sup>105</sup> Regardless of the plausibility of Tye’s claims when he is discussing brief durations, such as the transparency of experience over the duration of the PSP, it is plausible that his view leaves something out of the phenomenology when we are concerned with super-intervals of time. To demonstrate what Tye leaves out, we first need to acknowledge part of what he gets right.

Tye is correct that perceptual experience is temporally transparent. While temporal transparency has been appealed to under a number of guises,<sup>106</sup> for

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<sup>104</sup> One of Tye’s concerns is whether there are modality-specific experiences, or rather a multi-modal experience. I will not engage with this claim in the current context, though the conclusion I reach – that tokening particular experiences is context/interest relative – might be extended to this issue.

<sup>105</sup> Bayne highlights one implausible consequence of taking Tye’s claim that experiences are PANIC representations (representations with poised, abstract, non-conceptual, intentional content) together with Tye’s ‘one experience’ view (see Bayne, 2005: 498). Taking the two claims together, it would appear to follow that the contents of an entire stream of consciousness are conjointly poised for direct input into the reasoning system. Yet it appears to be very implausible to maintain that, in the morning, whatever I see later that evening is conjointly poised with what I currently see for direct input into the reasoning system.

<sup>106</sup> For variations on the claim that perceptual experience is temporally transparent, see Frischhut (2014), Phillips (2014a and 2014b), Rashbrook (2013a), Richardson (2014), and Soteriou (2013). See Hoerl (2018) for critical discussion of temporal transparency, where he says: “There is just no scope within a description of our experience of temporal properties for a distinction between

current purposes it can be presented as the following claim: the temporal location of an experiencing subject's perceptual perspective on a given occurrence seems, to her, to be transparent to the temporal location of the occurrence she seems to perceive. This, as I take it, is to be understood as an expression of the negative claim that from simply reflecting on the perceptual phenomenology, the experiencing subject cannot distinguish between the temporal location from which she perceptually experiences a given occurrence and the temporal location of that occurrence which she seems to perceive. There are two contrast cases which can be considered in order to elucidate this temporal transparency claim.

First, there is the sense in which "one's perceptual access to an interval of time doesn't seem to one to be perspectival" (Soteriou, 2013: 131). It doesn't seem to the subject as though, through merely reflecting upon her perceptual phenomenology, she can mark out the temporal location of her perceptual point of view on an object or occurrence as distinct from the apparent temporal location of whatever object or occurrence it is that she seems to be perceptually aware of. This can be contrasted with how a subject *can* mark out the apparent spatial locations of objects she is visually aware of as distinct from the spatial location of her perceptual point of view on them (as visual experience presents its objects as distally located in space).<sup>107</sup> Second, the temporal transparency of perceptual experience can also be contrasted with memory.<sup>108</sup> When we recall an event, through reflection on the phenomenology we are (typically) aware that the event being recalled occurred at an earlier time than the time at which we are engaged in recollecting. We are not aware of any such distinction in the case of perceptual experience.

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those experienced properties themselves and a point in time *from which* they are experienced" (Hoerl, 2018: 143). Note that even on Hoerl's view, the negative claim I make in the text holds.

<sup>107</sup> See Chapter 4 for a greater discussion of the distinction between the perceptual perspective an experiencing subject occupies in space and in time.

<sup>108</sup> Rashbrook (2013a) appeals to the distinction between episodic recall and perception to stress that we cannot discern a difference between the temporal location of 'the perceptual experience' and the object/s of 'perceptual experience', though we can discern such a difference in the case of episodic recall (the objects of which are presented 'as past'). Because of contested issues in the literature about what, in actual fact, talk of 'the experience' – and its temporal location – refers to, I appeal instead to the subject's perspective on such objects (of perception or of recollection).

Tye appeals to the transparency of experience in order to argue that we are not introspectively aware of a change in experience over time, though we can be aware of experienced change. This aspect of Tye's view appears to leave something out of the phenomenology, failing to capture the sense in which what a subject experiences seems to change over super-intervals of time. Consider a subject seated in a theatre, watching a play. At the end of the play – assuming the subject did not leave the theatre at all, or lose consciousness, during the production – it will be true to say that the subject has experienced the whole play. However, contra-Tye, the subject's perceptual experience is not temporally transparent to the two-hour extent of the play; she can judge that her perceptual experience of the end of the play comes after her perceptual experience of the play's beginning (that this is not merely a change presented in experience).<sup>109</sup>

In the final throes of the play, the subject is perceptually aware of a temporal part of the performance, but at this point the subject can recall earlier temporal parts. Recollecting earlier temporal parts of the play is not temporally transparent, the subject is typically well aware that what is being recalled occurred at an earlier time – that what she earlier perceived she is now recalling. In the example of the play, she recalls earlier experiencing the scene setting, and then experiencing the on-stage conflict, while she is perceptually aware of the resolution taking place.

The above example demonstrates that it takes time to experience a whole play. It is not just that a change is perceptually presented to the experiencer, what she is perceptually presented with also changes (as illustrated by how she can recall what was previously perceived). This is another way of saying that over super-intervals of time we experience what we do in virtue of what we experience over PSPs within that greater interval. If the play takes two hours to perform, it plausibly takes just as long to see the play. This is true even though we are not tempted to say that the subject sees the whole play at the moment the play ends. (That which is presented in a subject's experience does not seem to swell in temporal breadth, until she is perceptually presented with a two-hour interval.)

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<sup>109</sup> Also see the rejection of the Principle of Presentational Concurrence as it pertains to sub-intervals of the PSP in Chapter 2, and the reasons given – and agreed with Prosser (2016) – for thinking that there may nonetheless be a sense in which the principle holds over super-intervals.



The subject experiences the whole play over two hours – i.e. over the time the play itself unfolds – rather than *after* two hours.<sup>110</sup>

The latter claim can be understood in (at least) two ways. First, it could be understood as the claim that in virtue of watching the play unfold over the two-hour period the subject can, at any time within this interval, be said to experience the whole play. Second, it could be understood as the claim that over the two-hour period within which the play unfolds, the subject experiences what she does in virtue of what she experiences over the sub-intervals of this greater interval. Reflection on a contrast case provides support for the second understanding.

Contrast experience with belief. In virtue of believing that the play lasts for two hours, it is true to say that at any time within the two-hour interval the subject believes that the play lasts for two hours. Her holding such a belief over that interval of time makes it the case that we can attribute the belief to her at any instant within that interval. We are not motivated to say the same of experience. It doesn't appear as though the subject sees the whole play at any time within the interval over which the play unfolds. If the subject left the theatre at the intermission, it would be true to say that while in the theatre she did believe that the play lasts for two hours; it would not be true to say that while in the theatre she experienced the whole play. Falling into a dreamless sleep during the second half of the performance, the subject is no longer experiencing the play; yet it remains plausible that she still has the belief that the play lasts for two hours. If we stipulate that the subject does not leave the theatre and that she remains wakefully conscious and alert, it does not become more plausible to suggest that she has, throughout the whole play, an experience presenting the whole play, such that we can say that at any time within this interval she has an experience presenting the whole play. This is because over time what the subject experiences changes.

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<sup>110</sup> See Soteriou (2018) for a more detailed discussion of this point, again in the context of Tye's 'one experience' view, and for more on the contrast between the manifest temporal profile of belief and experience (which I briefly discuss in the paragraphs to follow).

Tye appears to anticipate a response along the lines offered above. His alternative suggestion is that we are experientially aware of occurrences which change in some quality over time, but we are not aware of any change in experience over this time.<sup>111</sup> In what he takes to be a probative analogy, Tye says: “Consider a movie depicting a complex series of events taking place during an extended period of time. ... The movie can be boring at some times and exciting at others; for what it depicts at different times varies. Even so, there is just one movie, not many movies unified together into one encompassing movie” (Tye, 2003: 99). We take a movie to represent a temporal extent and yet we do not take it to be made up of successive shorter movies; so too with experience, for Tye. There are two problems with this analogy.

Firstly, suppose we think about traditional movies which involve a single overarching narrative. We might agree that we tend to think of such movies as being made up of different scenes, not successive shorter movies (let’s say sub-movies). It doesn’t follow from this that we cannot think of – or that it would be incorrect to think of – a movie being made up of several sub-movies. If someone was to say that watching all of the *Lord of the Rings* movies successively was both watching three movies and watching one over-arching movie, on what grounds are we to disagree? Indeed, this might lead us to agree with Bayne’s suggestion that what Tye calls ‘experience stages’ are in fact “experiences in all but name” (Bayne, 2010: 23). Bayne continues: “I suppose that one could insist on distinguishing experiences from experiences stages, but I don’t see anything to be gained from doing so” (*ibid.*). We might then say that there is no prima facie problem with thinking of a movie as consisting of many sub-movies (perhaps of some minimal temporal extent); so too with experience.

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<sup>111</sup> Though he is happy to talk of successive stages of experience, and successive specious presents, Tye argues that these stages are not experiences in their own right. Tye adopts a position on which there is a relation of direct phenomenal unity between experiential contents within the specious present, with a relation of indirect phenomenal unity between what is being experienced (within the specious present) and what was previously experienced in one’s stream of consciousness – as long as there were no periods of unconsciousness in the interim – through what he calls “chains of experienced succession” which “flow from one specious present to the next” (Tye, 2003: 100). This may call into question whether he is merely signposting that his use of the term ‘experience’ is idiosyncratic, such that it is not clear how much – dialectically – his appeal to the ‘one experience view’ does (as the relations of direct phenomenal unity would appear, in this context, to offer a way of picking out a privileged interval of a lesser extent that whole periods of consciousness). However, I will not discuss these issues any further in the current context; for more detailed discussion see Bayne (2005).

In a defensive move, Tye says that “experience stages are not experiences, any more than undetached cloud parts are clouds” (2003: 99). The thought appears to be as follows. We can acknowledge that undetached cloud parts do not (*generally*<sup>112</sup>) possess any markers by which we can readily pick them out as clouds in their own right. Similarly, Tye says that over super-intervals of time the temporally extended sub-intervals of one’s experience do not possess any markers by which they can be readily picked out as experiences in their own right. Tye takes this claim to call into question whether there is a principled way of individuating between experiences of a lesser temporal extent than an unbroken stream of consciousness. However, it might nonetheless be the case that there are interest/context relative concerns which allow us to refer to token experiences. We might be interested in picking out *the experience* one has when watching a play over two hours, *an experience* of acute pain which lasted for a couple of minutes, or *the experience* of foul-smelling milk which lasted for a few seconds while the fridge door was ajar. In any such case, some feature of the phenomenology might well allow us to pick out the experience of interest (I return to this suggestion in section 4.3.).

The second problem with Tye’s analogy is that the question of whether movies are constituted by shorter movies is misleading, as what we call ‘a movie’ is partially a matter of convention. More to the point, assuming Tye’s representational view of perceptual experience, we say a movie, like an experience, typically represents occurrences unfolding over some interval of time. Does it follow that the movie does not itself consist of a succession of representations? Of course it doesn’t. We are very familiar with the traditional model of cinematic representation where a sequence of frames/snapshots, each representing a given state of affairs, together combine (being presented in quick succession) in order to represent a temporally extended state of affairs. I have, in Chapter 2, argued that we should not think of experience over time as made up of successive snapshots. But why not think that it is nonetheless made up of

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<sup>112</sup> I say *generally* – although Tye would want to be rid of this qualification – because we might question whether this is always true. It is not uncommon (in Britain, at least) to have an overcast sky where some portions of the cloud cover is white and other portions are dark grey. We might suppose that the difference in colour would allow us to pick out a white cloud and a dark grey cloud, as clouds in their own right, while each also appears to be an undetached part of a larger cloud.

successive representations of some minimal positive temporal extent? The appeal to cinematic representation appears to do more to undermine Tye's view than to support it.

## **2. That which is presented *at a time***

In Chapter 2 I argued that what is presented in experience as occurring at a time depends upon what is presented in experience as occurring over a greater interval of time; this led to the question of the temporal extent of the 'greater interval of time' we are to appeal to when characterising the subject's experiential phenomenology. Tye can be read as offering a view on which there is a single experience in an uninterrupted period of wakeful consciousness (this being an ontological claim), where this (re)presents all that the subject experiences over that period of wakeful consciousness (this being a claim concerning the phenomenology). I have said that Tye's 'one experience' view sits uncomfortably with the idea that, over super-intervals of time, what is presented in experience seems to change. In the current section (2) and the one which follows it (3) I will present two further accounts of our experience over super-intervals, which correspond to retentional and extensional proposals respectively (discussed briefly in the Introductory Remarks and further below). I argue that, when these two particular proposals are presented in their most plausible forms, each makes ontological commitments that do not have unequivocal support from reflection upon the phenomenology. Each proposal can be read as being motivated by an inference to the best explanation; I will end by offering a further proposal (in section 4) which I take to provide a better explanation as it does not bring with it the ontological baggage of these former accounts.

Let's return to the example of the play. I suggested, against Tye, that it is plausible that there is not merely a change presented in experience over the two hours; there is also a change in what one's experience is presenting. We want to offer an explanation of how the subject experiences various occurrences over the two-hour period, over which the play is performed, in terms of what is successively presented in experience over time. This might motivate the thought

that, rather than focusing on the temporal extent of the stream of consciousness, we should look towards the other extreme: what is experienced *at a time* (and at successive times – by which I mean instants – that fall within the super-interval).

One variation upon the previous suggestion can be immediately rejected. If the thought is that we can offer an account of the ontology and phenomenology of experience over time in terms of what is presented subsequently at each time, further supposing that what experience presents at a time is an instant of time, we arrive at one form of the snapshot model of temporal experience previously discussed and rejected. The rejection of the snapshot view does not automatically result in the rejection of a view on which the phenomenology is to be accounted for in terms of what is presented in experience at a time. One suggestion at this point may be that appeal what a subject experiences at a time – perhaps appealing to discrete experiences at subsequent times – provides the correct view of the ontology, though we will have to say that at a time experience presents some temporal breadth – rather than an instantaneous state of affairs – in order to accommodate the phenomenology.

The following might present itself as a plausible line of reasoning (though I will argue that this line of reasoning is misleading in what follows). We appeal to a subject's visual field in order to characterise how visual experience presents a certain region of space to the subject, from a given location at a given time; we might also say that the subject has a temporal field – the PSP – where this is appealed to in order to pick out how experience presents an interval of time to the subject at a given location at a given time. Views of this kind are not uncommon in the literature; I will focus on a proposal of this kind which can be read in Husserl's (1905) *On the Phenomenology of the Consciousness of Internal Time*, and which has been recently taken up by Kiverstein (2010).

### **2. 1. Kiverstein's Husserlian proposal**

Husserl does not offer a consistent account of the nature of time-consciousness throughout his works, but in his 1905 lectures he appears to offer a position on

which a subject, at a time, is aware of a greater temporal extent than that given time. (It is not uncontroversial how we should understand what it means to be aware of a greater temporal extent from a time of a lesser extent; in what follows I appeal to Kiverstein's interpretation of Husserl.<sup>113</sup>) He can be read as offering a proposal on which a subject is, at a given time, perceptually presented with what seems to be occurring at that time, he calls this the 'primal impression', while the subject is simultaneously presented with some degree of what seemed to occur immediately previously and what seems to be due to occur immediately subsequently. He labels the latter two aspects of experience 'retention' and 'protention' respectively. This is not to say that things that occur over some interval of objective time are presented as occurring simultaneously in experience, but it is to maintain that things that occur over some interval of objective time are – in a sense that needs to be specified further – simultaneously presented.

Discussing the relationship between primal impressions and retentions, Husserl says that “[d]uring the time that a motion is being perceived, a grasping-as-now takes place moment by moment... But this now-apprehension is, as it were, the head attached to the comet's tail of retentions relating to the earlier now-points of the motion” (Husserl, 1905: 32). Husserl dedicates less space to developing the notion of protention, but he does make clear that it is supposed to be the future-oriented counterpart of retention: “every process that constitutes its object originally is animated by protentions that emptily constitute what is coming as coming, that catch it and bring it toward fulfilment” (Husserl, 1905: 54). For Husserl, these notions can only be understood in terms of the others, with retention and protention making irreducible reference to the primal impression, which is itself to be conceived of as the limit between the span of retentions and protentions.<sup>114</sup>

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<sup>113</sup> Rather than being concerned with whether or not this interpretation is a faithful reconstruction of Husserl's view in 1905, I will focus on why this way of interpreting Husserl might not ultimately provide a satisfying view of our experience over super-intervals.

<sup>114</sup> Husserl says that “the now-phase is conceivable only as the limit of a continuity of retentions, just as every retentional phase is itself conceivable only as a point belonging to such a continuum; and this is true of every now of time-consciousness” (Husserl, 1905: 35).

In so characterising retentions, protentions, and primal impressions, Husserl can be read as offering a model of experience on which, at a given time, the subject is aware of a brief interval of time.<sup>115</sup> In order to further spell out how we are to understand the sense in which a subject is so aware of an interval of time at a point in time, and to illustrate how this relates to our experience over super-intervals of time, we can turn to recent work from Kiverstein. When concerned with our experience over sub-intervals of the PSP, Kiverstein appeals to the notion of *phenomenal unity*, taken from Bayne and Chalmers (2003) (which is used in order to pick out what it is like to occupy two or more conscious states *together*<sup>116</sup>). Kiverstein suggests that the idea of phenomenal unity *over time* may be explained “in terms of an experience’s manner of representation” (Kiverstein, 2010: 174). Referring to Husserl’s work on time-consciousness,<sup>117</sup> Kiverstein says that “every conscious episode includes as a part of its manner of representation a retentive component that keeps hold of experiences from the recent past, and a protentive component that anticipates what might be experienced next” (Kiverstein, 2010: 175).<sup>118</sup>

Kiverstein presents part of Husserl’s proposal as the claim that you are perceptually presented, at a time, with what seems to occur over an interval of a

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<sup>115</sup> See Smith (2016, esp. ch.5) for a more detailed introduction to Husserl’s theory of time-consciousness, at least as espoused in his 1905 lectures.

<sup>116</sup> While it is not the main issue to concern us in what follows, we do not hear enough about ‘togetherness’, or what it is for contents to be experienced ‘together’ in the *temporal* case (as opposed to the case of across modalities), in order for this to be probative. Bayne and Chalmers characterise phenomenal unity as a relation which holds between experiential contents *at a time*, discussing experiential states and content pertaining to different sensory modalities (e.g. hearing the engine revving and seeing the smoke rise from underneath the car’s hood). It isn’t straightforward how to apply this notion of *unity* or *togetherness* to experiential contents over time. There is a sense in which it would be misleading to help ourselves to the notion of content being unified *at a time* when considering experiential occurrences of a distinctly temporal nature (such as experiencing something occurring before/after something else) – more will be made of this in what follows. If we are not entitled to appeal to things being unified *at a time* then it is not yet clear how talk of content being unified or ‘experienced together’ is supposed to work.

<sup>117</sup> Kiverstein also says “our awareness *extends* a short distance through time... all events occurring within a specious present are experienced with the same force and vivacity...” (Kiverstein, 2010: 167). More may have to be said about what this force and vivacity consists in, before we could comment decisively on whether this claim was shared by Husserl. More importantly, while there might be something correct in how Kiverstein appeals to a subject’s awareness extending through time, it doesn’t appear as though an appeal to ‘force and vivacity’ will help to demarcate some interesting temporal extent/limit in perceptual experience. This is because all of the occurrences that we experience, while watching the play, will presumably be experienced with this ‘same force and vivacity’ (in virtue of being experienced).

<sup>118</sup> Other contemporary theorists also hold that there is a role for this tripartite structure in perceptual experience, which can be supported by reflecting on the phenomenology. See, for example, Almäng (2014).

greater extent.<sup>119</sup> This appears to allow for an explanation of how what is presented in experience as occurring at a time depends on what is presented as occurring over that time, insofar as it depends on what is presented as occurring over the interval of the PSP. That is, taking the claim that the temporal extent of the PSP is explained in terms of the temporal extent of the retentions and protentions, from the primal impression, at a time, together with the claim that retentions, protentions, and primal impressions are interdependent – that they only have substance in terms of each other – we might suppose that what is presented, at a time, as occurring by the primal impression depends, in part, on what is presented in retention and protention.

Kiverstein also offers an explanation of how this proposal can be used in order to account for how over super-intervals of time, that which is presented in experience changes (there being, *at each time*, an experiential presentation of an interval of time). Kiverstein stresses that this is compatible with experience not seeming discontinuous. The continuity of experience over time “...is explained by the continuum of retentions and protentions that form part of the manner of representation” (Kiverstein, 2010: 180). This passage reveals that the span of retentions and protentions plays a dual role, for Kiverstein. They are used in order to explain how a subject is perceptually presented with a brief interval at a time and, in Kiverstein’s terms, the *continuity* of experience over super-intervals of time is also explained by the fact that the primal impression at any given time later recedes into retention, then being presented *as recently past*, before some time later disappearing from consciousness altogether.

We can read two subtly different proposals in Kiverstein’s discussion which it will be useful to distinguish between. Firstly, we might suppose that Kiverstein

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<sup>119</sup> We could interpret Kiverstein as being committed to the claim that you are only perceptually presented, at a time, with what seems to be the case at a time, but where what you experienced immediately previously and what you anticipate experiencing immediately subsequently modifies what is experienced as occurring at that time. This is one way of interpreting Kiverstein’s claim that “[w]hat you anticipate [and what was experienced immediately previously] determines in part the character of your experience now” (2010: 174). On this line, you experience – at a time – what seems to be the case at a point in time. However, this would be to commit Kiverstein to a variation of the snapshot model of temporal experience which I have argued that we have reason to reject. The interpretation presented in the text above is also the natural way of reading the claim that “[e]xperiences aren’t confined to durationless points in time... but can stretch across time to embrace temporally extended events. ... [O]ur experiences can extend through time in this way because of their manner of representation” (Kiverstein, 2010: 180).



is proposing a *modal* retentional model of the PSP, to use Dainton's (2016) terminology. On this reading, talk of different manners of representation is taken to have phenomenological import: some temporal extent of the PSP is presented as *just past*, the primal impression as *present*, and perhaps some temporal part as *to come*. This can be compared to how one might think that some portion of a subject's visual field is presented as *to the left*, another portion as *to the right*, and some portion as *straight ahead*. Alternatively, we might suppose that Kiverstein is proposing a *non-modal* retentional model of the PSP, to again use Dainton's (2016) terminology. On such a model, appeal to different manners of representation is not taken to have phenomenological import; rather, they might be thought of as theoretical postulates. Such postulates might be appealed to in order to account for some feature of the phenomenology (perhaps reflected by Kiverstein's concern to explain how it is possible to perceive succession and change), rather than being 'read off' of the phenomenology.<sup>120</sup>

One might further suppose that either characterisation of the PSP provides an account of how we are to individuate experiences: an experience, at a time, presenting the temporal breadth of the PSP.<sup>121</sup> On this understanding of Kiverstein's proposal, an experiencing subject would be attributed a succession of momentary experiences – each presenting some temporal extent – in order to explain how we experience events spread over super-intervals of time. However, this method of individuating between experiences is not forced upon Kiverstein. To offer an explanation of what is presented in experience at a time in terms of the PSP is not necessarily to suppose that *an experience* at a time presents the PSP.

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<sup>120</sup> This is to interpret the proposal more in line with the non-modal tripartite accounts suggested by Grush (2007) and Lee (2014a, 2014b, and 2014c).

<sup>121</sup> Although this view is not decisively supported by Husserl, it could be read as part of the proposal Kiverstein presents. At least, given what Kiverstein says about retention and protention as manners of representation, this method of individuating experiences might be suggested by the claim that “[a]n *experience* unifies *itself* by means of its manner of representation” (Kiverstein, 2010: 180; *emphasis added*).

## **2. 2. The limitations of the Husserlian proposal**

The proposal drawn from Kiverstein and Husserl appears to allow for one way of accommodating phenomenological claims at issue, but it is not a proposal we are independently motivated to endorse. The first point to raise is that the proposal appears to lack phenomenological support for the claim that an interval is presented in experience at a given time (albeit under different manners of representation); this view of the ‘temporal shape’ of experience also appears to carry further theoretical commitments. The second point is that the proposal appears to be motivated by an inference to the best explanation; in what follows I will offer an alternative.

In order to demonstrate the lack of independent phenomenological support for the proposal, consider again the analogy with the visual field. We appeal to a subject’s visual field in order to characterise how visual experience presents a certain region of space to the subject, from a given location at a given time. In this visuo-spatial case, we have phenomenological support for supposing that visual experience presents us with a region of space which is of a greater spatial extent than our perspective upon that extent.<sup>122</sup> From our perspective in space, we are visually aware of objects as distally located. In some cases, such as when stood before a building, we are also visually aware of objects as being of a greater extent (say along the horizontal and vertical axes) than the perspective one possesses upon the object.

Unlike in the spatial case, we do not have phenomenological support in the temporal case for supposing that we are perceptually presented with a greater temporal extent from a point of view of a lesser temporal extent.<sup>123</sup> An experiencing subject cannot distinguish, from reflection on the phenomenology, between the temporal location of that which is presented in perceptual experience, and the temporal location of the subject’s experiential perspective

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<sup>122</sup> I say more about the analogies which can be drawn between our perceptual perspective in space and in time – and those which should not be drawn – in Chapter 4.

<sup>123</sup> It might also be pressed that reflection on the phenomenology of our ongoing experience does not support the claim that what is perceptually presented is so presented under something akin to differing temporal manners of presentation. For arguments against positing tensed perceptual content, see Dainton (2006); Hoerl (2009); Le Poidevin (2007); and Mellor (1998).

in/on time. This is to reaffirm the claim that perceptual experience is temporally transparent. It might be responded that the tripartite structure of experience on Kiverstein's proposal is not supposed to have introspective support. Rather than being motivated by reflection on the phenomenology, the temporal manners of representation appealed to can be read as theoretical postulates. This is to take the non-modal reading of Kiverstein's proposal. On this reading, Kiverstein's proposal is to be motivated by an inference to the best explanation in the service of accounting for some feature of a subject's perceptual phenomenology. To accept this proposal would therefore be to adopt a position which is not necessarily contradicted by reflection on other features of the experiential phenomenology, but which is not unequivocally supported by such reflection.

Although I suggested that the proposal drawn from Kiverstein need not commit one to a principled way of individuating between discrete experiences, this is not to say that the proposal is without controversial ontological commitments. One such commitment is the very idea that, at a time, a subject is perceptually presented with an interval of time. Recall the distinction between retentional and extensional models of the PSP, briefly discussed in the Introductory Remarks. On the extensional model experiencing is itself said to be temporally extended, as is that which is presented in experience; there being an explanatory relation between the two. On the retentional model – which Kiverstein's proposal appears to be a variant of – such an explanatory connection is denied; yet, unlike the snapshot model, that which is presented in experience is said to possess a non-zero temporal extension. A theorist may find the retentional model Kiverstein proposes unpalatable because of other commitments in discussions of temporal experience,<sup>124</sup> or because of other commitments in the philosophy of mind quite generally.

Hoerl (2017), for example, suggests that a given theorist's view of the nature of perceptual experience might also incline her to reject, or to endorse, such a model of temporal experience. On a representational view of perceptual experience, where perceptual experience is to be (most fundamentally)

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<sup>124</sup> She may, for example, wish to maintain that “experience of succession requires successive experience and so [she may] insist on an explanatory connection between the unfolding temporal structure of experience and its contents” (Phillips, 2018: 294).

characterised in terms of the way in which it represents things as being in the subject's immediate environment, a distinction can be drawn between the vehicle and content of the experience. In this context the vehicle can be taken to be those properties of the subject's perceptual state that are responsible for the very representing; the content can be taken to be those properties that are represented by the subject's perceptual state. Hoerl suggests that such a view lends itself to a retentional model of the PSP. Given the content/vehicle distinction, on a representational view a theorist may hold that the vehicle, at a time, presents a temporally extended content; that at a time, a subject is perceptually presented with a given temporal interval.

If a theorist does not avail herself of a representational view of perceptual experience, she may be suspicious of views postulating both vehicles and contents. Take a broad characterisation of an opposing view of the nature of perceptual experience to be the relational view, where perceptual experience is to be (most fundamentally) characterised in terms of the things in the subject's immediate environment<sup>125</sup> which she is perceptually related to in such experience. Hoerl says that, on the relational view, "there is no representational vehicle the subject instantiates, the particular properties of which fix the contents of her experience" (Hoerl, 2017: 179-80). Without granting a role to the properties of the vehicle, there does not appear to be the scope for allowing that, at a time, the subject is perceptually presented with occurrences unfolding over an interval of time.<sup>126</sup> To the extent that a theorist finds a relational view of perceptual experience appealing, she may find herself sympathetic to the thought that, in Phillips' terms, "an explanatory connection obtains between the unfolding of experience itself and its capacity to present us with change and succession" (Phillips, 2018: 294). This lends itself to an extensional model of the PSP, and appears to be incompatible with Kiverstein's proposal.

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<sup>125</sup> This is to take a direct realist reading of the relational view of perceptual experience, of the kind supported by Campbell (2009), Martin (2006), and Soteriou (2013). One might also present a relational view on which the direct objects the subject is acquainted with are mind-dependent entities, such as sense-data views of perceptual experience.

<sup>126</sup> It might be thought that a relational view need not be hostile to a retentional view, if we can appeal to relations of 'just pastness' and 'presentness' in perceptual experience. However, this would appear to be a modal form of retentionalism, rejected previously for violating temporal transparency.

For those theorists who wish to endorse an extensional model of the PSP – or simply do not wish to rule out such a model – Kiverstein’s proposal must be rejected. This would leave us without an account of how such a theorist avoids holding a proposal that ultimately amounts to a version of Tye’s ‘one experience’ view at one extreme, or the snapshot model at the other extreme. At this point, it might appear natural to return to the issue of discrete experiences and to question Tye’s claim that there is no principled way of individuating between successive experiences in the stream of consciousness.

### **3. An extensional alternative**

#### **3.1. Hoerl’s individuation argument**

If we do not wish to commit ourselves to the claim that *at a time* what is presented in experience spans some interval of time, and if we are uncomfortable with Tye’s ‘one experience’ view, we can find an alternative method of characterising the phenomenology and ontology of experience over super-intervals of time in recent work from Hoerl (2013). Hoerl disputes Tye’s claim that nothing – in reflection upon the phenomenology – other than breaks in consciousness speaks to there being a maximum temporal extent that an experience can span.

Hoerl provides what he calls the ‘individuation argument’. In doing so, he appeals to the distinction – discussed in the previous two chapters – between perceptible and imperceptible motion. The crux of what I want to take from Hoerl’s presentation of the individuation argument can be found in the following passages:

“[W]hat does the real work in explaining the difference in phenomenology... [between imperceptible and perceptible motion] ... is simply the idea of the specious present as a fairly limited maximum period of time that individual experiences can span. The length of the specious present, thus understood, determines which temporal phenomena we can be aware of *within* experience...”  
(Hoerl, 2013: 387; *emphasis in original*).

“According to the individuation argument, what explains why you can see the second-hand moving but not the hour-hand is just this: the period of time that individual perceptual experiences can span is limited, with the term ‘the specious present’ denoting the maximal interval that an individual experience can span... As it is only across such discrete experiences that the different positions traversed by the hour-hand become discriminable, you can only become aware that the hour-hand has moved, whereas you can see the second-hand moving” (*ibid.*: 388).

Hoerl explains how that which is presented in experience changes, over super-intervals of time, through using the individuation argument in order to offer an account of how we are to cut up the stream of consciousness into discrete experiences. In response to Tye’s ‘one experience view’, Hoerl says that:

“From the point of view of the defender of the individuation argument... there is in fact a feature of the phenomenology of experience (and indeed an introspectible feature) that we can point to in support of a particular way of individuating experiences (or at least the maximum length that any one experience can span) that is very different from that envisaged by the one-experience view. That feature is that we can directly perceive some instances of movement or change, but not others” (*ibid.*: 397).

Hoerl is disputing the claim that there is no introspectible feature of the phenomenology which can support picking out temporal parts of the stream of consciousness as privileged intervals of a lesser temporal extent than the period between breaks in consciousness. On Hoerl’s presentation of the individuation argument, the feature which we can become introspectively aware of is the perception of motion/change. Given that we are introspectively aware of perceiving change, and can contrast this with the imperceptible cases of change (where we infer change, rather than perceiving it), Hoerl suggests that we can become aware of temporal limits upon the kinds of things we can experience. He further suggests that these temporal limits might be best accounted for if we, contra Tye, adopt an account on which such limits are taken to determine how we individuate between discrete experiences in the stream of consciousness.<sup>127</sup>

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<sup>127</sup> Perhaps Frischhut implicitly assumes something like Hoerl’s view of discrete experiences, when she appeals to “the duration of a single experience” and says: “we can attend to an object for one hour constantly, we cannot ‘take in’ what happens over an entire hour *with a single experience*” (Frischhut, 2014: 46, footnote 14; *emphasis added*). In what follows I will argue that there is no reason in principle to say that we cannot have *a single experience* presenting an hour-

To be clear, the presentation of this argument does not commit one to holding that experience presents a temporal extent over time, rather than at a time.<sup>128</sup> But if we are uncomfortable with the claim that a temporal extent is presented in experience *at a time*, Hoerl offers an alternative. He offers a view on which there is an “explanatory connection” (*ibid.*: 383) between the temporal structure of the experience and what it presents: “...there is a sense in which experiences of succession do take the form of a succession of experiences, because they take up a duration during which different things are being experienced in succession” (*ibid.*: 382). Hoerl can be read as saying that experience extends through time like that which it presents, offering an extensional model of the PSP, while maintaining that a given experience has a maximal temporal extent – the extent of the PSP.

On Hoerl’s proposal, we are given one explanation of how what is presented in experience as occurring at a time depends upon what is presented as occurring over time. In appealing to a sequence of discrete experiences, we can say that what is presented in experience as occurring at a time is only so presented in virtue of what is presented in *an* experience. We can also use Hoerl’s proposal in order to explain how that which is presented in a subject’s experience over super-intervals of time changes. The subject experiences what she does over super-intervals of time in virtue of what is presented in each discrete experience she undergoes over that time. However, it is not clear that the introspectable feature Hoerl appeals to – the distinction between perceptible and imperceptible motion – justifies the appeal to discrete experiences, except perhaps as an inference to the best explanation.

### **3. 2. The limitations of the individuation argument**

As discussed in section 1, Tye appeals to reflection on one’s phenomenology over time – experienced continuity in particular – in order to cast doubt on an

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long occurrence, but – and perhaps this is the motivation behind Frischhut’s claim – the hour-long occurrence will not be presented as present in the PSP.

<sup>128</sup> The individuation argument is available to a theorist advocating either a retentional or an extensional account of the PSP; it is neutral between their many differences.

account of the ontology of experience over time which appeals to discrete experiences that follow successively from one another in objective time. Following Rashbrook, I suggested that it might be best to put matters more neutrally and, rather than appealing to experienced continuity as Tye does, say that we are not typically aware of our experience over super-intervals – where there is no break in consciousness – as discontinuous. With this additional qualification, we might nonetheless appear to be proposing an account that is contrary to the phenomenology if we use the individuation argument in order to pick out token experiences over super-intervals.

Some theorists (Dainton, 2014, and Rashbrook-Cooper, 2017) can be read as arguing that, on a proposal which postulates discrete successive experiences, we would expect to be introspectively aware of discontinuities in our experience over super-intervals of time. That is, if we suppose an account of the ontology of experience which appeals to discrete experiences *unfolding successively* over super-intervals of time, such theorists present considerations in support of the idea that subjects would become aware of discontinuities in experience over super-intervals. This is something it is claimed that subjects cannot, in actual fact, do. However, we need not be concerned with such arguments in the present context as Hoerl's account need not be read in this way. The individuation argument is presented as a way in which to individuate particular experiences; there is no explicit commitment to such experiences occurring successively, rather than overlapping.

It might yet be thought that individuating between discrete experiences which unfold – be it successively, or overlapping in content – over super-intervals leaves one needing to provide an explanation of why a subject's experience over such super-intervals does not seem to be discontinuous. Rather than explore such a worry here,<sup>129</sup> I simply wish to draw attention to how this method of individuating between discrete experiences is again an inference to the best

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<sup>129</sup> I suspect that the strength of any such worry will turn on the issue of whether such discontinuities are of a great enough extent to rise to conscious awareness (allowing for an awareness of discontinuities rather than simply appealing to discontinuities in awareness); to simply assume that they are without further considerations would appear to beg the question against Hoerl.



explanation.<sup>130</sup> The argument of Chapter 1 leaves us agreeing, to an extent, with Hoerl's claim that "[t]he length of the specious present ... determines which temporal phenomena we can be aware of *within* experience..." (Hoerl, 2013: 387; *emphasis in original*). That is, the argument presented in Chapter 1 supports the claim that the length of the PSP plays a role in determining whether or not certain temporal phenomena will be presented in experience, for example, whether a case of change or motion will be presented as such. It does not follow that we cannot be said to have an experience of temporal phenomena over super-intervals, such as plays, concerts, or football matches.

Individuating between discrete experiences of the temporal extent of the PSP might be consistent with the fact that experience does not seem to be discontinuous (though it might not be, if it is cashed out in a certain way), but there is no unequivocal support from reflection upon the experiential phenomenology to suggest that there are such discrete experiences. Understanding the individuation argument to be an inference to the best explanation, in what follows, I offer an alternative that need not make the ontological commitments – the appeal to discrete experiences – Hoerl's proposal does.

#### **4. A phenomenological characterisation of the PSP**

Having considered several extant proposals in the literature, in the current section I offer a positive proposal regarding how we are to characterise the experience of events over super-intervals of time. In order to do so, we need not appeal to discrete experiences unfolding successively in the stream of consciousness; we need not hold that experience over super-intervals is discontinuous in any principled sense. I begin by offering a phenomenological characterisation of the PSP.

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<sup>130</sup> This can be read in how Hoerl sets up the individuation argument. He says: "What introspection might reveal, instead, are limits to the kinds of things we can and do experience, which in turn *might be best accounted for* by adopting a particular view of the individuation of discrete experiences" (Hoerl, 2013: 398; *emphasis added*).

I first (in section 4.1.) present how Russell draws a connection between attention and an object being given (present) in a primitive way in experience. After setting out this view of Russell's, I demonstrate how Martin extends this claim – concerning what is present in experience – to a region of space, over and above the objects filling said region. I subsequently (in section 4.2.) demonstrate that this can be extended to occurrences and to an awareness of some temporal extent, over and above the occurrences falling within this temporal extent. This proposal makes use of an appeal to a subject's awareness of immediately preceding and subsequent times, though it does so in a way which is distinct from the Husserlian proposal. Finally, given the characterisation offered of the PSP, I offer an explanation of how we may refer to token experiences (in section 4.3.), on which there is no *in principle* distinction between successive experiences in an unbroken stream of consciousness.

#### **4.1. Russell, the *Theory of Knowledge*, and the given**

In *Principia Mathematica* (1910/1912/1913) Russell and Whitehead set out to describe a set of axioms and rules of inference in symbolic logic from which all mathematical truths could – in principle – be proven. In the *Theory of Knowledge* (1992) manuscript (TK hereafter), Russell appears to be following a similar methodology. Russell proceeds by taking as basic a limited number of axioms, then trying to show how we could derive all knowledge from these axioms together with the deliverances of experience.

In offering an analysis of experience,<sup>131</sup> Russell says that there are (typically) several objects *given* in experience at any time – focusing on visual perceptual experience for simplicity. To say that an object is so given is to say that it is presented to the subject, without the subject needing to reflect on any of the properties of the object or relations between herself and the object. To illustrate

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<sup>131</sup> Russell establishes at the outset what he means by 'experience': "The things which a man is said to experience are the things that are given in sensation, his own thoughts and feelings (at any rate so far as he is aware of them), and perhaps (though on this point common sense might hesitate) the facts which he comes to know by thinking" (Russell, 1992: 7). In what is a broadly similar use of the term, I have been taking 'experience' to mean a phenomenally conscious occurrence – an occurrence for which there is something it is like for the subject undergoing it.

this claim, Russell says that if we were inclined to go around naming objects, the particular objects named would be the objects given in experience (that objects given in experience can be demonstratively picked out and named in a way in which other objects cannot). That which distinguishes the objects named from the various other objects populating the world is that the former are given in experience and the latter are not, but this distinction only becomes evident in reflection. During the naming process, Russell says that the particular objects appear merely as *this* or *that*.

In spelling out what it is that is given in experience, Russell says that ‘this’ can function as a proper name and apply directly to an object without requiring any description of the object; on different occasions it can apply to different objects. ‘This’ is used to name the object being attended to at a particular time by the person who uses the word. He says that what one can pick out as ‘this’ is that which is given in experience (he says that ‘this’, referring to an object, is given in experience, and reflection shows that it is ‘that which is given’). In doing so Russell, draws a connection between attention and what is given in (visual) experience:

“At any moment of my conscious life, there is one object (or at most some very small number of objects) to which I am attending. All knowledge of particulars radiates out from this object. The object is not intrinsically distinguishable from other objects – it just happens (owing to causes which do not concern us) that I am attending to it. Since I am attending to it, I can name it; ... I am apt to name it ‘this’... ‘This’ is the point from which the whole process starts, and ‘this’ itself is not defined, but simply given...” (Russell, 1992: 40).

The subject’s position in the world – and the relative position of various objects – delineates those objects which can be visually attended to from her current position, and those objects which she cannot attend to. The notion of attention being appealed to is something like the ‘spotlight model’ of attention. Without providing a sophisticated account of this model, we can say that there are particular things – particular objects, their parts, or perhaps other features – within the subject’s visual field which can be visually attended to. One way to put this would be by saying that, on this model, once we establish the extent of a subject’s visual field and her location relative to other objects at a time – such

that we know which stimuli fall within her visual field, from her current location – it is then a further question what, if anything, she is visually attending to in this sense.

While a subject might visually attend to a single object in the above sense, it is plausible that what is given in visual experience is not typically a single particular object. In offering an account of what is given in experience, it is plausible that we need to appeal to more than ‘this’ – the particular object being attended to. It is plausible that there are a variety of stimuli given in experience, as well as the region of space within which such stimuli fall, delineated by the extent of the visual field. This coheres with Martin’s claim that: “We can think of normal visual experience as experience not only of objects which are located in some space, but as of a space within which they are located. The space is part of the experience in as much as one is aware of the region as a potential location for objects of vision” (Martin, 1992: 189). We are visually aware of a region of space spread wider than our position as experiencers, within which stimuli can be seen<sup>132</sup>. This region of space is given in the subject’s experience.

Granting that this is how we should construe visual experience (that given in experience is a region of space within which various stimuli fall), in order to have this experience, of the region of space, it seems as though there must be some way to attend to all of *this*.<sup>133</sup> Without being able to do so, the subject could not be said to experience the region of space over and above being aware of this-or-that object or sub-region within the region.

Building upon Russell’s proposal, we can maintain Martin’s claim that we are able to attend in this way to a region of space; this region of space being that which is given in experience. I will refer to this latter sense, contrasted with the attention to a particular object, as *wide-attention*. An appeal to what is given in

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<sup>132</sup> And this region of space seems to be a sub-region of all of the space that there is. For further discussion of this claim, see Chapter 4; also see Soteriou (2013) and Richardson (2014), following Martin (1992).

<sup>133</sup> Nothing much hangs on calling this ‘attention’. If other theorists have strict accounts of what can and cannot count as a form of attention, and if the form currently under discussion would not pass their tests, they are free to disregard the terminology. What is important is that we can (and do) do what is being described here; not whether or not this can count as a form of *attention*, as opposed to a form of *awareness*, for example.

experience can then be used in order to provide a phenomenological characterisation of the visual field: it is that spatial extent which is so given in visual experience, which can be wide-attended to, from a given location at a given time.<sup>134</sup> Before turning to further considerations, it is worth highlighting that in the case of the visual field we are not forced into a particular account of how we are to individuate between experiences. I have offered a characterisation of the notion of wide-attention and how this can capture what is given in experience, but this is not to say that what can be attended to from a position, at a time, gives us *an* experience in any principled sense.<sup>135</sup> This notion of what is given in experience plausibly also has application in the temporal case.

#### **4. 2. The phenomenological characterisation of the PSP**

In TK Russell discusses the presence of objects in perceptual experience under the broader guise of ‘acquaintance’. For Russell acquaintance is a dual relation between a subject and an object. Russell develops a view on which there are three forms of the relation of acquaintance: imagination, sensation, and memory.<sup>136</sup> For Russell, the relation of presence/sensation<sup>137</sup> is one of the ultimate constituents of our knowledge of time; the ‘present time’ is to be understood as the time of those things which stand in the relation of presence/sensation to the subject (see Russell, 1992: 66).

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<sup>134</sup> There may be questions concerning whether *everything* which falls within the region of space given in experience should be counted as being attended to in the wide sense, no matter how small the stimulus, for example. There will also be questions concerning whether there is really a neat cut-off point between what is and is not attended to in this way, from a given location at a given time. This is the question of whether the edges of the visual field are – phenomenologically speaking – clear and determinate, or fuzzy and/or indeterminate. For present purposes, neither point needs to be settled decisively. We can say, minimally, that the visual field is to be given a phenomenological characterisation in terms of the spatial extent which *can* be attended to in the wide sense; we need not settle precisely what can and cannot be so attended to from a given location at a given time.

<sup>135</sup> One may wish to individuate experiences in terms of what a subject can see from a given location at a given time, but reflection on what is given in experience does not force a theorist to do so.

<sup>136</sup> I won’t discuss the distinction between memory, imagination, and sensation that Russell draws in this context, as exploring the senses in which the remembering and imagining are and are not ‘present’ – concerning the phenomenally conscious occurrences and the objects to which the subject is psychologically directed to – would take us too far from our current concerns. (He also speaks briefly of attention as a fourth relation of acquaintance, which picks out particular objects in sensation.)

<sup>137</sup> These two terms are used interchangeably by Russell to pick out a single acquaintance relation.

The difference between these modes of acquaintance is taken to be introspectively accessible. Russell says that in sensation objects are ‘present’ in a sense in which they are not in memory, for example. As put by Martin, for Russell: “[In memory] there is a distinctive kind of acquaintance with past objects, one in which we experience them as past, and recognise them as belonging in the past. This contrasts with all present sensation, and all sense experience of sense-data, including what Russell himself labels the specious present in TK” (Martin, 2015: 12). This is, as Martin says, to contrast that which is given as past in memory with that which is given by the relation of presence.

In discussing the relation of presence, Russell did not appear to think that the relation holds between the subject and an instantaneous state of affairs, but rather between the subject and some brief temporal extent – the PSP. Martin writes that “Russell contrasts the status of objects that one experiences in the specious present, and the objects of immediate memory... Russell takes all objects that belong to the specious present of a subject in an interval as being objects of sensation, as being present. In contrast, the key significance of immediate memory is that while objects are experienced in immediate memory we are acquainted with them in a way different from that of sensation, in being past rather than present” (Martin, 2015: 6).<sup>138</sup> This highlights a distinction between Russell’s proposal and that which was previously drawn from Husserl. Immediate memory combined with sensation is not what gives the specious present temporal breadth, for Russell this comes from sensation alone.<sup>139</sup> The relation of presence which he postulates is a relation to occurrences of some temporal extent, and this makes available a proposal on which such a temporal extent is given in experience.

He says: “The most obvious fact, in our present inquiry, is that... some objects undoubtedly fall within my *present experience*, and of these objects some at least did not fall within my experience at earlier times which I can still remember” (Russell, 1992: 33; *emphasis added*). In saying this, he can be read as highlighting

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<sup>138</sup> In a footnote Martin also points out that in *The Analysis of Mind* (1921) Russell changes his view on this point, holding that immediate memory is a feature of the specious present and that which explains our experience of change. Here I will only consider Russell’s proposals in TK.

<sup>139</sup> Again, see Martin, who says that “for Russell, present experience excluding memory can present a temporal interval and not just a moment...” (Martin, 2015: 11).

one motivation behind the PSP: the sense in which, over super-intervals of time, that which is presented in experience changes. In ongoing experience, a subject may be able to remember what she has previously experienced (in the same unbroken period of consciousness) and she may be able to anticipate what she will subsequently experience (in the same unbroken period of consciousness), while there is some limited temporal extent she is given in perceptual experience. It is within this latter temporal extent that some objects/occurrences stand in the relation of presence to the subject.

Taking a relatively invariant temporal extent to be given in perceptual experience can allow us to offer a characterisation of the PSP which parallels the characterisation I offered of the visual field. We can make an analogous primitiveness claim regarding what is experientially given in the spatial and temporal variants. In typical cases a variety of stimuli, of some temporal spread, are given in experience. To parallel with Martin's suggestion in the spatial case, we can also make the point that our experience is not merely of stimuli of some temporal spread, but of a positive temporal extent within which such stimuli are located. In the temporal variant, talk of what is given in experience picks out the totality of the *temporal* extent that can be attended to in the wide sense:<sup>140</sup> the PSP. However, in offering a phenomenological characterisation of the visual field, I appealed to the region a subject could attend to from her location in space. It might be objected that this is part of what gives substance to the notion; yet I have not appealed to anything analogous in the temporal case.

The objection offered certainly has merit. If we offer a phenomenological characterisation of the visual field in terms of what is given in experience, from a given location at a given time, it might appear plausible that this is what we

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<sup>140</sup> It might be objected that there is a striking disanalogy between the case of the visual field and the PSP, concerning the distinction between the two forms of attention discussed previously. In motivating the wide notion of attention, through considering what can be said about the visual field, it was taken for granted that something akin to the spotlight model is also applicable. It may be contended that it is not clear whether we can take this for granted in the temporal case. One may question whether we can attend to a temporal part of what falls within the PSP in the way in which we can attend to a spatial part of what falls within the visual field, in the spotlight sense of the term. The quick response is that nothing that has been said commits the account of the PSP to come down either way on this issue. We might be able to attend – in the spotlight sense of the term – to a temporal part of the PSP and we might not. For the account of the PSP outlined above the important point is to recognise the applicability of the wide notion in the temporal case, regardless of the applicability of something akin to the spotlight model.

should also do in the temporal case. Do we mean to appeal to what is given in experience *at a time*? Or in a particular experience? Neither will do, having previously questioned both Kiverstein's appeal to what is presented in experience at a given time and Hoerl's appeal to discrete experiences. If not committing to either way out of the mire, how are we to pick out the interval of interest? To offer no such explanation would be insufficient. We need some way of constraining the interval of interest when we appeal to what is given in experience, because – as Tye might rightly object – everything experienced over the course of the day will be similarly given in experience at the time at which it is experienced.

A solution can be found if we take what Russell says together with Husserl,<sup>141</sup> but divorced of the claim that the temporal extent given in experience is presented *at a time*. Husserl appeared to offer a view on which the notions of retention, protention, and primal impression, can only be understood in terms of one another; in addition we are offered a characterisation of the PSP in terms of the temporal breadth spanned by the retentions and protentions (these being understood as different temporal manners of presentation, presenting their objects as *just past* or *about to come* respectively). I have given reasons to be sceptical of the characterisation of the PSP suggested by the latter claim, but this was not to say that we should be sceptical of the broader idea which can be read in the former: that a subject's experiential awareness of a time – or rather an interval of time – *as present* irreducibly depends on her awareness of other times as recently past/future.<sup>142</sup>

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<sup>141</sup> There is reason to think that the resulting view would do no violence to the view Russell expresses in TK. After all, Russell defines the present time in terms of the time of those things to which I stand in the relation of presence; the past and future would both therefore be defined in terms of what comes before/after the time of those things to which I stand in the relation of presence.

<sup>142</sup> This claim of irreducibility can also be read in O'Shaughnessy's discussion of the temporal properties of experience. He says that "the essential description of any experience of the moment contains an irreducible reference to the immediate past/future of the experience, given from the temporal vantage-point of 'now'. ... Close up the past, wall off the future, and you cover over the present too" (O'Shaughnessy, 2000: 62). O'Shaughnessy also makes the claim that the experienced present is instantaneous, but we need not accept this claim in order to accept the irreducibility claim. For a proposal which is inspired by O'Shaughnessy's discussion of the irreducible reference to the past and future in an experiencing subject's awareness of the present, but which holds that perceptual experience presents a non-zero temporal extent as such, see Crowther and Soteriou (2017). I will say more about this awareness of past/future times in Chapter 4; I argue that this is related to the sense in which time seems to pass in Chapter 5.



Taking elements from Russell and Husserl, the resulting view of the PSP is as follows. We take (from Russell) the claim that a temporal extent is given as present in experience – through the relation of presence, in Russell’s terms. We take (from Husserl) the idea that a form of awareness of the recent future and past has an irreducible role to play in characterising our awareness of the present. These ideas are compatible if we say that an interval is given as present in experience, not necessarily involving memory (nor retention) or imagination (nor protention), though the subject’s awareness of immediately preceding and subsequent times is constitutive of the interval being so given. We can then say that the subject is invariably presented with a positive temporal extent, with this extent marking the partition between the past and the future for the subject. No claim is made regarding whether a subject is presented with such an interval *at a time* as opposed to *over* some interval of time and no claim is made concerning the individuation between discrete experiences, because no such claims concerning the ontology of experience are yet required in order to do justice to the phenomenology.

#### **4. 3. The Russellian account and token experiences**

On the proposal developed above, the PSP is characterised as the invariant interval the subject is given in experience – given as the partition between past and future. On this account, although it will be true to say that over time whatever brief occurrences are experienced by the subject will seem to be present (between past and future) as she experiences them, all that she experiences in an unbroken stream of consciousness does not seem, to her, to be given as falling between past and future. It is not typically that what is given in experience, as falling between the past and future, positively seems to be a discrete experience either, as Tye suggests.

To return to the example of the play, we can say that experiencing unfolds over the two hours in which the subject is watching the play. We can grant to Tye that experiencing does not appear to stop until there is a break in consciousness. I have suggested that throughout this two-hour period an invariant interval, the

PSP, is given in experience as that which falls between the past and the future. As time goes on, the occurrences the subject is so aware of – which are given as falling between past and future – changes.<sup>143</sup> What the subject experiences over the two-hour interval is dependent upon what is given in the subject's experience, as falling between past and future as the subject is oriented to them, over sub-intervals of this super-interval. The latter claim can be true without us thinking that there is a discrete experience, and indeed a series of discrete experiences.

To say that what is given in experience is a temporal extent which marks out the partition between past and future, for the subject, does not commit us to anything which forces us back towards a version of the snapshot model. We can hold that what is presented in experience as occurring at a time is so presented in virtue of what is presented in experience as occurring over that time – over the PSP.<sup>144</sup> We can also maintain that what is presented in experience over super-intervals changes. One's experience is not only of occurrences located in time, but of an interval of time within which they are located. We can attend – in the wide sense – to the temporal extent which is given in experience in a way in which we cannot attend to super-intervals, such as that which spans an unbroken period of consciousness. Thus there is a sense in which the PSP picks out a *privileged interval*, for experiencing subjects. A subject can experience things of a greater temporal extent, things that unfold over super-intervals of time, but when she does so this is through experiencing sub-intervals of the occurrence, as they fall within the PSP, over time.

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<sup>143</sup> This can accommodate the sense in which our experience over time is often said to be in flux – there is continuously more experiencing occurring – while also stable, in that the PSP remains throughout. This is so even if what the subject is experientially aware of seems to remain identical in content, such as watching a static scene, as there is always more experiencing which seems to be taking place. This is not a new claim; it is put particularly forcefully by O'Shaughnessy when he says: “even when experience is not changing in type or content, it still changes in another respect: it is constantly renewed, a new sector of itself is there and then taking place. ... Thus, even if I am staring fixedly at some unchanging material object, such staring is not merely a continuous existent across time, it is an activity and therefore also a process, and thus occurrently renewed in each instant in which it continues to exist” (O'Shaughnessy, 2000: 42).

<sup>144</sup> Just as we may wish to say that what is visually presented as being at a point in space depends upon what is presented as being over some spatial extent within which the point falls (see Chapter 2, section 5, for further discussion).

In offering the phenomenal characterisation of the PSP, we have not had to commit to any principled way of individuating between experiences in the stream of consciousness. To end, I return to the thought that this may be because there is no principled way of individuating between experiences. Common sense might wane at this point, but we tend to talk about experiences as things which may either have a fairly substantial or a short temporal breadth – contrast one’s experience of the play with the experience of a flash of lightning – and as things that we may pick out in terms of the presence (or absence) of certain phenomenal properties – such as the experience of pain in one’s leg, or the experience of a pause in the music. Consistent with the idea that experiencing continues to unfold while a subject is wakefully conscious, we may pick out token experiences by picking out the ingredients of the experience we are concerned with.

Suppose a subject is awake and experiencing from  $t_1$ - $t_{30}$  (for simplicity, take the PSP to span the interval between successive integers). Suppose that she is perceptually aware, over time  $t_{11} - t_{20}$ , of a distant whining sound. Through becoming perceptually aware of the whining sound at  $t_{11}$  and no longer being so aware after  $t_{20}$ , we can pick out her experience of the whining sound: that portion of the experiencing which unfolded from  $t_{11}$ - $t_{20}$ . (We could just as well pick out the experience of the whining sound *starting*, between  $t_{10}$  and  $t_{11}$ ). To pick out *an* experience is therefore to do something which is, to this extent, interest/context relative. Tye may be correct that at no point in an unbroken stream of consciousness is a subject aware of what seems to be a discrete experience, followed by another, and so on. However, the subject can be aware of the presence/absence of an ingredient of the phenomenology; she can be aware, for example, of the whining sound starting, continuing for some period of time, and then stopping. Being so aware, we can gainfully appeal to an experience of the whining sound, the token experience being picked out with reference to the relevant feature of the phenomenology.

In summary, we can grant that there is no principled way of individuating between discrete experiences in the stream of consciousness. It does not follow that we cannot refer to token experiences in the stream of consciousness; it is

merely a reflection of the fact that our doing so is to this extent interest/context relative.

### **Concluding remarks**

In the present chapter, the issue of interest has been how we are to characterise the experience of occurrences that unfold over super-intervals – such as plays, concerts, and football matches. I have sought an account which can maintain that what is presented in experience as occurring at a time is only so presented in virtue of what is presented as occurring over a greater extent, while consistently maintaining that what is presented in experience over super-intervals of time changes.

I considered three extant accounts of the ontology and phenomenology of experience over super-intervals of time, from Tye (2003); Husserl (1905) and Kiverstein (2010); and Hoerl (2013). Tye argues that there are no reasons from reflection on the phenomenology to think that there is a sequence of discrete experiences, each presenting some invariant temporal extent. He argues that there is, on the contrary, one experience which presents an entire unbroken stream of consciousness. While sympathetic to the former claim, I argued that we must reject the latter as it is stated, because it does not do justice to how what is presented in experience seems to change over time.

Husserl and Kiverstein can be read as offering a proposal on which a subject's experience, at a time, presents a given non-zero temporal extent (the PSP). Against this view I argued that we do not have phenomenological support for supposing that we experience a greater temporal extent from a point of view of a lesser temporal extent (in contrast to the spatial-visual case). I said that Kiverstein's proposal can be read as an inference to the best explanation, but that the ontological commitments of the proposal render it unavailable to those theorists wishing to endorse extensional models of the PSP or relational views of perceptual experience. Hoerl offers a proposal on which we have a series of discrete experiences (overlapping or in succession) over super-intervals of time,

individuated by the temporal extent of the PSP. Against Hoerl's proposal I suggested that we need not take the stream of consciousness to consist of a series of discrete experiences – each the temporal extent of the PSP – in order to do justice to the phenomenology.

I have offered a positive characterisation of the PSP through developing Russell's construal of what is *given* in experience. On this proposal a subject is invariably presented with a positive temporal extent, with this interval marking the partition between the past and the future for the subject. Given the phenomenological characterisation of the PSP developed, we can explain the sense in which that which is presented in experience over super-intervals seems to change without arriving at any principled way of individuating between experiences. I ended by suggesting that what counts as a token experience may be somewhat context or interest relative.

## Chapter Four

### ***Blood Brothers: On the Experience of Objects and Events***

*“So, did y’hear the story of the Johnstone twins?  
As like each other as two new pins,  
Of one womb born, on the self-same day,  
How one was kept and one given away?”  
(Russell, 2013: 5).*

*Blood Brothers*, a musical by Liverpudlian playwright Willy Russell, revolves around twin boys, Mickey and Edward, who are separated at birth and brought up in different environments in the city of Liverpool. Mickey (and his family) represents the working class, badly affected by the economic downturn in the 1980s, while Edward (and the Lyons family in which he is raised) embodies the middle class, which thrived over this period. During this period of economic strife, it was often said that anyone who wanted to succeed only needed to work hard; yet Russell’s play disputes this and captures the outcry against Thatcherism from the working class. Rather than there being a single set of principles governing the path to success for everyone, Russell illustrates how there appeared to be different principles (and circumstances) for the middle and working classes.

One view of our experience of objects and our experience of events is that they are much like Mickey and Edward, insofar as they are remarkably similar, and if for some reason theorists have appealed to different phenomenological principles in characterising either, this should be rectified. One way to approach the discussion to follow is through the question of how good such a comparison is: just how similar is our typical experience of objects as they fill space to our experience of events as they fill time? This question, as I will understand it, concerns how we are to characterise the phenomenal character of our

experience. I am interested in the phenomenal character of a subject's experience of medium-sized objects<sup>145</sup> – such as books, cups, tomatoes, and so on – and 'medium-length events'<sup>146</sup> – such as a bar of music, the scoring of a goal, the path traced by a comet in the night sky, and so on – as well as the sense in which a subject occupies a perspective in space and time on such objects and events.

In order to fruitfully compare and contrast our experience of objects and events, I first discuss the spatial case and the idea that a typical subject seems to experience an object while not seeming to experience all spatial portions of the object from a given spatial location relative to it. Having demonstrated that this is an idea that many theorists have found puzzling (in section 1.1.), I turn to consider Alva Noë's (2012) proposed solution to the apparent puzzle (in section 1.2.), on which the occluded portions of an object are presented in a subject's experience as *accessible* from the subject's point of view (albeit *less* accessible than those portions of the object which are not occluded). I demonstrate that Noë's proposal requires us to deny, or at least importantly qualify, a plausible phenomenological claim, and that this can be avoided if we opt for an alternative solution (outlined in section 2). On the latter, the sense in which an object is perceived as a voluminous whole while some portions of the object are not seen is to be accounted for through how it is manifest to the subject that she is experiencing an object from a relative point of view (the object seeming to afford many perspectives in space upon it). This relates to one sense in which our experience of objects will always be partial.

Having discussed the spatial case and the experience of objects, I turn to how Noë offers an analogous account of our experience of events (outlined in section 3). For Noë, perceiving a portion of an object can implicate, in the perceptual experience, the rest of the object extending in space, and perceiving some portion of an event can implicate, in the perceptual experience, the rest of the event extending in time. Developing Noë's proposal (in section 4.), I argue that while there are some analogies which can be drawn, the temporal case is

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<sup>145</sup> In the sense of Austin's "moderate-sized specimens of dry goods" (1962: 8).

<sup>146</sup> Which, to be analogues of Austin's moderate-sized specimens of dry goods, I will take to be temporal particulars from less than a second in length to several seconds in length. I will assume that while some may fall within the temporal extent of the PSP, others will extend beyond it.

importantly disanalogous in one respect: spatiotemporal occurrences do not seem to admit of any other possible perceptual points of view in time. I end by clarifying how my proposal interacts with other debates concerning temporal experience in the contemporary literature (in section 5.1.), and briefly contrast the explanatory projects of Noë and dynamic snapshot theorists (in section 5.2.), the latter being the main focus of Chapter 2.

## **1. Experiencing objects**

### **1.1. Two phenomenological claims and a puzzle**

When wakefully conscious, with open eyes and looking straight ahead, we tend to – in the typical case – take ourselves to be visually presented with objects.<sup>147</sup> It is part of what it is like for us – it is manifest in the phenomenology – that we are seeing such objects,<sup>148</sup> though it does not seem as though we can see all spatial portions of such objects at a given time.

These two claims – that we seem to see objects, and that we do not seem to see all spatial portions of any given object at a given time – are made in many places in the phenomenological literature. For example, Husserl says that a phenomenologically adequate description of the experience of a three-dimensional object would not merely appeal to the front facing surface; neither would it appeal to all portions of the object’s surface equally. He says: “Of necessity a physical thing can be given only ‘one-sidedly’... A physical thing is necessarily given in mere ‘modes of appearance’ in which necessarily a *core of ‘what is actually presented’* is apprehended as being surrounded by a horizon of ‘*co-givenness*’” (Husserl, 1913: 94; *emphasis in original*). In a similar fashion, Sartre

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<sup>147</sup> In philosophical discussions of perceptual experience the focus is, for the most part, on the visual experience of moderate-sized objects: books, cups, tomatoes, and so on. The experience of such objects is taken to be the paradigmatic or central case of perceptual experience; I will continue to focus on such objects in what follows. However, there are increasingly many important contributions which do not share this focus. For a recent example, see the discussions of perceptual ephemera collected in Crowther and Mac Cumhail (2018).

<sup>148</sup> See Strawson’s (1979) response to Ayer in defence of this claim. I will speak interchangeably of ‘experiencing’ and ‘seeing’ objects in what follows, nothing hangs on this difference in terminology.



says the following. “In perception I *observe* objects. It should be understood by this that the object, though it enters whole into my perception, is never given to me but one side at a time. ... All this has been said a hundred times: it is characteristic of perception that the object never appears except in a series of profiles, of projections” (Sartre, 1940: 8; *emphasis in original*).<sup>149</sup> Each author maintains that it is phenomenologically apt to talk of visually experiencing a three-dimensional object, while also maintaining that some portion of the object is seen and other portions are not, at any given time.

At a given time, when you can see a whole tomato before you, you cannot see the reverse facing surface of the tomato. It does not follow that you experience the tomato *as lacking* the reverse surface that a tomato usually has – we might find plausible quite the opposite, that the phenomenology is committal on there being the usual reverse surface of a tomato – but it does follow that the front facing surface of the tomato shows up in your experience in a certain sense<sup>150</sup> in which the reverse facing surface does not. The claim that we seem to experience three-dimensional objects, together with the distinction between the front facing surface of an object and its rear, make two phenomenological claims about visual experience plausible.

1. The Object Claim: A phenomenologically apt description of a typical subject’s visual experience needs to appeal to three-dimensional, space-filling objects, rather than mere patches of colour or surfaces.
2. The Surface Claim: A phenomenologically apt description of a typical subject’s visual experience needs to account for the sense in which we experience the front facing surface of an opaque object and not its rear.

Each claim is supposed to be supported by reflection on the perceptual phenomenology and yet they have been read by some theorists as being in

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<sup>149</sup> This can also be read in Merleau-Ponty’s (1964) discussion, when he similarly says that there are “two elements of perception”, and that “the appearance of ‘something’ requires both this presence and this absence” (Merleau-Ponty, 1964: 16). He takes perception to be “a reference to a whole which can be grasped, in principle, only through certain of its parts or aspects” (*ibid.*).

<sup>150</sup> At this point I intentionally leave it ambiguous what it means to say that the front surface of the tomato shows up in experience in a *certain sense*, as this is one of the issues under investigation.

conflict; as a consequence, we have a puzzle regarding how these two claims can be coherently maintained.

Thompson Clarke begins his discussion in ‘Seeing surfaces and physical objects’ (1965) by remarking that “[m]ore than one philosopher of impressive intelligence has taken the fact that normally we can see no more of a physical object than part of its surface to have paradoxical implications, that is, to signify that the ‘common-sense’ belief that we can see physical objects and on this basis know that there are such objects must either be flatly rejected or importantly qualified” (Clarke, 1965: 98).<sup>151</sup> As Clarke suggests, when faced with the puzzle of how we are to coherently maintain the two claims above, one way in which some theorists have proceeded is by denying the first claim outright (or importantly qualifying it).

Moore appears to be willing to deny the Object Claim when he says that what a man sees, when looking at his hand, is not strictly identical with his whole hand, but rather “that part of its surface which he is actually seeing...” (Moore, 1959: 54). Broad can also be read as denying the Object Claim when he says: “If you press a plain man with questions, you will easily get him to admit that all that he literally *sees* at any one moment is a *limited part* of the *outer surface* of a certain body” (Broad, 1952: 4; *emphasis in original*). Broad and Moore can be read as saying that we do not visually experience objects at all; that all we strictly speaking experience is the front facing surface of the object.

While Broad and Moore offer us one way out of the puzzle, as we do not need to explain how to coherently maintain the two claims if we simply reject one of them, this comes at a price. To deny the Object Claim is to run counter to a phenomenological claim that theorists have found incredibly plausible.<sup>152</sup> Theorists might try to lessen the cost, by suggesting that the claim that we are confronted with three-dimensional objects in our environment is a judgement – perhaps an implicit one – based on experience, rather than being something

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<sup>151</sup> I will not go on to further discuss Clarke’s positive proposal in this context. For detailed discussion of Clarke’s position, and the different ways in which one may disagree with the conclusions he draws, see Martin (2017).

<sup>152</sup> For example, Noë says that it is “bedrock, phenomenologically speaking, that the tomato [as one example] looks voluminous, that it looks to have a back” (Noë, 2012: 16).

experienced. Such claims remain revisionary, if not outright contrary to the phenomenology. In recent work Alva Noë can be read as offering an alternative proposal in an effort to coherently maintain both claims. While I am sympathetic to the spirit of Noë's proposal, in what follows I argue that, ultimately, he either denies or importantly qualifies the Surface Claim. Denying either claim is something that it would be preferable to avoid.

## **1.2. A sensorimotor response to the puzzle**

Discussing our visual experience of objects, Noë can be read as suggesting that we should maintain the Object Claim, saying: "you have a sense of the presence of the object as a whole at a moment in time" (Noë, 2012: 74); not merely a portion of its surface. Noë can also be read as suggesting that we should endorse the Surface Claim, saying that in visual experience "[y]ou have an experience of a voluminous whole... [while] you can only see the facing surface of the [object]..." (*ibid.*: 56). He says that objects "outstrip our experience; they have hidden parts, always" (*ibid.*: 74).

In an effort to coherently maintain the Object and Surface Claims Noë develops the technical notions of *perceptual presence* and *presence in absence*. For Noë, the front facing portion of an object's surface is perceptually present in the subject's experience, but this is not all that there is to the phenomenology of the experience. The object's reverse surface, which she cannot see from her current position relative to it, can also be perceptually present in her experience, but it is 'present in absence'. The notion of presence in absence is characterised by Noë as picking out the regions of an object's surface that the subject cannot currently see, but that figure in the phenomenal character of her experience through her understanding of how appearances could vary if she moved relative to the object.<sup>153</sup>

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<sup>153</sup> He says that presence in absence is "...a special kind of availability. The world is present, in perception, not by being present (e.g. represented or depicted) in consciousness all at once, as it were, but by being available all at once to the skillful perceiver. And different items are available in different ways, depending on the kind of bodily, sensorimotor relation that we hold to them" (Noë, 2012: 58).

Noë offers an account of perceptual presence in terms of sensorimotor availability: “what is visible is not what projects to a point... what is visible [should be thought of] as what is *available from a place*” (*ibid.*: 19; *emphasis in original*).<sup>154</sup> He claims that we have a visual sense of the presence of the reverse surface of an opaque object – contrasting this with the object’s insides – which consists in practical sensorimotor understanding: how we would have to move, or how the object would have to be moved, in order to bring what is currently the reverse side into view. For something to be perceptually present a perceiver must understand (where talk of ‘understanding’ here is not supposed to entail explicit reasoning, but can be construed in an implicit, practical, bodily way) that there is a relation between the perceiver and the object/quality which satisfies two conditions: one on how movements of the perceiver’s body will control the character of the relation, and another on how movements or other changes in the object/quality will control the character.

Note that Noë’s proposal is committed to more than the developmental claim that in early infancy we have sensorimotor interactions with three-dimensional solid objects and that it is – in part – through having such interactions that we come to experience objects as voluminous wholes in mature perception. Noë is making a claim about the phenomenal character of mature perceptual experience and the sense in which the reverse surface of an object features in a subject’s experience. He appears to be committed to the phenomenological claim that the reverse surface of an object features in the phenomenal character of a subject’s experience given the relevant sensorimotor understanding.

For Noë “*all* perceptual presence is the presence of access... I reject, that is, the idea that we see the front of the tomato as it were unproblematically and that we achieve access to the back of the tomato by dint of the application of sensorimotor understanding...” (Noë, 2008: 697). That is, he rejects the idea that we are to give one account of how the front facing surface of an object features in experience and a different account, appealing to the subject’s

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<sup>154</sup> Matthen (2005, 2010) offers what appears to be a similar view, appealing to the operations of the visuomotor system. I focus on Noë in the present chapter because of how he extends his account to incorporate our experience of temporally extended events, to be discussed in sections 3 and 4.

sensorimotor understanding, of how the reverse facing surface of an object features in experience.<sup>155</sup> There are different ways of understanding what Noë is here claiming. In order to be compatible with what he says about presence in absence, it would be uncharitable to interpret him as saying that there is no difference in how the back and the front of the tomato show up in experience. Such an interpretation would also appear to be incompatible with Noë's claim that "[i]n fact, you can only see the facing surface of the [object]... After all, what could be more salient than the fact that you only see its visible features, its facing side..." (Noë, 2012: 56). A more charitable interpretation may be that, for Noë, both the front and reverse portions of the object's surface are present in the subject's experience as *accessible* – and this is to be explained in each case through appeal to sensorimotor understanding – though the reverse surface is *less accessible*,<sup>156</sup> hence the reverse surface is only given in experience as present in absence.

On what I take to be the more charitable interpretation of Noë, he nonetheless makes the phenomenological claim that the reverse surface of an object features in the subject's experience. We may take this to be the strength of the claim that "[v]ision is not confined to the visible. We visually experience what is out of view, what is hidden or occluded" (*ibid.*: 15). He also appears to take the experience of occluded parts of an object to be part of an explanation of what it

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<sup>155</sup> Also see his claim that: "...if anything is given, everything is. If the front of the tomato is given, then so is the back. And the nature of our access to the front is of a kind with that of our access to the back. The thing (front and back) is there for us, present, in reach" (Noë, 2012: 20-21).

<sup>156</sup> This fits with his claim that "From the actionist standpoint [that Noë defends,] there is no sharp line to be drawn between that which is and that which is not perceptually present. The front of the tomato is maximally present; the back a little less so..." (Noë, 2012: 26). We might question whether this is true – that the reverse surface is less available – even on Noë's own account. It might sound plausible to say that the reverse surface is less available for being seen, from the subject's relative location, but it doesn't appear as though this can be what Noë would want to say. The surfaces of the object being presented as *more* or *less* available is supposed to account for the visual phenomenology; it isn't clear what it would mean to say that something is presented in the visual experience as *more* or *less* available for the visual experience (they would, after all, be presented in the experience and by this light be available for the experience). The appeal to sensorimotor understanding suggests that Noë would say that the portions of the object are presented as *more* or *less* available for tactual (sensorimotor) exploration, but is it true that the front surface of the object phenomenologically seems to be more available than the reverse in this sense? If so, it would appear that the phenomenology has little role to play in explain the gripping action the subject makes in picking up standard objects, where the front facing surface is rarely privileged over the reverse (consider picking up a handleless coffee cup, where one typically places a thumb on the front and four fingers on the reverse of a cup as one grasps it).

is to experience an object as a voluminous whole. Noë says that "...you now have a perceptual sense of the presence of the tomato's back even though you do not now see it" (*ibid.*: 74). The reverse surface of the object is not "...*seen without being seen...*" (*ibid.*: 75; *emphasis in original*), Noë acknowledges that to claim that it is would be paradoxical. But he maintains that "[t]he hidden portions of the object are present in experience now, even though we don't now see them, because we are now coupled to them in a special, immediate, familiar, sensorimotor manner" (*ibid.*: 75).

In order to forestall a possible misunderstanding, consider the following. We might find plausible that part of what is puzzling to theorists concerned with our typical experience of objects is the sense in which, when one sees an object, there seems to be more than one can see at a given time. (We might suppose that this does not depend upon the object having hidden or occluded parts. For example, we might think that even in seeing a two-dimensional drawing there seems to be a sense of there being more than one can see at a time; where one could see greater detail if stood closer to the sketch, for example.) Looking at a typical object from a given distance at one time, a subject may be able to discern the object's colour and shape. At this distance, the subject may be unable to discern any greater fine-grained details. Moving closer to the object at a later time, the subject may be able to discern far greater fine-grained detail, such as subtle variations in colour and scratches to the surface. (This is the case with typical three-dimensional objects and the example of a two-dimensional drawing.) While such fine-grained details were not presented in the subject's experience at the earlier time, we might nonetheless find it plausible that at the earlier time there did seem, to the subject, to be more that could be seen in this sense, without yet appealing to any sense of occlusion.

Although much of Noë's discussion focuses on the case of occluded spatial portions of objects, his proposal does extend to cases such as the above. It is best to read what Noë says regarding presence in absence as a particular application of a more general role fulfilled by expectations (based on sensorimotor understanding) in perceptual experience. We can take Noë to explain the sense in which there seems to be many possible perspectives one

could take upon an object in terms of the experiencing subject's expectations of how appearances would vary if she moved relative to the object. The experience of three-dimensional opaque objects, that seem to have occluded portions at any given time, may then be taken to be one – perhaps central or paradigmatic – case explained by Noë, but such expectations are not solely concerned with occluded spatial parts. Yet Noë's account of the phenomenology, as presented above, is problematic.

Firstly, it is not obvious that we can give an account of the phenomenal character of experience in terms of such expectations. Even if a subject has such expectations, there is more to the phenomenology than this. We need to heed Campbell's warning that, on Noë's account, there is the “danger that the content of perception will simply collapse into a set of counterfactual implications for sensorimotor activity” and if this was the analysis we were to make, then “[t]he ordinary world, there independently of us, there for us to explore, has simply disappeared” (Campbell, 2008: 667). It would appear as though Noë's proposal is too dispositional to account for the phenomenology, for the sense in which the objects of experience are presented in experience as external to and independent of the experiencer's particular point of view. Kelly also appears to have such a worry in mind when he says that Noë's sensorimotor account does not satisfactorily explain the sense in which the particular is experienced as a voluminous object, as having a rear side, *now*. Kelly suggests that the sensorimotor account could be satisfied even if “the back sides of objects didn't *exist* until I looked at them, if they only came into existence at the very moment I looked, then that situation would be perfectly compatible with their being represented as accessible in Noë's sense...” (Kelly, 2008: 684; *emphasis in original*). But, Kelly says that this is inconsistent with reflection on the phenomenology. He says that “I experience [the object] as something that *now has* a back side, even though that's not something I can see directly now” (*ibid.*).

A second and closely related worry with Noë's proposal is that it gets the order of explanation wrong. Noë appears to appeal to expectations in order to account for the phenomenology, but this proposal, so understood, gets the cart before the horse. The phenomenology plausibly has a role to play in the subject having

such expectations. Experiencing something as a voluminous object will play a role in explaining why the subject has certain expectations about how the object will look from other relative perspectives; it is not to be reduced to the possession of such expectations.

The previous worries are concerned with a reduction of the phenomenal character of experience to expectations based on sensorimotor understanding. A separate worry is that Noë's insistence that the occluded portions of objects are present in experience, albeit present in absence, suggests that his proposal ultimately has a further reductive element: reducing the sense in which an object features in experience to a sense in which all portions of an object's surface features in experience.<sup>157</sup> The implicit assumption of such a reduction may explain why the Object and Surface Claims are taken to be in conflict; to this extent it may also be behind why some theorists are willing to deny the Object Claim, instead maintaining the Surface Claim – which they believe to receive greater motivation from reflection upon the phenomenology. (I'll refer to this as *the* reductive assumption in what follows.) Appearing to make such a reductive assumption, Noë then offers a way out of the apparent puzzle by ultimately denying, or importantly qualifying, the Surface Claim.<sup>158</sup>

On one reading of the dialectic, theorists – such as Noë – implicitly make the reductive assumption and consequently reason from the phenomenologically motivated Object Claim to the claim that, in some sense, the rear surface of the object features in the subject's experience *in the same way* as its front surface;<sup>159</sup>

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<sup>157</sup> On this reading of Noë's claims, see Martin (2008: 676).

<sup>158</sup> To stress, this is not to suppose that such a reductive assumption is, or would be, explicitly endorsed. Rather, when puzzling about how it is implicit in the phenomenology that there is more of an object to be seen than is currently seen, something akin to this reductive assumption appears to motivate certain solutions that are offered in the literature. Although explicitly disagreeing with the finer points of Noë's account, we can also read what appears to be similarly reductive claims – or at least, claims motivated by an implicit reductive assumption – being made by Nanay (2010b), who says: "When we see an object, we also represent those parts of it that are not visible. ... We represent the occluded parts of perceived objects by means of mental imagery. ... [T]he exercise of mental imagery is necessary for amodal perception: for the representation of those parts of the perceived objects that are not visible" (Nanay, 2010b: 239-240).

<sup>159</sup> In a recent response to Noë, Kind (2018) helpfully elucidates the distinction between the claims that we seem to perceive *voluminous objects* (and not *merely surfaces*) and that there is a sense in which we seem to perceptually experience the reverse side of the object. Kind ultimately proceeds to suggest her own positive account, on which imagination – rather than sensorimotor understanding – accounts for our experiencing objects as voluminous wholes and the presence



the latter claim being taken to be part of the explanation of the Object Claim. Such a proposal does not appear to accommodate the Surface Claim: the sense in which we experience the front facing surface of an object and *not* its rear. Once something akin to this reductive assumption takes hold in one's reasoning, it appears as though we are faced with either denying the Object Claim or the Surface Claim. Rather than denying either, we can reject the assumption.<sup>160</sup>

While the reductive assumption might motivate the thought that there is a tension between the Object and Surface Claims, I suggest that there is no such tension and that there is no independent motivation for supposing such an assumption (as illustrated through contrast cases, below). Nothing has been said in favour of the reductive assumption; there is no agreed upon principle such as 'one must see all parts of an object in order to see the object'.<sup>161</sup> Against such a principle, note that it is not as if there are two competing things vying for being that which a subject sees when looking at an object: the object *or* its front facing surface. The object is not contrastive with a portion of its surface in this sense.

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in absence of the rear sides of such objects: "Working in tandem with our perceptual capacities, our imaginative capacities contribute to our perceptual experience by making unseen features of objects seem present" (2018: 176). However, we might find plausible the claim that we can experience objects as voluminous wholes without entertaining any mental imagery corresponding to the occluded portions of the object (see Prinz 2006a). Even when one does entertain such mental imagery, upon ceasing to do so one does not thereby fail to perceive what is before them as a three-dimensional object.

<sup>160</sup> Something akin to the reductive assumption appears to be quite pervasive in discussions of perceiving objects; it even appears to be implicit in the writing of theorists who are explicitly critical of such reductionism. This is one way of reading Dokic's claim that "... we can be visually aware of a whole self-occluding object even though there is a phenomenal sense in which what is visually apparent to us falls short of the presence of such an object" (Dokic, 2018: 181). In this claim Dokic appears to accept some of the reductive flavour present in Noë's proposal: that some portion of an object's front facing surface is visually apparent and the object itself is not. This can also be read in how Dokic describes the "phenomenological contrast" as being "between what we are visually aware of, namely a cat, and what is visually apparent to us but falls short of being a cat" (Dokic, 2018: 183). If we reject the reductive assumption, then we can accept that some portion of an object's front facing surface is visually apparent (in Dokic's terms) and that the object itself is, while some portion of the object's rear facing surface is not. As Dokic says at another point: "It is not obvious that being visually aware of a whole cat entails being visually aware of its hidden parts" (*ibid.*) In rejecting the reductive assumption, we could also say to Dokic that the same is true of what is visually apparent: It is not obvious that a cat being visually apparent entails its hidden parts being visually apparent; we can experience an object without experiencing all portions of its surface.

<sup>161</sup> We can accept that the reverse surface of an object is not perceptually present and that its front surface is – that we do not need to appeal to the reverse surface or its sensible qualities in order to describe what the subject experiences – without committing to anything puzzling or paradoxical, unless one accepts as a restriction that in order for a subject to experience an object she must experience all parts of the object. Again, see Martin (2008), who says: "That there are some parts of the cat [or any ordinary, opaque, three-dimensional object] I can't see doesn't show that strictly speaking I don't see the cat, unless one can only see something when one sees all of its parts" (Martin, 2008: 677).

This is consistent with the fact that the subject cannot see some other portion of the object, such as its reverse side.

In this context ‘contrastive’ is used in order to pick out two (or more) things which may be considered as being in competition with regards to some relevant standard. Firstly, consider occupying space: Laura’s torso and Laura are not in competition to be located in a given region of space in the sense that Laura’s torso and Laura’s hand are; if someone shoots a gun aimed at that position, we can ask whether the bullet hit Laura’s torso or her hand, but not whether it hit her torso or her. Secondly, consider location: one room in the Social Sciences building – say S2.35 – and the Social Sciences building itself are not in competition to be where I am currently located in the sense that two such rooms – say S2.35 and S0.17 – are. The two rooms are contrastive with one another with regards to where I am currently located, but neither is contrastive with the Social Sciences building in this regard.<sup>162</sup> Similarly, while the front and the back of an opaque object may be contrastive with respect to being that which a subject sees, neither is contrastive with the object in this regard.

In summary, I have rejected Noë’s proposal on the grounds that it is too dispositional to account for the phenomenology, for the sense in which the objects of experience are presented in experience as external to and independent of the experiencer’s particular point of view on them. Furthermore, the phenomenology plausibly has a role to play in the subject having expectations regarding how a given object, presented in experience, would look from other points of view, rather than being reducible to such expectations. I have also argued that we have no reason to accept the reductive assumption which can motivate the thought that the Surface and Object Claims are in conflict. In the subsequent section I offer an explanation of how the two claims are to be coherently maintained; in doing so I bring out several features of what it is like to occupy a visual point of view in space.

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<sup>162</sup> Clarke (1965) can be read as suggesting that, in noticing that we only have visual contact with some portion of a surface this very noticing brings this portion of the surface into competition with the object itself, making the two contrastive with regards to what one can see. It isn’t obvious why we should take this to be so. An object’s front facing surface and its reverse surface may be so contrastive (with regards to what one can see), but neither is in competition with the object.

## **2. Experiencing *in space***

### **2.1. Perspectival-partialness and field-partialness**

In the opening chapter of *The Imaginary* (1940), Sartre is engaged in a discussion of our experience of objects; using the example of a cube, he says: “The cube is indeed present to me, I can touch it, see it; but I can never see it except in a certain way, which calls for and excludes at the same time an infinity of other points of view” (Sartre, 1940: 8). In this passage Sartre brings out how, in visual experience, we seem to have one of many possible points of view on an object. The nature of visual experience in three-dimensional space is such that visual experience of objects will always be partial in a sense; what I refer to as being *perspectivally-partial*. I motivate this idea and explain this terminology in what follows, but briefly: in visual experience, we are perceptually presented with something (such as an object) and this is all the while manifestly from a perspective – and one of many possible perspectives – on that something. This is the phenomenological notion of perspective in what is being called perspectival-partialness. The partialness is to be accounted for in virtue of how the object is presented relative to a given point of view.

Sartre’s appeal to how our perceptual experience of objects both calls for and excludes other points of view can be used to develop an account of how we are to maintain both the Surface and Object Claims. The notions of perspectivalness and partialness are to be motivated by reflection on the phenomenology, and can be elucidated through a comparison with how other theorists have appealed to the such notions in discussions of perceptual experience. Several authors have emphasised the need to appeal to an experiencing subject’s perspective when articulating the phenomenal character of her visual experience. One such example comes from Campbell (2009), who makes the following claim. “We have to factor in the standpoint from which the scene is being observed. We should think of consciousness of the object not as a two-place relation between a person and an object, but as a three-place relation between a person, a standpoint, and an object. You always experience an object from a standpoint” (Campbell, 2009: 657).

While Noë can be read as offering a reductive or dispositional account of the phenomenal character of a subject's visual experience of an object, Campbell can be read as offering a different account through appeal to this third relatum: a standpoint. What goes in to characterising a standpoint will depend on various considerations. In the case of vision, as well as specifying a time and place, we also need to appeal to "... the relative orientations of the viewer and the object, how close the viewer is to the object, whether there is anything obstructing the light between them, and so on" (*ibid.*: 658). As Soteriou puts it, on Campbell's view "we need to factor in the notion of a 'standpoint' as our experience of objects is always, in some sense, partial" (Soteriou, 2016: 94).

Campbell's appeal to a standpoint gets close to the appeal I wish to make to a manifest perspective in visual experience, but there are reasons for thinking that the two are not equivalent. What is partial, for Campbell, and the need to appeal to a standpoint, is not merely found in the more basic notion of what is perceptually presented to a subject – plausibly, it is not simply a phenomenological notion.<sup>163</sup> While Campbell's appeal to a standpoint may be motivated, in part, by reflection upon the phenomenology, it is not obviously to be thought of as showing up in the phenomenology.

For a characterisation of the notion of perspective which is closer to that which is being advanced in the current section, we can turn to Brewer (2011). Brewer starts with the claim that "perceptual presentation irreducibly consists in conscious acquaintance with mind-independent physical objects" (Brewer, 2011: 94), before acknowledging that "there can be quite different perceptual experiences – had by the same subject or by different subjects – with identical such direct objects" (*ibid.*: 95). In recognition of how a subject can have quite different experiences of the same object from different relative locations, being in visual contact with distinct portions of the object's surface, Brewer puts his claim: "In a slogan, the ways things *look* are the ways (perceptually presented) *things* look from that point of view in those circumstances" (*ibid.*: 99). This is the claim that in order to articulate the phenomenal character of a subject's

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<sup>163</sup> As Brewer (2011: 96, footnote 2) notes, the control on Campbell's third relatum – the standpoint – comes from requirements on Fregean sense (Frege 1993), where this accounts for the cognitive significance of one way or another of picking out an object.

experience of an object, we must do so through appeal to the subject's spatiotemporal point of view relative to the object.

Appeal to a role for the notion of a perspective which I am interested in developing here need not depend on taking perceptual experience to be fundamentally a matter of conscious acquaintance as Brewer does. In offering an account of how to specify the representational content of a subject's experience, Peacocke (1992) makes a similar appeal to a perspective (though not in these terms). In specifying the representational content, Peacocke says: "The first step is to fix an origin and axes" (Peacocke, 1992: 62). One origin, for Peacocke, is given by the property of being the centre of a human subject's chest, with three axes being given by the directions back/front, left/right, and up/down (with respect to the origin).

In making this appeal to a point of origin and three axes, Peacocke is motivated by the phenomenal character of visual experience, saying that the "appropriate set of labelled axes captures distinctions in the phenomenology of experience itself" (*ibid.*). He suggests that in perceptual experience the locations of perceived objects are given as egocentric locations. This brings with it a notion of perspective. To illustrate this point, he distinguishes between the experience a given subject has when looking straight ahead at a building and the experience that subject has when turning her face toward the building while her body is turned toward some point on the building's right-hand side. In the latter case, he claims that the building "is experienced as being off to one side from the direction of straight ahead..." (*ibid.*). Regardless of whether one takes a view on which perceptual experience is to be characterised as fundamentally a matter of conscious acquaintance, or to be characterised through appeal to representational content, we can recognise that there is a role for the notion of a visual perspective to play in capturing the phenomenology.

The phenomenal character of visuo-spatial experience cannot be captured by simply describing the allocentric spatial relations between objects (presented in experience), we also need to acknowledge that the subject seems to occupy a spatial location from which these objects are seen. To demonstrate, it is not

merely that two objects visually experienced at a given time are presented as adjacent and with a given degree of separation. One object is presented as being to the left of (or above, or in front of, and so on) the other, and in being so presented this already brings with it the egocentric character of visual experience and the sense in which the objects are seen from a relative perspective. Examples such as this demonstrate that there is more to the phenomenology than merely that the objects of perceptual experience are presented as three-dimensional, and as stood in various relations to each other in three-dimensional space.<sup>164</sup> In characterising the phenomenal character of a subject's perceptual experience we need to appeal to that subject's point of view, because of how the objects of perceptual experience are presented as external and relative *to* the location from which the subject is visually aware of them.

This manifest perspective in space is a feature of the phenomenology; not as one of the objects presented in experience but as the perspective relative to which such objects are presented. That the phenomenology is perspectival, in this sense, may explain the holding of various expectations regarding how an object may look from other relative perspectives, rather than being reducible to such expectations. An experiencing subject is aware of the objects of visual perceptual experience as external and relative to the region of her eyes, to this extent she is aware of her perspective in space as occupying a distinct spatial location from those objects.<sup>165</sup> Being so aware of an object as externally located relative to a distal perspective brings with it an awareness of locations being presented relative to a perspective on those locations; it brings an awareness of locations other than that occupied by such an object and other possible perspectives on the object in question. It may well be that awareness of the perspective a subject seems to occupy relative to the objects presented in experience also brings with it an awareness of various enabling conditions: that in addition to the possibility

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<sup>164</sup> In maintaining this phenomenological claim, Smith (2002: 134-7) distinguishes the phenomenal character of perceptual experience from bodily sensation. In the latter case he suggests that bodily sensations may seem to be located in three-dimensional space and may seem to stand in spatial relations, but in bodily sensation – in contrast to perceptual experience – an experienced ache or pain is not presented as external and relative to a given sense organ. Perceptual experience, but not bodily sensation, seems to involve what Smith calls the “spatial *over-againstness* with which perceptual objects are given to awareness” (*ibid.*: 134; *emphasis in original*).

<sup>165</sup> For it to be a feature of the phenomenology in this sense is not sufficient for it to be graspable in thought, the latter plausibly has further requirements.

of being otherwise spatially related to the object, something could interpose itself so as to occlude the object, and so on. We can take this to be one expression of Evans' (1980) claim that perceptual experience seems, to the subject, to be a joint upshot of how things are in the world and certain enabling conditions on perception.<sup>166</sup>

The perspectivalness of perceptual experience is revealed in the phenomenal character, the objects of perception being presented as external and relative to the subject's sensory organs; the partialness of perceptual experience is to be characterised in terms of the subject's awareness that the perspective she occupies is one of many possible perspectives upon the object. To capture the sense in which what a subject sees from her perspective is partial, we can consider how there is "a kind of *overflowing* in the world of 'things': there is, at every moment, always infinitely more than we can see..." (Sartre, 1940: 9). That there are, at every moment, always more things than the subject can see – and more perspectives than the one the subject occupies – is easy enough to illustrate.

Building on the discussion of the previous section, we can say that in the case of objects of experience that seem to be extended in three spatial dimensions, the subject's position relative to the object (where this includes the distance from the object) alters how much of the object can be seen, as does whether an object is opaque, translucent, or transparent. From one side of an object the subject will see features she would not see from the other side. From a great distance, very few fine-grained details will be made out, whether the object is opaque or transparent. From very close such fine-grained details may be seen, but other parts of the object may not. Small blemishes/scratches on the surface of an object may be seen when the subject is very close to the object, but from this

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<sup>166</sup> In Evans' discussion, the central interest (through critical discussion of Strawson) is the necessary conditions on experience if it is to form the basis of an explanation of our belief in an objective world, and of our related belief in the continued existence unperceived of the objects we perceive. Evans says that the subject requires some rudimentary theory, or form of theory of perception; that "[this] is the indispensable surrounding for the idea of existence unperceived, and so, of existence perceived... the two ideas are sides of a single idea: the idea of an objective world" (Evans, 1980: 262). To say that this is required does not commit one to the claim that it must be actively or reflectively deployed by the individual. For greater discussion of the awareness a subject has of the world as existing objectively, on the basis of her experience, see Eilan (1997 and 2011).

distance – depending on the size of the object – the subject may not see some of the parts which she could see from a distance, because they now fall outside of the visual field (I say more about this below). We might suppose that a subject will see more of a transparent object from a given perspective than an opaque object, because she may see marks on both its front and rear side from a given position relative to it, whereas she can only see features of the front side of an opaque object. This is not, however, to say that she sees all portions of the transparent object from a given position relative to it – it is plausible that there will be blemishes or scratches on the surface she will only see if held very closely. If the subject holds an object at a certain distance from her eyes she may see the shape of the object but not all of its fine-grained features, and holding the object closer to her eyes she may see more of its features although she cannot now see the outline of its shape.

To say that visual experience is perspectivally-partial is therefore to say that in visual experience a subject occupies a manifest perspective – where this seems to be one of many possible perspectives – upon the objects within that three-dimensional region of space. From any such point of view one only seems to see some part of the objects that fall within that region. The notion of perspectival-partialness can be elucidated further by distinguishing it from another way in which we can construe a subject’s visual experience of space as being partial. Call this field-partialness, where this notion is invoked in order to capture the limited extent of a sensory field. The notion of a sensory field is a region with certain limits, such that if some relevant stimulus was to appear within these limits (in the sensory field) it would be possible for the subject to experience it (assuming the normal operation of that modality). To this extent, the notion of a sensory field can be characterised counterfactually.

In vision, we typically seem to be visually aware of a region of space within which objects *can* be seen,<sup>167</sup> and this region seems to extend wider in space than the subject’s perspective upon it. The limits of this spatial region, given in experience, do not positively seem to be the limits of all of the space that there

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<sup>167</sup> As Martin says: “[Sight] is experience of objects external to one as arranged in physical space... Normal visual experience is essentially experience of objects as they fall within the visual field...” (Martin, 1992: 210). See Chapter 3, section 4.1., for further discussion of this claim.



is.<sup>168</sup> Reflecting on our experience, we are aware that the spatial extent of the visual field is a sub-region of all of the space that there is; by turning our head we can make it the case that we are now aware of a distinct sub-region of space.

To illustrate the notion of field-partialness, consider a subject holding a pumpkin close to her face, so that – from her relative position – she cannot see at least some portion of the edge of the pumpkin (because it falls outside of her visual field). While some portion of the pumpkin’s front facing surface shows up in the qualitative character of the subject’s experience, by stipulation some portions do not (because these portions of the pumpkin fall outside the visual field). To this extent, the limitations of the subject’s visual field result in her experience of the object being partial.

An appeal to field-partialness does not do the work of explaining how we seem to experience objects as voluminous while only seeing some portion of the object. Whether the object and the experiencing subject are positioned relative to one another in such a way that the object falls partly within and partly outside the visual field, or completely within it, in each case the object is experienced as a voluminous whole.

Appeal to the sense of perspectival-partialness does do the work of explaining how we are to maintain both the Object and Surface Claims. In visual experience we manifestly experience objects and we manifestly do so from a relative perspective. The object presented in experience seems to be something that affords other perspectives upon it in space and the subject’s spatial location relative to an object seems to determine the portions of the object that she can see and those portions that she cannot.

On Noë’s proposal, it appears as though the sense in which an object features in experience is reduced to a sense in which all portions of an object’s surface features in experience (through the subject’s sensorimotor understanding). I

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<sup>168</sup> Soteriou (2011) further says that the subject can become aware of the limits of this region as being determined by her own sensory limitations, when (for example) by squinting, or closing one eye, she makes this region of space decrease in size. Soteriou refers to the visual field as a structural feature of experience, where this an aspect of the manner in which a subject presented with entities she is consciously aware of in perceptual experience.

suggested that such reductionism, be it implicit or explicit, motivates the thought that the Object and Surface Claims are in tension; such reductionism and supposed tension between the claims can be rejected. In contrast to Noë's dispositional account of the phenomenal character of experience, we are to appeal to the manifest perspectivalness of perceptual experience.

## **2.2. A place for presence in absence**

In offering the above proposal we need not deny that the subject will have expectations about how a tomato, for example, will look when she changes her position relative to it; nor need we deny that such expectations may show up in her visual experience in some sense.<sup>169</sup> What we do deny, in offering the above proposal, is that such expectations need to be appealed to in order to explain how the subject experiences *the tomato* rather than merely some portion of its front facing surface.

And yet, it can be granted that Noë's appeal to presence in absence is not without merit. In a given case of visual experience, such as seeing a tomato, there may be expectations about how occluded portions of the tomato look. To adequately characterise how things are for the experiencing subject, I have suggested that we need to appeal to how she manifestly occupies a perspective in space relative to the objects – and the region of space – presented. We may think that the phenomenology is committal – to an extent – on what is filling some of this space, beyond the object's occluding surface and perhaps beyond the limits visual field. This is not to say that the sensory properties of that which falls in the region of space that lies outside of her visual field, or that lies behind an occluding object or surface, are presented in the subject's perceptual experience.

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<sup>169</sup> That is, we can grant that there is a sense in which "...we seem to be *visually aware* of more than what is visually present or... *apparent* to us" (Dokic, 2018: 181). However, rejecting the reductive assumption, we need not take this to be part of an explanation of how we experience voluminous objects.

Talk of what the phenomenology is committal on, in this context, should be read in terms of a sense of expectation.<sup>170</sup> (It is not that the perceptual phenomenology is to be cashed out in terms of expectations, but that such expectations can be explained, at least in part, by the phenomenology.) The subject has certain expectations regarding the layout of the environment around her and how things would look if she occupied a given perspective on an object or a region of space. There is plausibly a role for something akin to presence in absence in characterising how things are for the experiencing subject, if it is understood in terms of such expectations. This could also be put in counterfactual terms, that the subject would be surprised if things turned out otherwise. This is not to say that the subject actively entertains any such expectations in thought, or that how things look from another point of view (other than the point of view the subject occupies in actual fact) is presented in the perceptual experience.

In addition to being manifest in the phenomenology that the subject possesses one of many possible points of view upon an object, how things are for the subject may be committal on what the object would look like if the subject possessed a different position relative to it. Insofar as one takes the phenomenology to be so committal, this may be more or less fine-grained. In the example of a subject holding a pumpkin close to her face, by stipulation it was said that some portion of the pumpkin's front facing surface lies outside of her visual field. It is nevertheless plausible that how things are for the subject is committal – at least in the typical case – to some of what lies beyond the extent of the visual field; that if the subject turns her head to look, there will both be more space there, and also more pumpkin filling that space. How things are for the subject is committal – at least in the typical case – both to the pumpkin continuing on beyond the limits of the visual field and to it continuing on beyond the surface and filling a given region of three-dimensional space.

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<sup>170</sup> We might think of this in terms of anticipations concerning how the object would look if we occupied a different perspective relative to it. Husserl often appealed to 'anticipation' to describe the way in which the 'co-given' is present in perceptual experience. He says, "there belongs to every external perception its reference from the 'genuinely perceived' sides of the object of perception to the sides 'also meant'—not yet perceived, but only anticipated and, at first, with a non-intuitional emptiness... the perception has horizons made up of other possibilities of perception, as perceptions that we *could* have, if we *actively directed* the course of perception otherwise" (Husserl, 1931: 44).

It may be that how things are for the subject is committal on the pumpkin being visually similar on its reverse surface to its front facing surface (that, all else being equal, it is committal to uniformity of shape, colour, and so on); that it is committal on it having certain distinctive markings (perhaps as a result of previously seeing *this* pumpkin from other angles, or other pumpkins); and/or that it is committal on certain signs the subject is familiar with being complete. For an example of the latter, if in a given region fruit and vegetables are labelled with large stickers, and looking at the pumpkin a subject can – from her position – see the letters “U M P K I” on a label, how things are for the subject may be committal on there being the letters “P” and “N” on portions of the label which are out of view.<sup>171</sup>

The phenomenology may be committal on where the edge of the pumpkin – which falls outside the visual field – is to be found, on the pumpkin’s reverse surface having a given colour and/or shape, and on the letters “P” and “N” being at either end of the label. This may be true while sensory qualities corresponding to such features are not presented in the subject’s perceptual experience; this is, plausibly, part of what motivates the Surface Claim, as well as motivating Moore and Broad’s claim that we only strictly speaking see the front facing surface of such objects.

What a subject makes of the scene/object being viewed may well depend on previous experience of the scene/object in question as she has – on this occasion – moved around it; as she has encountered it on other occasions; or perhaps as she has encountered relevantly similar scenes/objects on other occasions. To this extent, what a subject makes of some scene/object may be context-

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<sup>171</sup> This may be related to how Kind (2018) construes the presence of the ‘Diet Coke’ lettering, when the subject can – from her position – only see a couple of the relevant letters on the can. We can allow for the sake of argument that an object can be experienced as ‘a Diet Coke can’ (in support of the view that high-level properties do feature in the phenomenal character of perceptual experience, see Siegel, 2006 and 2009; in opposition, see Prinz, 2006b; on the importance of distinguishing between perceptual and non-perceptual phenomenology in such cases, see Butterfill, 2009). Granting that it is part of the representational content that it is a Diet Coke can, we can also allow that, in order for the experience to have this content, it is necessary that the subject’s experience is committal on what the can would look like from other perspectives in space (that other portions of the lettering would be seen, for example). This may be part of the story of what it is to see something as a Diet Coke can, it does not follow that this is also part of the story of what it is to see the can as a voluminous object.

relative.<sup>172</sup> This is one way of interpreting Sartre's claim that "[o]ne must *learn* objects, which is to say, multiply the possible points of view on them. ...What does this signify for us? The necessity of *making a tour* of objects, of waiting, as Bergson said, until the 'sugar dissolves'" (Sartre, 1940: 8; *emphasis in original*). Whether the reverse of the object has been seen by the subject previously, whether other objects of this kind have been seen by the subject previously, whether the object is completely novel to the subject, and so on, may impact upon what it is like for the subject when she perceives the scene before her.

To be clear, I am suggesting that there may be some way in which expectations show up in the phenomenology, though I remain noncommittal on that claim, but we do not need to appeal to a subject's expectations about the sensory qualities of these occluded portions of an object in order to explain what it is for her to experience it as an object. Having demonstrated that we can satisfy the Object and Surface Claim while rejecting the reductive assumption, and that we can allow that there might be a role for something akin to presence in absence in giving a complete account of the phenomenology, we can turn to consider how Noë extends his proposal to the temporal case.

### **3. Experiencing events**

In addition to providing an account of what it is like to experience objects, Noë also provides an account of what it is like to experience events. Responding to criticism from Clark (2006),<sup>173</sup> who claims that Noë's sensorimotor account is ill-equipped to accommodate for temporal features of our perceptual experience,

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<sup>172</sup> We might think that this will depend upon the perceptual recognitional capacities of the subject. See Dokic (2010) for a discussion of this point.

<sup>173</sup> Clark appeals to an example given by Kelly (2005) in which we are to imagine hearing an opera singer holding a high C note. The nature of Clark's claim against Noë and the finer details of Kelly's example need not concern us here. (It is worth noting that there is a lot going on in Kelly's example, perhaps more than Kelly or some recent commentators have explicitly acknowledged, such as: our perceptual experience of temporal properties; how preceding experience impacts upon current experience; how our understanding may impact upon our experience; and whether there is any role for short-term memory in the phenomenal character of a subject's ongoing experience.) The focus in what follows will be on how Noë explains some of the temporal features of our experience in an analogous way to his explanation of our experience of objects, and what analogies and disanalogies we can draw out in developing his proposal.

Noë poses the following puzzle: “*How is it possible, at a moment in time, to experience an event, something which has no existence at a moment in time?*” (Noë, 2012: 77).<sup>174</sup> This question appears to parallel the question which Noë addressed in the spatial case, where his concern was our experience of objects. The question in the temporal case concerns how we perceptually experience an event (temporal particular) as a temporally extended whole, while only ever perceptually experiencing a temporally limited portion of the event at a time.<sup>175</sup>

Behind Noë’s way of posing these questions in the spatial and temporal cases there appears to be an implicit assumption of a commonality between our experience of objects and events. For Noë, there is a sense in which we seem to perceptually experience an object, and experience it as a voluminous whole, while not seeing some parts of that object (or its surface) from a given spatiotemporal location. Similarly, he appears to hold that there is a sense in which we seem to perceptually experience an event, and experience it as a temporally extended whole, while not seeing some parts of that event from a given spatiotemporal location. The aim in the current section is to present Noë’s position and to highlight two questions which remain.

Having posed the question concerning our experience of events, in offering a solution Noë draws the following comparison between the spatial and temporal cases: “It is not *the past* that is present in the current experience; rather, it is the trajectory or arc that is present now, and of course the arc describes the relation of what is now to what has already happened (and to what may still happen) ... Just as in a way the front of the [everyday three-dimensional object] is directed toward the back – indicates the space where the back is to be found – so the present sound implicates a temporal structure by referring backwards and

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<sup>174</sup> It is worth noting that – pace Noë – there are events that can be said to exist at a moment in time (even if they are realised as a result of what occurred over some preceding interval). As put by Vendler: “One reaches the hilltop, wins the race, spots or recognizes something, and so on at a definite moment” (Vendler, 1957: 146). However, granting that there are instantaneous events, such as the event of crossing a finish line, the question as to how we perceive such events isn’t necessarily any easier than it is in the case of extended events. In what follows I will focus on events of some temporal extension.

<sup>175</sup> I offer an account of our experience over super-intervals in the preceding chapter. My current concern is not with rehearsing the details of the positive proposal offered in Chapter 3, but with how a subject’s experience of temporally extended occurrences and her perspective in time differs from the spatial analogue.

forwards in time” (*ibid.*: 77-8). In the case of objects, Noë says that a subject seems to experience the object as a voluminous whole because of how the portion she is in visual contact with implicates the rest of the object extending in space (in virtue of her sensorimotor understanding). Analogously, he suggests that visual (or auditory, or so on) contact with some portion of an event implicates, in the perceptual experience, the rest of the event extending in time. Noë wants to be careful to insist that we do not strictly hear a past sound concurrently with the present sound (the past and future portions of the event do not seem to be audibly present concurrently with the present portion), but he holds that the trajectory/arc is present. This is how Noë takes it to be possible, at a moment in time, to experience an event, something which he says has no existence at a moment in time.

As may be obvious, this sort of analysis will not work for any old event – for any temporal particular of some extent. Noë is explicit in recognising how his account entails this result. As he puts matters, “[not] any old sequence of occurrences is an event in this sense; events are sequences with a *sense*; they unfold in a direction according to a rule” (*ibid.*: 78). Calling these temporal particulars meaningful events, Noë says that the past and future parts of the event are not present in one’s experience now – from one’s current temporal perspective – but they are implicated by it, and that the “able perceiver appreciates this” (*ibid.*). Mention of *meaningful events* as events with a *sense*, and this being something an *able perceiver* appreciates, highlights how – for Noë – perceptual experiences are activities of skilful engagement with one’s environment.<sup>176</sup> On the account Noë offers, characterising the phenomenal character of one’s perceptual experience requires appealing to more than what is perceptually present (*as present*) from a subject’s point of view; this is the case in both our experience of objects and events.

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<sup>176</sup> That Noë’s account will only be applicable to certain temporally arranged occurrences may strike the reader as problematic in and of itself. While the scope of Noë’s account could be problematic in this regard, more would have to be said in order to demonstrate that it is so. Consider by analogy how not any spatial particular, or spatial arrangement of stimuli, is an object (or will be experienced as an object); Noë may suggest that the same is true in the temporal case and that he is picking out those cases which are experienced as *wholes* in the relevant sense.

We should not attribute the implausible claim to Noë that events are experienced as *temporally-voluminous* wholes, as the voluminous-claim is tied to spatially extended three-dimensional objects. But Noë does appear to take there to be an analogy tied to the notion of spatial and temporal *wholes*. In the spatial case, reflection on the phenomenal character of experience supports the claim that we experience objects from a given spatial location relative to the object, a location from which we cannot see some parts of the object. Noë takes there to be an analogous claim to be made in the temporal case; that reflection on the phenomenology supports the claim that we experience events from a given temporal location, even though we do not see (or hear, and so on) some parts of the event from this location.

There are different ways of interpreting Noë's proposal and the commonalities he draws between our typical experience of objects and events. In order to better appreciate Noë's proposal and to appreciate the sense in which we do – and the sense in which we do not – seem to have a point of view in time, there are two particular issues we need to address.<sup>177</sup> Firstly, how are we to understand the claim that we experience events at a time, rather than simply holding that we experience events through experiencing their temporal parts in turn? Secondly, how are we to understand the distinction Noë draws between the spatial and temporal cases, where in the temporal case Noë says that the past and future parts of the event are not presented as temporally present in one's experience – in contrast to how the other spatial parts of an object are – but they are implicated by it? In addressing these questions, we can gain a greater understanding of the phenomenological differences (and similarities) between the perspective a typical experiencing subject seems to occupy in space and in time, and corresponding phenomenological differences between her experience of objects and events.

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<sup>177</sup> My interest in what follows is in the truth of the matter, in how we are to accurately characterise our experience of temporally extended occurrences, rather than in faithfully presenting Noë's expressed view. If the two come apart, I will focus on the former.



#### 4. Experiencing *in time*

How we experience events in time is not directly analogous to the case of experiencing objects in space. A subject's visuo-spatial field contains three dimensions of spatial extension; this is not true of the temporal case. As a result of our visual experience typically being of three-dimensional objects in space, and of events in the single temporal dimension, some object or object-part can be occluded or 'hidden' from sight, from a relative perspective, in a way in which a temporal part of the event cannot.

To avoid confusion, it is true that we can construe events as having both spatial and temporal parts, and some spatial parts can seem to be occluded from view by other spatial parts. This is not the case with temporal parts. One temporal part does not seem to occlude another; the occluding role played by opaque surfaces in three-dimensional space does not seem, to an experiencing subject, to be played by a temporal part of an event in the single temporal dimension. It is not as if *the most recent instant*, or something to that effect, seems to play the role of a temporal surface.

Perspectival-partialness is a phenomenological ingredient of our typical visual experience of objects in three-dimensional space, where a subject manifestly occupies one of many possible perspectives upon an object and where there seems to be more, to the subject, than she can see from her relative point of view. (Where a subject could see more/other spatial parts if only she occupied a different point of view in space relative to the object.) It is not a phenomenological ingredient of our typical experience in the temporal case. The subject does not seem to occupy one of many possible perspectives in time on the occurrence given in perceptual experience over the PSP; it does not seem to the subject as though she could possess a different perceptual perspective in time on any given temporal part. To be charitable, we should not understand Noë's appeal to an analogy between our experience of objects and events in terms of there being a role in each case for perspectival-partialness, or else the proposal would be immediately objectionable.

One thought may be that even if there is no perspectival-partialness – as it has been characterised – in the temporal case, there could be another way in which the notion of perspective could be appealed to in order to explain how we experience events from a point of view in time. Recall how Peacocke described the perspective a subject possesses in the spatial case as featuring three axes of extension from a point of origin. The suggestion might be that we could describe the temporal case as featuring a single earlier/later axis of extension which a subject has a point of view upon. There are at least two ways of understanding how this suggestion can be used to flesh out Noë's proposal. On the first, we could say that the subject seems to experience an event as spread out through some interval of time from a time within this interval, in much the same way as an object is experienced as extended through space from a location in space, albeit with the proviso that the temporal case is one dimensional. So stated, the proposal would be uncharitable and contrary to a distinct aspect of the perceptual phenomenology: temporal transparency.

As discussed in the preceding chapter, in reflecting upon the phenomenal character of visual experience a subject can distinguish between the spatial location of her experiential perspective and the apparent spatial location of the object of perceptual experience; this cannot be done in the temporal case. Objects of visual experience seem to be distally located with regards to the subject and they can also seem to be of a greater extent than the experiencer's perspective (extending along the left/right and up/down axes); this is something evident in the phenomenology. In the temporal case matters are not analogous. From reflection upon the perceptual phenomenology, a subject cannot distinguish between the temporal location of her perceptual perspective and the apparent temporal location of that which she is perceiving; the latter does not positively seem to be spread through a greater interval of time than the former. A more charitable interpretation of how the above suggestion can be used in order to flesh out Noë's proposal would appeal to how, while there is no perspectival-partialness in the temporal case, we might think that there is field-partialness.

We typically take ourselves to experience events over the time over which they occur.<sup>178</sup> A subject does not seem to experience a whole song now, at a time, but over the time it takes to play the song.<sup>179</sup> Yet we might nonetheless think that what she experiences now, over the PSP, will depend in some sense on what she takes herself to be experiencing over a greater interval. For example, we would want to say that there is a phenomenological difference between hearing a bar of music as part of a song and hearing a bar of music played in isolation (not as part of a song occurring over a greater interval). This reveals a sense in which there seems to be field-partialness – and a form of awareness of times beyond this field – in the temporal case.

On this second way of developing Noë's proposal, how things are for an experiencing subject depends on her being aware of other times: both that there were earlier times/temporal parts she experienced, and that there will be later times/temporal parts she will experience. The temporal location of the subject's perceptual point of view is transparent to the apparent temporal location of that which is being perceived; yet, how things are for the subject is not completely transparent to the interval of time she is perceptually aware of. If it was, we would struggle to explain why she continues to stare at the TV screen as the football match builds to a climax, as there would be no expectation that the match should continue to unfold in the future. In much the same way as how things are for the typical subject is committal – to an extent – regarding what lies beyond the limits of the visual field, how things are for the subject may also be committal regarding what occurred immediately prior to and/or will occur immediately subsequent to the time presented in perceptual experience: perceiving a bar of music *as* part of a song, for example.

This way of developing Noë's proposal, as laid out above, offers us one way of responding to the first question from Noë's discussion. We can maintain the plausible claim that it takes us at least as long to experience a song as it takes for the song to be played. We are not to understand the claim that we experience

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<sup>178</sup> See my Chapter 3.

<sup>179</sup> Where this need not entail that what we experience over time is to be accounted for in terms of the sum of what we experience at each *instant* in the interim, see Chapters 2 and 3 for further discussion of this point.

events at a time in a way which would lead to denying that we experience events through experiencing their temporal parts in turn, or in a way in which would require us to deny temporal transparency. When Noë says “the present sound implicates a temporal structure by referring backwards and forwards in time” (Noë, 2012: 78) we can understand him to be saying that the phenomenology is committal on what occurred immediately prior to what one is currently perceiving and what will occur immediately subsequently. This is the sense in which there is field-partialness in the temporal case, though not perspectival-partialness.

The final matter to consider concerns the distinction Noë draws between the point of view a subject seems to occupy in space and time. Noë says that “to experience an *event*...is not to experience something whose hidden parts are present but out of view [as is the case with objects]. It is to experience something whose past and future parts are precisely *not present*” (*ibid.*: 77). Noë says that the past and future parts of the event do not seem to be present now, in contrast to how the other spatial parts of an object do seem to be. This distinction is plausibly related to the claim that the time a subject is perceptually aware of seems to the subject to be a sub-interval of a greater interval (or which that sub-interval is a part). Whether or not we agree with such a claim will depend upon what we take it to entail.

Phenomenologically speaking, the experiencing subject does not seem to occupy a perspective in time in the same sense as she does in space. As previously stated, it does not seem as though she could just as well be experiencing the same occurrences – which occupy the same temporal location – but from a different relative temporal location. However, it is not as though the time a subject is perceptually aware of positively seems to the subject to be all of the time that there is, was, or will be. The temporal part a subject is experiencing, that which is presented over the PSP, can be experienced as a temporal part of a greater occurrence (such as perceiving a few notes as a temporal part of a greater piece of music).

This is how we can understand Noë's claim that the past and future portions of a perceived event do not seem to be *present* in the way in which the reverse surface – or the spatial portions falling outside of the visual field – of a perceived object do. In the spatial case, to the extent that how things are for the subject is committal to there being *other* spatial regions (behind the object and beyond the limits of the visual field), it is committal to those regions being there *now*.<sup>180</sup> In the temporal case, to the extent that how things are for the subject is committal to there being *other* times (beyond the limits of the PSP), it is committal to those times as preceding or succeeding the interval presented over the PSP.

The idea just outlined is related to a further point, which we can draw out of Soteriou's claim that "...the extent of the temporal interval one is aware of does not seem to one to be determined by one's sensory limitations. In this respect, one's conscious perceptual experience of limited temporal intervals is quite unlike one's visual experience of bounded regions of space" (Soteriou, 2011: 203-4). We can understand this difference in the following way. When an object moves from one's visual field – whether it is the subject or the object that moves – it does not seem to the subject as though the object is no longer there should she wish to look at it again. This point can also be made regarding an object which falls partly within and partly outside of the subject's visual field; there is a sense in which those portions of the object which the subject is not visually aware of from her current position do seem to be there in space, should the subject wish to look at them. Space – not just objects – seems to be there for the subject's exploration of it.

The above is not true of the temporal case. Once an occurrence is over – once the subject has perceived it – then it does not seem to the subject as though she can return to observe it again. The temporal case features an asymmetrical awareness of times either side of the PSP: there is the time/occurrence which has been experienced and so is no longer there to be experienced, and there is the time/occurrence which will be there to be experienced in the immediate future. The subject can anticipate other occurrences unfolding in the immediate

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<sup>180</sup> While I have suggested that this is recognised by Noë, as discussed previously Kelly (2008) can be read as criticising Noë for nevertheless failing to satisfactorily account for this.

future, she does not seem to be stuck in time, but time does not seem to be there for the subject's exploration of it in the way in which space does.<sup>181</sup>

In summary, experiencing subjects are perceptually presented with a positive but limited spatial and temporal extent. Capturing how things are for the subject typically also involves appealing to a sense in which the subject is aware of other regions of space and/or intervals of time which go beyond that region/interval she is perceptually presented with. In the spatial case a subject's experience is perspectively-partial, the subject seems to possess one of many possible perspectives in space upon that which she is perceiving; this is not true of the temporal case. In three-dimensional space, in which one has a distal point of view, the spatiotemporal occurrences a subject perceives seem to admit of many possible perceptual points of view in space. In one-dimensional time, in which one has a temporally-transparent perceptual point of view, spatiotemporal occurrences do not seem to admit of any other possible perceptual points of view in time.

## **5. A perspective in time: contemporary debates**

### **5.1. The temporal microstructure of experience**

As in Chapter 3, I do not take the discussion of the phenomenal character of experience presented above to settle the question of the view of the temporal microstructure of experience we are to take. However, readers familiar with contemporary debates may be suspicious that what has been said above proves too much. Within such debates, theorists endorsing a retentional view can be read as saying that an experiencing subject has a perceptual temporal perspective, a perspective which reaches some way into the past (and perhaps also the future) from the present. It may be thought that such accounts have been ruled out by the considerations presented above, but it should be clarified that while what I

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<sup>181</sup> In Chapter 5 I argue that this is related to the sense in which time seems to pass, for the subject.

have said in the present chapter does stand in contrast to *modal* retentional views, it remains consistent with *non-modal* retentional views.

The claim that there is a disanalogy between the perspectival nature of visual experience in the spatial and temporal cases – in that the former does, and the latter does not, feature perspectival-partialness – does not automatically gain traction against the retentional view. There could, of course, be particular retentional accounts which are inconsistent with the proposal put forward in section 4, such as the modal variants (to the extent that they would require one to deny the temporal transparency of perceptual experience). But in principle a retentional view need not deny the features of the phenomenology I have described.

There is a sense of perspectival-partialness and sense of occlusion in the spatial case which is not present in the temporal case. This does not speak to the issue of what view of the temporal microstructure of experience one takes. I have appealed to the absence of a perspectival nature to be revealed in the phenomenology in the temporal case (in contrast to the spatial case); this may be orthogonal to the retentionalist's concerns and something she could accept. Insofar as retentionalism and extensionalism are views concerning the temporal microstructure of experience, the proponent of either can maintain the disanalogy between the experience of objects and events. On retentional and extensional views, an experiencing subject is taken to have something akin to a limited temporal field (the PSP); on both views we can make sense of field-partialness.

## **5. 2. The DSM and Noë: a brief comparison**

As a final aside, the reader may wonder how the current discussion relates to the discussion of Chapter 2. Both Noë and dynamic snapshot theorists appear to take a subject to have visual access to something like the present moment/instant, with the former appealing to an intentional trajectory/arc which is also present in the experience at that time, while the latter appeals to

vectors ‘painted on’ what is perceptually presented as being the case at that time. These differences appear to reflect a difference in what the theorists take to be required in order to provide an adequate characterisation of the experiential phenomenology, at least within their respective explanatory projects.

Dynamic snapshot theorists appear to be concerned with accounting for how we experience motion/change, offering a candidate causal story about how our perceptual systems integrate information over time. Within this context, it is suggested that we need only appeal to experiential snapshots and vectors ‘painted on’. I argued that there is more to a subject’s experiential phenomenology than spatially-ordered states of affairs (like snapshots) and movement/change; I argued against the idea that an appeal to a series of snapshots (and vectors) can adequately characterise the phenomenology.

Noë is concerned with providing a richer causal story than the dynamic snapshot theorist – appealing to sensorimotor understanding – and accounting for our experience of time-filling temporal particulars. Within this context, he introduces an apparent analogy with the spatial case, an analogy with seeing a particular object as a voluminous whole though only in perceptual contact with a portion of the object from a relative perspective. In this chapter, I have demonstrated that there are analogies that can be drawn between our experience of objects and events, as well as the experiential point of view we occupy in the temporal and spatial cases – each featuring field-partialness. There are also significant disanalogies.

The temporal case, unlike the spatial case, is not perspectively-partial; and the temporal case features an *asymmetrical* awareness of times either side of the PSP – that which has been experienced and so is no longer there to be experienced, and that which will be there to be experienced in the immediate future – unlike the spatial analogue. In the spatial case, the subject plausibly has a form of awareness of the regions of space surrounding the sub-region captured by the visual field, but this awareness does not feature the asymmetry evident in the temporal case. This latter idea is related to the sense in which space seems to be there for our exploration in a way in which time does not.



## Concluding remarks

In this chapter I have been concerned with several questions in the philosophy of perception and temporal experience. The overarching interest has been how similar our experience of objects and events is, and how similar our manifest experiential point of view in space is to our experiential point of view in time. To return to the opening metaphor, are they *Blood Brothers*, or distinctly different?

I suggested Noë provides an illustration of some of the ways in which the two are and are not analogous. Noë presents a candidate solution to an issue which many theorists have found to be puzzling – the sense in which we experience objects as voluminous wholes while not seeing some portions of the objects' outer surfaces. I argued that Noë's proposed solution to this puzzle leaves us in the unwelcome position of denying (or importantly qualifying) a very plausible phenomenological claim. On the proposal I have offered, we need to appeal to how it is manifest to the subject that she is experiencing an object from a relative perspective. The perspective she possesses is one of many possible perspectives on the object and from other perspectives she could see more/other portions of the object. One's visual experience of objects has a sense of perspectival-partialness.

Having discussed the spatial case and a subject's typical visual experience of objects, I turned to consider the phenomenal character of our experience of events. Noë provided a good foil because he offers an analogous account of our experience of objects to our experience of events. For Noë, perceiving a portion of the object can implicate, in the perceptual experience, the rest of the object extending in space, and perceiving some portion of an event can implicate, in the perceptual experience, the rest of the event extending in time. This is, for Noë, how it is possible at a moment in time to experience a temporally extended event.

Developing Noë's proposal, I demonstrated that in the temporal case our experience is not perspectivally-partial; spatiotemporal occurrences do not seem to admit of any other possible perceptual points of view in time. Yet, getting

right how things are for the subject requires an appeal to the sense in which the subject has an (asymmetrical) awareness of the times immediately prior and subsequent to the time presented in perceptual experience: that there were earlier times/temporal parts she experienced, and that there will be later times/temporal parts she will experience. In the following chapter I argue that this asymmetrical awareness of times either side of the PSP is (partly) responsible for the sense in which time seems to pass, for the experiencing subject.

## Chapter Five

### On Time Seeming to Pass

*“Time involves a kind of movement or activity. It does not stand still. It waits for no man. Sometimes it even flies. Poets liken time to a river, bringing fresh events and sweeping away old ones. Time is always passing” (Olson, 2009: 440).*

*“We say that time passes or flows by. We speak of the course of time. ...If time is similar to a river, it flows from the past towards the present and the future. ...But this often repeated metaphor is in reality extremely confused. ...The fact that the metaphor based on this comparison has persisted from the time of Heraclitus to our own day is explained by our surreptitiously putting into the river a witness of its course” (Merleau-Ponty, 1962: 366).*

In discussions of the philosophy of time, theorists often appeal to an ingredient of our wakeful, phenomenally conscious experience as evidence of a certain metaphysical view of time: that time flows or passes.<sup>182</sup> This kind of metaphysical claim is itself difficult to offer without resorting to metaphors of streams, flowing water, or other forms of movement. Without resorting to metaphors – and whether or not it is true that time does in fact pass – it is worth pausing to consider what this apparent ingredient of a subject’s phenomenally conscious experience amounts to. In what follows I maintain the phenomenological focus which has been present throughout the thesis; the issue of interest is not whether time *does* pass, but whether time does *seem* – in a phenomenological sense – to pass; if so, in virtue of what?

Within academic discussions and literature written for a more general audience, it is widely claimed that there is such an ingredient of a subject’s experience:

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<sup>182</sup> This is suggested by the passage from Norton (2010) below. Craig (2000) also presents such an argument from experience, when he says that experience is “a defeater-defeater that overwhelms any B-theoretic arguments against the reality of tense” (Craig, 2000: 138). See also Balashov (2005) and Falk (2003).

“[T]he flow of time, or passage, as it is known, *is given in experience*, ...it is as indubitable an aspect of our perception of the world as the sights and sounds that come in upon us...” (Schuster, 1986: 695; *emphasis added*).

“There is hardly any *experience* that seems more persistently, or immediately given to us than *the relentless flow of time*” (Schlesinger, 1991: 427; *emphasis added*).

“...something in the way of ‘now’ must surely be inaccessible to non-experiencers. What that is, seems to be a direct consequence of their incapacity to experience the passage of time” (O’Shaughnessy, 2000: 50).

“[A]s a human being, I find it impossible to relinquish the sensation of a flowing time and a moving present moment. It is something so basic to my experience of the world...” (Davies, 1995: 275).

“Time really passes ... *Our sense of passage is our largely passive experience* of a fact about the way time truly is, objectively” (Norton, 2010: 24; *emphasis added*).

It might be surprising to some readers that whether or not our experience presents time as passing is a debated issue. It is tempting to think that time either does or does not seem to pass, and whichever is true should be remarkably obvious whenever we come to reflect on our experience. Given the current state of the literature, this would not appear to be the case.<sup>183</sup> Some theorists have claimed that time does seem to pass, suggesting various candidate explanations of what the experience of time passing amounts to;<sup>184</sup> others have insisted that

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<sup>183</sup> There might be reason not to expect that this should be something obvious to a given subject. The experience of *time* is an issue which is liable to confuse people, as time (much like space) does not show up in a subject’s experience in the sense that shape, brightness, or change do. As we seem to experience time (or space) in virtue of experiencing temporal (or spatial) relations, asking whether *time itself* seems to pass – and even asking what it means to say that time seems to pass – is liable to create some confusion, or at least pause for further thought.

<sup>184</sup> There are a number of proposals which could be appealed to, but which I do not have the space to consider here. Torrenco (2017) presents a phenomenal modifier (or what might be called a projectivist) account of the experience of passage. While I am sympathetic to much of the motivation behind Torrenco’s account, I take the proposal I offer in section 3 to be an independently motivated alternative. Phillips (2013) gives an account of the phenomenology of time passing in terms of the direct perception of durations relative to a non-perceptual stream of consciousness. Insofar as Phillips’ account is of the *rate* at which time seems to pass, much of what I say may be compatible with his proposal. Skow (2011 and 2012) offers a view on which time seems to pass because, in part, time *does* pass. Though the author later appears to change his mind on this matter (Skow 2015).

these theorists are misclassifying aspects of their experience,<sup>185</sup> taking what is really the experience of something else to be the experience of time passing.

To give substance to this disagreement, in section 1 I generate a puzzle about how time could seem to pass in perceptual experience. I set out two proposals from the literature which can be read as attempts to solve this puzzle, a reductive proposal which appeals to the perception of motion/change is presented in section 2.1, and a proposal which appeals to the objects of perception being presented as enduring is presented in section 2.2. I argue that although these proposals provide some valuable insights, given some independently plausible assumptions it remains puzzling how there could be a sense in which time seems to pass in perceptual experience. In section 2.3, I argue that the puzzle cannot be bypassed by simply making an additional appeal to episodic memory. In section 3, drawing on aspects of the accounts discussed in section 2 (and the tripartite temporal structure of experience appealed to in Chapters 3 and 4), I offer a proposal which does allow us to bypass the puzzle without abandoning the idea that time seems to pass. On the positive proposal I develop, an appeal to ‘a witness’ is made less surreptitiously than Merleau-Ponty suggests it often is; I suggest that the temporal structure of an experiencing subject’s perspective is responsible for time seeming to pass.

### **1. Time seeming to pass: two assumptions and a puzzle**

A puzzle regarding the supposed experience of time passing can be generated when we try to reconcile two independently plausible phenomenological claims. Firstly, from passages such as those quoted previously, we can take it that time seeming to pass is supposed to be a pervasive, perhaps ever-present, ingredient of our wakeful phenomenally conscious lives. Secondly, there is the claim that

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<sup>185</sup> Such arguments appear to be presented by Callender (2008), Deng (2013a, 2013b, and 2017), Frischhut (2015), and Hoerl (2014). The latter is more narrowly focused in arguing that we do not seem to *perceive* time passing. These authors appear to be motivated, at least in part, to argue against the idea that experience supports the metaphysical view of time actually passing. It should be noted that in section 3 I offer an account of the phenomenology, the correct account of the metaphysics of reality is then a further question which I do not take the phenomenology to settle.

*perceptual* experience is temporally transparent.<sup>186</sup> Recall that, in my hands, temporal transparency is the following negative claim: it doesn't seem to the subject as though, through merely reflecting upon her perceptual phenomenology, she can mark out the temporal location of her perceptual point of view on an object or occurrence as distinct from the apparent temporal location of whatever object or occurrence it is that she seems to be perceptually aware of.

To generate the puzzle, let us take from Schuster (quoted previously) the claim that when we talk about the experience of time passing we are talking about *perceptual* experience. Consider a subject perceiving some occurrence, such as visually perceiving a ball rolling down an incline. What is it that she is perceptually aware of which can be properly brought out as time seeming to pass? One thought may be that the subject seems to be perceptually aware, at a given time, of the ball's journey from one location to another over a greater interval of time. Being so aware of the ball's journey, the subject might also be said to be aware of not only the ball's change in spatial (and temporal) location, but a change in some property of *time*, of some previous time seeming to give way to the time which seems to be *now*.

If a theorist was not concerned with maintaining the claim of temporal transparency, she might take this route and claim that a subject is perceptually aware, at one time, of the ball as occupying distinct spatial locations at *different* times. However, commitment to temporal transparency renders such an explanation unavailable.<sup>187</sup> Supposing that a subject is able to discern the time at which she seems to be perceptually presented with such an occurrence,<sup>188</sup> by temporal transparency she is unable – in introspection alone – to distinguish between the time at which she is so perceptually presented with the occurrence

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<sup>186</sup> See Chapter 3, section 1, for discussion.

<sup>187</sup> This does not automatically also create a puzzle concerning how a subject can experience change, something occurring over time, unless we make the further assumption that what is presented in perception is an instantaneous state of affairs – this does not follow from the claim that perceptual experience is temporally transparent. However, it might still be thought that the experience of change is closely related to the experience of time passing.

<sup>188</sup> In what follows reference to the time presented in experience, or to what is experienced as *at a time*, is not to pick out an instant, it is to pick out time as it is given in perceptual experience – the time a subject's perceptual point of view is transparent to. I will take this to be the interval of the PSP.

and a distinct apparent temporal location of the occurrence perceptually presented. From merely reflecting on the phenomenology, she does not seem to be perceptually aware of the ball in a given location as *just previous* or *past*.

To avoid conflicting with the claim of temporal transparency, a further thought may be that we need only appeal to how the subject first seems to be perceptually aware of the ball as occupying one spatial location at a given time and at a subsequent time seems to be perceptually aware of it as occupying another spatial location. Yet, while this may avoid violating the claim of temporal transparency, the experience that something is the case at one time and not at another time does not in and of itself provide a sense in which time itself has, or seems to have, changed. Perhaps this provides for a sense in which there seems to be more than one temporal location, but there being – and there seeming to be – multiple temporal locations is not sufficient for time to seem to pass. (For time to seem to pass there must be more than a change in perspective upon time, as a change in perspective upon space does not make it the case that space seems to pass. More will be said about this in section 3.1.)

It is not yet clear what it means for time to *seem* to change, pass, or flow, unless we are merely saying that each time can be said to seem to be present at the time at which it is presented in experience. But the claim that time seems to pass is certainly supposed to amount to more than the claim that at each time of experience it seems to be the time that it is. For there to be a change there needs to be something which is the subject of that change; it is as of yet unclear how time can seem to be the subject of such change.<sup>189</sup> I take the proposal I offer in section 3 to directly address this issue. Prior to offering a positive proposal it will be useful to consider some existing accounts, in order to draw attention to what they appear to get right and so should be accommodated, and where puzzles remain.

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<sup>189</sup> This being one of the issues widely discussed in the philosophy of time since McTaggart's (1908) argument for the unreality of time, an argument defended by Dummett (1960).

## 2. Accounts of why time seems to pass

### 2.1. From the perception of motion and change

To give a succinct summary of one way of accounting for the claim that time seems to pass, we can turn to L. A. Paul:

“I step out of my house into the morning air and feel the cool breeze on my face. I feel the freshness of the cool breeze *now*, and, as the breeze dies down, I notice that time is passing... Reflection on the qualitative character of such experiences suggests that events occurring now have a characteristic property of *nowness*, responsible for a certain special “feel,” and that events pass from the future to the present and then into the past” (Paul, 2010: 333).

Paul takes as a question to guide her enquiry: “... what exactly do we perceive when we are supposed to be perceiving passage?” (*ibid.*: 345). In the above passage an appeal to perceived change is tied to an awareness that time is passing.<sup>190</sup> Paul says that there is a distinctive qualitative character to a subject’s experience in cases of perceived change, over and above the experience of some object having a given property at a time and the experience of the same object not having that given property at a later time. Paul talks about this in terms of “an animated qualitative change” and the “animated, flowing character of our ordinary experiences as of change” (*ibid.*: 351). In saying this, I take Paul to have in mind a case such as when one looks at the second-hand of a clock and sees it moving around the clock face (as opposed to a case such as when one looks at the hour-hand of a clock and does not see it moving, even if after some time one can infer that it has moved). In what follows I will take it that Paul is right in this regard; to experience change is not merely to experience an object instantiate different properties at different times.

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<sup>190</sup> Paul also says that “experiences as of nowness and as of the passage of events are central to our subjective perspective. In some deep but hard to define way, our temporal experience is caught up with our sense of being, that is, our sense of what we are and how we are” (Paul 2010: 333-4). Paul suggests that “[m]aking sense of the features of temporal experience is fundamental to our ability to make sense of the world and of ourselves as agents in the world and bears important connections to one’s having a point of view and to one’s sense of being a self” (*ibid.*: 334). I will go on to argue (in section 3) that this claim is very close to the truth of the matter, but it is also a claim which I believe gets obscured in Paul’s positive proposal, which I outline.



Paul describes how the brain interprets perceptually presented stimuli over time and how this can account for the phenomenology common to cases of perceived change (be they veridical or illusory). The subject's perceptual makeup is such that it responds to perceptually presented stimuli, which are presented within a given temporal window and which have (a degree of) some sort of qualitative contrast, by organising these inputs and giving rise to the animated, flowing character of our experiences of change (see *ibid.*: 354). If such a qualitative contrast is only discriminable over a greater interval, the experience of change will not arise.

Paul further says that “if we were in an entirely static environment where there were no contrasts between property instances (this would have to include no contrasts with respect to properties of my thoughts) then it would seem to us as though time were standing still. And, indeed, I think this is a very plausible supposition” (*ibid.*: 355). It is not entirely clear how to interpret the parenthetical qualification regarding the change in properties of thoughts. One proposal which can clearly be read in Paul's discussion trades on an appeal to a subject's perceptual mechanisms and an empirical explanation of a feature of the (visual) perceptual phenomenology. In what follows I will focus on this proposal: that the (visual) perceptual systems are such that the perceptual experience of change involves a dynamic quality, and this quality is what is picked out by people who refer to time as seeming to pass. It is not clear what role contrasts with respect to properties of thoughts can play in this story. Taking the focus upon the visual perception of motion/change throughout Paul's paper to indicate the thought that there is a necessary connection between perceiving motion/change and experiencing time passing, in what follows I reject this claim. If the focus is not solely on the perception of motion/change, then there may be a further proposal which can be developed from Paul's discussion (though I won't here attempt to spell out what this proposal amounts to).

Paul says: “There is no claim (at least no claim that I have been able to discover) that we somehow have experiences as of passage apart from experiences as of change. ...The argument for the existence of passage relies solely on our experience as of change, rather than on any claim that we somehow directly or

independently detect passage as a fundamental feature of the universe” (*ibid.*: 346). If we grant that there is some particular ingredient of the subject’s phenomenology which we can call time seeming to pass, we can take Paul’s suggestion to be that this ingredient is reducible to some combination of other phenomenal ingredients, such as the perception of motion and change.<sup>191</sup> However, there are reasons to believe that the perception of motion and change is not all that there is to the experience of time’s apparent passage.

Consider O’Shaughnessy’s (2000) invitation to imagine “[p]erceptual worlds populated exclusively... by unchanging objects” (O’Shaughnessy, 2000: 60). He goes on to say that this would be experienced as “a sort of graveyard of immobilized entities, all frozen in their tracks. And in fact such a scene would be a world, not in reality of changelessness, but of persistence and change in which the change is presented to consciousness in the mode of the hour hand” (O’Shaughnessy, 2000: 61). O’Shaughnessy is describing a scenario in which a subject’s perceptual experience lacks the phenomenal ingredient picked out by our talk of perceiving qualitative change and motion. Changes in the environment may only be inferred over time, when the subject notices – based on a comparison between what she currently perceives and can recall – that things in her environment are not as they were.

O’Shaughnessy maintains that: “Even in the situation of total lack of change in the objects of perception, change continues—within. ...However frozen the perceptible world may in fact be, the ‘internal clock’ of consciousness ticks on...” (O’Shaughnessy, 2000: 61). In claiming that the internal clock of consciousness ticks on, O’Shaughnessy claims that time would still seem to pass, for the subject.<sup>192</sup> He stipulates that the closely spaced inputs to the subject’s perceptual mechanisms do not have the qualitative contrasts required in order to give rise to the animated, flowing character of our typical perceptual experiences of change. Yet, he says that time would seem to pass for the subject,

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<sup>191</sup> For a deflationist response to Paul’s proposal, and moreover to the claim that we seem to perceive the passage of time, see Hoerl (2014). For more on the difference between reductionist and deflationist theses one could take with respect to the claim that time seems to pass, see Torrenzo (2017).

<sup>192</sup> This is related to his claim that “experience guarantees a direct confrontation with the passage of time...” (O’Shaughnessy, 2000: 65).

because the subject will seem to have been perceiving such a static state of affairs for some time, as her experiencing continues on.

Without appealing to such a ‘frozen perceptible world’, this point is also emphasised by Torrenco (2017). Torrenco picks up on the distinction between perceptible and imperceptible change and says: “Although there is no direct perception of movement or change ... [in the case of watching the hour-hand of a clock, for example, unlike the case of watching the second-hand] ... they don’t seem to differ with respect to their ability to tell us what it is like for time to pass” (Torrenco, 2017: 176). Even when we are confronted with a seemingly static state of affairs in perceptual experience, each author maintains that there is a phenomenal ingredient in our wakeful conscious lives which can be picked out as time seeming to pass as the subject’s experiencing continues on.

The thought can be summarised as follows. Over a given period of time a subject might not be perceptually presented with any discriminable qualitative contrasts between property instances, and yet it would not seem to the subject as though time were standing still. Time seems to pass as she seems to be experiencing the same (seemingly unchanging) objects for some period of time. This strikes a chord with the first assumption outlined above, that time’s seeming passage is supposed to be a persistent and perhaps ever-present feature of our wakefully conscious lives.

It is open to a theorist to dispute such a claim and to insist that experiencing time passing *does* entail perceiving motion and change,<sup>193</sup> but if the claims of O’Shaughnessy and Torrenco – in addition to the assumption made at the outset – are more in line with lay thought regarding time seeming to pass, any such response would be at least revisionary. For those who find the opening assumption plausible, the phenomenal ingredient being gestured at as the experience of time’s apparent passing is not reducible to *perceived qualitative*

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<sup>193</sup> One suggestion may be that we should develop Paul’s proposal not in terms of perceived motion/change, but in terms of some other form of awareness of change, which could include an awareness that more experiencing is taking place even if there was no perceptible change in the environment. This thought gets close to the proposal I offer in section 3.

change. The challenge is to then explain what is missing from the present proposal.

## **2.2. From the experience of change and persistence**

One moral we may take from the preceding discussion is that it is not merely the experience of change which is distinctly temporal, but also the experience of persistence regardless of change. In addition to being perceptually aware of an object undergoing some qualitative change as an occurrence which unfolds over time, we can also be perceptually aware of some object persisting without undergoing some qualitative change as something which occurs over time. Whether the subject seems to have been perceiving a static state of affairs or a changing one, she will seem to have been experiencing it for some time as her experiencing continues on; being so perceptually aware of some object persisting over time, whether it undergoes some qualitative change or not, time seems to pass.

The above line of thought may make plausible the following suggestion: it is something about how perceptually presented objects seem to persist over time which accounts for the sense in which time seems to pass. This line of thought is presented by Simon Prosser (2012 and 2016), who argues that it is in virtue of the objects of perceptual experience being presented as enduring that we experience time passing.<sup>194</sup> In order to persuade the reader of this proposal, Prosser suggests that objects being presented as enduring plays a crucial role in our experience of change (and plausibly persistence regardless of change too).

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<sup>194</sup> Prosser cites Velleman (2006) as a source of inspiration for this claim. Velleman suggests that “experiential memory leads me to think that my own temporal extension is composed of a single momentary self playing the role of each temporal part of my existence” (Velleman, 2006: 8). That is, Velleman suggests that in experiential memory a subject thinks of herself as being present in the here-and-now in a way which is inconsistent with having temporal parts, but she nevertheless thinks that she has persisted over time (her memory being evidence of her existence at earlier times). Hence, Velleman argues that we are led to conceive of ourselves as enduring subjects. I explain why such an appeal to memory is not sufficient for the current explanatory project in section 2.3. I believe that there is something correct in both Velleman’s and Prosser’s suggestions, but that in the current context such proposals might get the cart before the horse. I will consider the relationship between an appeal to the subject of experience, as we find in Velleman (and Hofweber and Velleman, 2011), and an appeal to the objects of experience, as we find in Prosser, in section 3.

To endure, in the sense at issue, is – crudely – for something to exist in its entirety at any moment at which it exists. The alternative way to persist over time is by perduring; to perdure is for something – again crudely – to persist by having different temporal parts at different times.<sup>195</sup>

Prosser reads Kant as making the point that in order for a change to be presented<sup>196</sup> in experience, something must be presented as retaining its identity throughout the change. From this Prosser suggests that “in order to experience change our experience must also represent something retaining its identity through the change. This, I suggest, requires objects to be represented as enduring” (Prosser, 2012: 105). In order for an object to be presented as changing in colour from green to red, for example, it must be presented as one and the same object which is at one time green and then at a later time red. We can say the same of persistence regardless of qualitative change. Minimally, an object must seem to be numerically one and the same thing which exists at different times in order to seem to persist through time.<sup>197</sup>

On perdurance theories an object also retains its identity throughout a change, but Prosser says such theories do not capture the change “*as we experience it*” (Prosser, 2012: 106; *emphasis in original*). Explaining this claim, Prosser says: “Change is not experienced as an *F* temporal part succeeded by a *non-F* temporal part, with it somehow being understood that both parts belong to the same composite whole; this does not correctly capture the phenomenology” (*ibid.*). He says that if we were to experience objects as perduring, we would experience one temporal part followed by another, experiencing these *as* temporal parts, and that reflection supports the claim that the phenomenology is not this way.

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<sup>195</sup> This comes from Lewis’s (1986) discussion of temporary intrinsics and relates to contested issues concerning how we are to understand the endurance/perdurance distinction (see, for example, Donnelly, 2011; Fine, 2008; Hofweber and Velleman, 2011; Sider, 2001). I don’t intend to settle any such disputes here, in what follows I simply draw attention to one of the differences in how we experience objects and occurrences as filling time.

<sup>196</sup> Prosser’s discussion makes use of ‘representation’ rather than ‘presentation’. I use the latter in order to be neutral on the issue of whether perceptual experience is fundamentally representational, but if it would chime better with Prosser’s claims everything I say in this section could be cast in terms of perceptual representation rather than presentation.

<sup>197</sup> This is necessary, but not sufficient. We could concoct a case in which an object seems to go out of existence at  $t_1$  and comes into existence at  $t_5$  while seeming to remain numerically identical and yet not seeming to persist from  $t_1$  to  $t_5$ .

The consequence of this line of reasoning, Prosser suggests, is that objects are presented in experience as enduring.

According to Prosser, objects being presented as enduring is responsible for change seeming dynamic, and change being experienced as dynamic is a key part of time seeming to pass<sup>198</sup> (in this sense, Prosser comes close to the position attributed to Paul). The particular proposal I am drawing from Prosser is as follows: the perceptual experience of objects persisting over time by enduring is what the experience of time passing consists in.<sup>199</sup> Prosser's appeal to the presentation of an object *as enduring* throughout a change, and even if there is no change,<sup>200</sup> distinguishes his proposal from Paul's; yet this proposal has implications I reject.<sup>201</sup>

One might take issue with Prosser's claim that objects of experience are presented as enduring.<sup>202</sup> Yet this is a claim which I believe has some plausibility when further developed, as I do below. I defend Prosser's claim because doing so ultimately reveals a more substantive disagreement. Prosser's proposal fails because the perceptual experience of objects as enduring is neither necessary nor sufficient for time to seem to pass.

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<sup>198</sup> Prosser claims that if objects were presented as perduring there would be no such dynamism in the phenomenology – that experiencing objects as perduring would be akin to experiencing a series of 'static' images. Against this claim, see Hoerl (2014).

<sup>199</sup> If there are other proposals which can be read in Prosser's discussion then these would need to be developed further. In conversation, Prosser has confirmed that he foresees more of a role being given to the subject's sense that she too endures; the pursuit of this thought is one way of viewing the proposal I offer in section 3.

<sup>200</sup> Regarding the question of why objects are presented as enduring – which he takes to be illusory – Prosser suggests that this is because of a 'laziness' in the perceptual system: "it is more economical to represent a simple enduring identity than a perduring identity that consists in the unity of a series of independently represented parts" (Prosser, 2012: 112).

<sup>201</sup> It might be that we could appeal to a 'perfect' sensory deprivation tank (which deprives a subject of *all* sensory input), suggesting that while in such a tank time would still seem to pass for the subject, even though there is no object of experience to be represented as enduring. However, such a thought experiment is far from straightforward. Firstly, Prosser could complain that it is not clear what our intuitions would dictate in this case; by insisting that time would seem to pass his interlocutor might simply be begging the question against his proposal. Secondly, depending on how broad his use of the term 'object' is, Prosser might hold that there would still be 'objects' of memory or imagination, presented to the subject while in this tank, which may be represented as enduring.

<sup>202</sup> For a response to Prosser's argument along these lines, see Deng (2013a).

### 2.2.i. Experiencing objects as enduring

In claiming that objects of experience are presented as enduring Prosser appears to argue by elimination while only considering two options, that objects are presented as perduring or enduring, and while not explicitly considering whether objects could be presented as persisting in a way which is neutral between perdurance and endurance. However, we can add some plausibility to Prosser's claims when we consider a difference between how we perceive objects and occurrences (I will focus on processes) over time.<sup>203</sup>

We may not expect the nature of a particular's persistence to be read off perceptual experience, as a subject's perceptual mechanisms are not metaphysicians, but reflection on the phenomenology does reveal differences in how we ordinarily experience things filling time. An object, such as a ball, can seem to persist over time without there seeming to be any more of the object. In the ordinary case, a ball – visually perceived over some period of time – seems to persist over time, but it is not phenomenologically apt to say that there seems to be more and more of the object. There *could* seem to be more and more of the ball over time, if it swelled in size, but this is a change over time in how it fills (and seems to fill) space. Keeping its spatial extent constant over time, it is not true to the phenomenology to say that there seems to be more of the ball over time. Experiencing the ball over time, it seems to exist – it is presented in experience – at each time, and so it seems to be changing in its temporal location over time. The same is not true of occurrences.

Experiencing some processual activity, such as a ball rolling down an incline, it seems to have temporal parts at different temporal locations. When watching the ball's journey over time, it is phenomenologically apt to say that the ball's journey fills time by there seeming to be more and more of it. This is one way of understanding O'Shaughnessy's claim that "processes 'go on' or 'continue' occurrently in time, each new instant realizing more of the same as what has gone on so far... the process 'lays down' more and more of an event the same

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<sup>203</sup> See Chapter 4 for a distinct but related discussion of some of the phenomenological differences between our experience of spatial and temporal particulars.

in kind as itself” (O’Shaughnessy, 2000: 44). A given process that a subject experiences does not seem to change its temporal location; as she experiences it, it seems to have more and more temporal parts at subsequent temporal locations. This is how processes seem to fill time and this is to be contrasted with objects.

Over time an object of experience, a spatial particular, may seem to change its temporal location while remaining numerically one and the same object, but it does not do so by there seeming to be *any more* of it. On the basis of such phenomenological reflections, Prosser’s suggestion regarding the objects of experience being presented as enduring can be supported. Rather than focusing on the contested endurance/perdurance distinction we can say that, through reflection on the phenomenology, objects – but not processes – seem to fill time by changing their temporal location over time. I will take this claim to be the content of Prosser’s insight.

### **2.2.ii. Experiencing objects as enduring and time seeming to pass**

Prosser’s account may allow us to build upon the puzzle which remained after the proposal from Paul, offering an account of how time can seem to pass even when one is not perceptually presented with any discriminable qualitative contrasts between property instances. Yet as stated it also faces problems, because the perceptual experience of objects as enduring is neither necessary nor sufficient for time to seem to pass. To begin I focus on the necessity claim.

In the passage quoted above Paul appeals to feeling a breeze dying down, tying this to an awareness of time as passing. To switch sensory modalities, it is also plausible that in hearing the whistling of the wind time can seem to pass for the subject. In each case, there is constantly something new occurring and being experienced. Even if there is no change in the content of what is being experienced – such as when one hears the whistling of the wind without hearing it getting louder/quieter, faster/slower, and so on – there is still *more experiencing* occurring. In neither case have we introduced an object – a spatial particular –



that the subject is experientially aware of as enduring; yet in experiencing either phenomenon it is plausible to maintain that time seems to pass.

As demonstrated in the previous examples, our perceptual experience of processes involves a seeming awareness of time passing. On the proposal attributed to Prosser this would only be derivatively so, in virtue of it somewhere involving an experience of an object (on Prosser's proposal it is necessary to experience objects – as enduring – in order to experience time passing). This does not appear to be true to the phenomenology in the two cases above. It appears plausible that a subject can be perceptually aware of a breeze dying down, or of the whistling of the wind, without thereby being perceptually aware of an enduring object of experience. Because in such cases time seems to pass, the perceptual experience of objects as enduring is not necessary for time to seem to pass; hence Prosser's proposal cannot give us the whole story.

It is also not obvious that the perceptual experience of objects as enduring is sufficient for time seeming to pass, at least not without saying more concerning what is being assumed about the experiencing subject. For example, it cannot be sufficient for time to seem to pass, nor for an object to seem to change and/or persist, that a numerically identical object is perceptually presented as occupying one temporal location and subsequently perceptually presented as occupying a distinct temporal location. It is necessary that there is also single subject experiencing the object over time; not a series of subjects each experiencing the object at successive times.<sup>204</sup> The object perceptually presented needs to seem to remain the same – needs to be presented as numerically identical over time – and the thing to which the object is presented needs to seem to remain the same in some sense – the experiencing subject. In order for an object to seem to change or persist, over time both the object and the individual the object is presented to must seem to remain numerically identical.

Matters are more complicated still. Consider a subject with no sense of memory or anticipation, a subject who is only responsive to her immediate environment.

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<sup>204</sup> This is related to the Jamesian claim that a succession of experiences are not alone sufficient for an experience of succession (see James, 1890: 420); being explicit about this avoids our appeal to *an experienter* being surreptitious.

Call this the purely-perceptual subject. By the temporal transparency of perceptual experience, it doesn't seem, to the subject, as though she can mark out the temporal location of her experiential point of view on an object or occurrence as distinct from the temporal location of whatever object or occurrence it is that she seems to be experientially aware of. As a result, for the purely-perceptual subject it is not obvious that the object perceived can *seem* to be numerically identical to the object perceived at earlier/later times, because this requires an awareness of these earlier/later times (this would also plausibly be the case for the subject – rather than object – end of the relation).

For an object to seem to persist over time it is not enough to stipulate that each of the object of experience and the experiencing subject are one and the same numerically identical things over time, each must also *seem* to be. For an object of experience to seem to persist, as well as the subject experiencing the object now, at time  $t_2$ , she must seem to have previously occupied a view point on the *same* object, at  $t_1$ , and perhaps anticipate having a subsequent view point on the *same* object at  $t_3$ . (This is not something Prosser would need to disagree with – though it is also not something he explicitly acknowledges – as he is not assuming a purely-perceptual subject.) This boils down to what can be regarded as a problem for any account of time seeming to pass which only appeals to what a subject is aware of in perceptual experience: for time to seem to pass it is not sufficient to be aware of a time at a time. Without invoking a sense of memory or anticipation, though the experiencing subject may seem to be aware of *a time* – the time her perceptual perspective is transparent to – it does not appear as though she can be said to be aware of time seeming to pass.

We have been supposing that when we talk about the experience of time passing we are talking about *perceptual* experience, and since this supposition has led to a series of puzzles it would be best to see whether we can explain the sense in which time seems to pass if we jettison this supposition. Without supposing that time seeming to pass is reducible to a particular ingredient of a subject's perceptual phenomenology, we are still left with the question of how we are to make sense of time seeming to pass for a wakefully conscious subject.

### 2.3. Beyond perceptual experience

Our phenomenally conscious wakeful lives – our conscious points of view in time – do not merely reduce to the deliverances of perceptual experience. We are not like the purely-perceptual subject. As wakefully conscious subjects we also recall and anticipate occurrences; it may be thought that it is a form of memory which is responsible for time seeming to pass. In some recent discussions of our experience of the apparent passage of time, some authors have explicitly distinguished between the temporal awareness afforded by perceptual experience and that which is afforded by recollection. For example, Le Poidevin says: “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” (Le Poidevin, 2007: 87). Following Le Poidevin, Deng (2017) also says that reflection upon what one recalls affords a kind of temporal awareness which might be thought to play a role in time seeming to pass. Deng, like Le Poidevin, calls this an indirect kind of temporal awareness “that arises when we reflect on how things used to be and compare them to how they are now” (Deng, 2017: 245). In so far as these are offered as explanations of time seeming to pass for wakefully conscious subjects,<sup>205</sup> we need to say more about the form of memory that such explanations concern.

It cannot be that memory understood as retained knowledge (such as semantic memory) plays the role envisioned by such authors in an explanation of time seeming to pass. Retained knowledge may concern timeless facts, such as facts concerning prime numbers; such knowledge does not play any role in a distinctive form of temporal awareness. There is also no guarantee that retained knowledge regarding occurrences in time will concern times at which the subject was alive, or that such knowledge will make a difference to how things seem experientially to the subject. That Harold Godwinson died during the Battle of Hastings in 1066 may have been learned in childhood and retained through

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<sup>205</sup> To be clear, this is not a claim the authors explicitly support. Deng goes on to argue that time does not *seem* to pass in any substantive phenomenological sense. Le Poidevin, in the previously quoted passage, also says that we are more immediately aware of the passage of time when we perceive motion and/or change; moreover it isn’t obvious that time seeming to ‘pass’ is really what is at issue for Le Poidevin, rather than experiencing time and/or temporal phenomena more generally.

adolescence and into adulthood, but this retained knowledge does not appear to make an experiential difference to the subject, we say that such knowledge is retained even in dreamless sleep.

An appeal to episodic memory<sup>206</sup> – understood as a form of auto-noetic, autobiographical memory, taken to involve some form of imagery<sup>207</sup> – may appear plausible. The proposal would then be that it is the comparison between what one episodically recalls and what one is currently perceptually aware of which is responsible for time's seeming passage. Depending on the account of episodic memory one gives, this form of memory can be taken to deliver a representation of a previously experienced occurrence. That is, episodic memory can be understood to be an experiential form of awareness of objects (and their qualities) as they *were* previously perceived, but not as they are *now* perceived (episodic recollection is not temporally transparent to its objects). The claim could be that, granting that in episodic recall a subject is aware of an event (or temporal part thereof) as something which was witnessed at the time at which it occurred, but which is now – during the time of recall – no longer being witnessed, this delivers a sense in which time seems to pass or have passed. However, there are at least two problems when one takes this to explain the sense in which time seems to pass.

A representation of one time as something which was perceived, but is not currently being perceived, together with a representation of another time as that which is being perceived currently, does not yet get to the idea that time has, or seems to have, *passed*. Such an experiential representation delivers a sense in which there are – or rather, there seem to be – different temporal locations. As discussed previously, the idea that there are – and that there seem to be – different temporal locations does not yet deliver a sense in which time seems to have passed, or any sense in which time itself seems to have changed. That is, not unless we say more about this comparison between what can be recalled and

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<sup>206</sup> That there is such a distinction to be drawn between semantic and episodic memory is stressed by the work of Tulving (1972 and 1982).

<sup>207</sup> By 'imagery' I here simply mean that there is something experiential, there is something it is like for the subject, where this need not be understood in visual terms.

what is now being experienced,<sup>208</sup> or build more into the phenomenology of episodic recall,<sup>209</sup> but even if one was to explore this option, there is a further concern.

Suppose we were to appeal to episodic memory in order to give an account of an ingredient of the phenomenology which can be picked out as time seeming to pass. Such an ingredient of the phenomenology would be a feature which is only present in episodic recall. Time seeming to pass is supposed to be a pervasive part of our experiential lives. It is a plausible enough assumption that episodic recall only occurs sporadically. Therefore to pick out a phenomenological feature of episodic recall is not to pick out the phenomenological ingredient of interest when theorists discuss time seeming to pass, something which is said to be persistently and immediately given to us.

Without appealing to more than what is presented in perceptual experience, we appear to encounter the puzzle laid out in section 1. The temporal transparency of perceptual experience makes it puzzling how time can seem to pass. I have further suggested that an appeal to episodic recollection does not provide us with a solution to our puzzle, but it would be an oversimplification to conclude that no appeal to a form of memory or anticipation could be fruitful in explaining a sense in which time seems to pass. I will explore a further possibility, drawing on a role for an experiencing subject's perspective in time, in the final section.

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<sup>208</sup> Deng (2017) says that a comparison between what a subject can recall and what she is now experiencing, in addition to a subject's awareness of the temporal asymmetry of episodic memory – that she is always experiencing something new and adding to memory (at a later time you are aware that you can recall more now than you could previously) – may be thought to provide the subject with an awareness of time passing/having passed. We could grant this, as Deng (and Le Poidevin) suggests that such a form of awareness would be *indirect*. Insofar as we think that there is a pervasive feature of our phenomenally conscious lives properly picked out as time *seeming* to pass (and that this is *direct* – it doesn't require reflection) we are motivated to keep on looking.

<sup>209</sup> We might describe episodic memory as a form of awareness of a 'past present', where this involves an awareness that the time in question once had the objective property of presence but no longer does. An early version of such a view might be read in Russell's *Theory of Knowledge* manuscript, where he suggests that in memory the events we recall appear as in the past rather than appearing as present (see Russell 1992). This phenomenological claim can also be read in Martin (2001), who says that while perception and memory can coincide with respect to the objects of experience, and their qualities, "they still differ in the manner by which these objects are given or presented to the mind" (Martin, 2001: 271).

### 3. On why time seems to pass

#### 3.1. Taking stock

In the previous sections I outlined several candidate explanations for the sense in which time seems to pass. While each proposal illuminated a feature of a typical experiencing subject's temporal awareness, each also left a puzzle of its own. Paul's proposal drew attention to the experience of change, but appeal to a change in the properties of an object presented in perceptual experience is not sufficient to account for the pervasiveness of time seeming to pass. Prosser's proposal drew attention to the objects of experience being presented as enduring, but the focus upon what is presented in perceptual experience – and three-dimensional objects in particular – does not account for how a subject can be aware of a succession of times as successive. An appeal to episodic memory was considered in order to patch the previous worry; while this appears to get right that we need to appeal to more than what is presented in perceptual experience, as stated it also fails to account for the pervasiveness of time seeming to pass.

To make headway, let's return to some thoughts offered at the outset. Merleau-Ponty suggested that the metaphor of time as a river, and of it flowing/passing, is only supported by our *surreptitiously* assigning a role to a witness of its course. Motivated by Merleau-Ponty's claim, we can stop to ask if there is something about the role of a witness – the experiencing subject – which, once articulated, might allow for an account of time seeming to pass.

In offering an account of time seeming to pass, it is not enough to merely appeal to an experiential perspective, because occupying an experiential perspective on a given state of affairs is not sufficient for anything to *seem* to pass. Consider a subject's perspective in space. In Chapter 4, I discussed the ways in which we might think of a typical subject's visual experience of space as perspectival, yet at no point was it claimed – and it would not be plausible to claim – that space seems to pass the typical subject in the sense in which time is supposed to. As time seeming to pass is said to be one of the ways in which a subject's experience

of time differs from her experience of space, we are motivated to look for ways in which the experiential perspective a subject occupies in space differs from that which she occupies in time.

One thought might be that it is the passivity in the change of perspective in the temporal case, unlike the activity in the change of perspective in the spatial case, which is sufficient for time to seem to pass. This thought goes as follows. The subject can (to an extent) be active with regards to the spatial location of her experiential perspective; she can choose to move through three-dimensional space in a number of ways and she can choose to remain stationary (relative to her immediate environment). The subject is not so active with regards to the temporal location of her experiential perspective; she cannot choose at will what time to experience next, and she cannot choose to remain at one particular temporal vantage point.

Passivity regarding the temporal location of one's point of view does contrast with the agentive control one has over its spatial location, but this difference between the two cases is not sufficient for time – rather than space – to seem to pass.<sup>210</sup> To demonstrate why, we can imagine a spatial case in which one passively occupies a series of positions relative to an object. From cinematic representation we are familiar with a range of camera angles on an object being presented in succession, without the audience having any say on which camera angle is presented next. In a broadly analogous fashion, suppose a subject possesses subsequent perspectives, at disparate points (not following a continuous path through spacetime) in three-dimensional space, upon an object; suppose further that she has no agentive control over the succession of perspectives she occupies. (For current purposes the specifics of the example do not matter, whether we construe the example as involving virtual reality goggles, a subject being rapidly and continuously tele-transported, or simply the watching of a film.) In the supposed case the subject occupies a series of seemingly random perspectives upon an object at subsequent times; the subject seems to change in her spatial location relative to the object, but it does not appear

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<sup>210</sup> I do not dispute that such passivity may be necessary, what I dispute is that passivity alone is sufficient. Minimally, it needs to be supplemented with other features of awareness; in particular, an awareness of more than the present time.

plausible to suggest that in this case space would seem to pass in the sense that time is supposed to. Therefore the appeal to passivity – regarding the location of one’s point of view – does not alone appear to be sufficient for anything to seem to pass.

An alternative suggestion might appeal to the idea that there has to be a continuous (or at least not noticeably discontinuous) path through time/space in order for time/space to seem to pass. Without saying more, it would appear that, once again, this is not quite enough. We can take there to be a perspective on time/space which includes some sort of awareness of a ‘path’, without time/space seeming to pass. For example, in the spatial case there is no sense in which anything seems to pass if one remains stationary at a point on a path.<sup>211</sup> The metaphor of a path only appears to be fruitful if it is added that one seems to be moving along the path.<sup>212</sup> In order for time to seem to pass, it appears that there must be some sense of movement; a sense in which the subject is aware of occupying distinct, successive temporal locations at distinct times (being aware of them as successive). The experiential perspective a subject possesses in time, developed in Chapter 3 and 4, can be put to use in explaining how there is such a sense of movement through time.

### **3.2. The tripartite temporal structure of experience**

In Chapter 3 I argued that a form of awareness of both the immediate past and immediate future has an irreducible role to play in characterising a subject’s awareness of the present. What is given in experience is a non-zero temporal extent, given as falling between the recent past and future as the subject is

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<sup>211</sup> I take this to be the import of Kit Fine’s discussion, when he says (regarding the temporal case): “the passage of time requires that the moments of time be *successively* present and this appears to require more than the presentness of a single moment of time” (Fine, 2005: 287; *emphasis added*).

<sup>212</sup> Dummett (1960) supports this idea by imagining a hypothetical observer who is aware of four-dimensional spacetime in such a way that it can survey the whole course of events at once, or in whatever order it chooses. In this case, he says: “If our hypothetical observer observes only the four-dimensional configuration without observing our movement – the movement of consciousness – through it, like someone observing the road but blind to the traveler, he does not see all that happens. But if he also observes our passage through it, what he is observing is no longer static...” (1960: 502).



oriented to them. This is not to say that what is presented in perceptual experience is presented under distinct temporal modes of presentation, rather the awareness of immediately preceding and subsequent times is constitutive of the interval being given as present in experience.

To elucidate this tripartite temporal structure, before returning to the issue time seeming to pass, we can turn to O’Shaughnessy’s discussion in his *Consciousness and the World* (2000). O’Shaughnessy says that the experiencing subject “stands in a special relation to time not discoverable in those not experiencing” (O’Shaughnessy, 2000: 50); at least part of this special relation is to be found in the way in which something about a ‘thin now’ is only accessible to an experiencing subject. By speaking of a ‘thin now’, O’Shaughnessy says that this use of ‘now’ should be thought of as picking out an instant, rather than a ‘fat now’ which picks out a rough position on a timescale. In using the fat now, we can truly say ‘2018 is now coming to an end’ when speaking at around 11pm on December 31<sup>st</sup>, but in using the thin now we could only truly say this on the stroke of midnight. Unlike O’Shaughnessy, in what follows I will assume that we could also use this ‘thin now’ to pick out the interval of the specious present (PSP), rather than an instant.<sup>213</sup>

The special relation to a ‘thin now’ enjoyed by an experiencing subject isn’t simply the ability to hold a belief about the ‘thin now’. A subject may form a belief about what is occurring now – in the ‘thin’ sense – before falling suddenly into dreamless sleep, and may be said to retain this belief while asleep (and so not experiencing). However, in forming a belief directed at the ‘thin-now’ before falling into dreamless sleep, the subject fails to recognise that a continuity of such ‘now’s then follow while she is in dreamless sleep, resulting in the ‘thin-now’ the content of the belief concerns continuing to pick out that moment before she fell into dreamless sleep.<sup>214</sup> In recent work, building upon

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<sup>213</sup> As it will be used in what follows, the ‘thin now’ is ‘thin’ in that it only picks out the temporal extent which is given in experience, the time perceptual experience is transparent to.

<sup>214</sup> O’Shaughnessy tells us that what is going wrong, in this case, is a form of temporal indexing of the subject’s belief: “But of which instant did the dreamless sleeper believe that ‘now the train is passing through Zermatt station?’ Undoubtedly, the instant before he fell asleep. Then during the six-hundred-second interval he retained that belief, *directed erroneously at each instant to that instant in the past as ‘now’*. This error is instructive. What a non-experiencing person cannot do is,

O’Shaughnessy’s discussion, Crowther and Soteriou (2017) emphasise that “those who lack experience are not capable of a temporally indexical mode of awareness of the present moment” (Crowther and Soteriou, 2017: 186). What experience affords a subject with is a form of awareness of a time, the time given in experience, as the time that it is.<sup>215</sup> A non-experiencing person cannot direct a held belief to the same time as the belief itself is held, singled out by the ‘thin now’, because an experiencing subject has an awareness of the current time, picked out by the ‘thin now’, which a non-experiencing subject lacks. This time – the thin-now – *seems* to be the time the subject has a vantage point upon and can consequently form beliefs about.

In addition to being aware of a given time that it is the time that it is, O’Shaughnessy says that an experiencing subject’s temporal awareness has a tripartite structure. O’Shaughnessy describes how this tripartite structure of experience “essentially connects and contrasts ‘now’ with its immediate neighbours...” (O’Shaughnessy, 2000: 55). In doing so, he says: “The essential description of any experience of the moment contains an irreducible reference to the immediate past/future of the experience, given from the temporal vantage-point of ‘now’...” (*ibid.*: 62). This can be read as the claim that experiencing subjects, in addition to being experientially aware of what is given in experience, are psychologically oriented to what is to come and what has just been. This psychological orientation is asymmetrical, to the *immediate* past and *immediate* future,<sup>216</sup> either side of the time given in experience.

Appeal to an experiencing subject’s temporal awareness as *asymmetrical* is to appeal to an inequivalence in the subject’s awareness of what is to come and

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direct a belief to the same instant as the belief itself, singled out purely as ‘now’” (O’Shaughnessy, 2000: 51; *emphasis added*).

<sup>215</sup> It is not only that non-experiencing subjects are incapable of being aware of a given moment as *now*; in addition “[t]hey lack a distinctive kind of awareness of time *over* the intervals of time during which they are dreamlessly asleep” (Crowther and Soteriou, 2017: 187).

<sup>216</sup> It might be the case that, in unfamiliar circumstances, what the subject anticipates is not a given stimulus being perceptually presented, but more minimally that *something* will be perceptually presented (where what this ‘something’ is might be more or less precisely specified). The violation of such anticipation, whether the subject anticipates a change or a continuation of some stimulation, may be part of an explanation of the feeling of perceptual surprise. See Reisenzein *et al.* (2017) for a review of the use of the repetition-change paradigm – which can be used to create and violate both explicit and implicit anticipatory expectations in subjects – in empirical studies of surprise; see Niepel (2001) for a clever way of dissociating the change in stimulus from the violation of expectations in a similar experimental paradigm.

what has just been. This can be contrasted with a subject's spatial awareness of what – from a given position – is just out of view to the left and to the right. With the subject's psychological orientation towards the future, there is an awareness of there constantly being something new coming to be experienced (if not different in content, there is still *more experiencing* to come); the subject's psychological orientation towards the past involves an awareness of what has been experienced and cannot be returned to (at least a token occurrence cannot be returned to, though there is a sense in which the same type of occurrence can be experienced again). By contrast, if a particular object passes out of the subject's visual field – to the subject's left or to her right – there is not typically an awareness on the subject's behalf that it cannot be returned to and experienced again; rather, the subject is typically aware of how to see the object again, through turning left or right.

The two-pronged temporal psychological orientation further brings out the sense in which experience affords a subject with a temporal vantage point (upon the time a subject has a temporally indexical mode of awareness of). The subject is psychologically oriented to a time as what *she has* experienced immediately previously and to another as what *she anticipates* experiencing immediately subsequently, where this is contrasted with the time which is currently given in experience – given as that time which falls between the immediate past and future as the subject is so psychologically oriented to them.

While the notion of a primitive psychological awareness of the immediate past and future appears to be under-described by O'Shaughnessy, there are a few different ways in which the project can be illuminated. An independent source of motivation for appealing to such an asymmetrical structure of temporal awareness in wakeful experience – which O'Shaughnessy himself appeals to – can be found in how experiencing subjects engage in intentional action. When explaining a subject's actions in terms of her intentions, we appeal to a distinctive relation to her immediate past and immediate future. When a subject performs a given intentional action, such as running across her garden in order to chase away a fox, her intention at any moment in time aims towards the immediate future and depends upon the immediate past. There is a constant bringing about

of some state of affairs, her running onwards to some further point of the garden, where at any moment she has an awareness of and orientation towards what she is intending to do (what she will do in her immediate future, such as continue running, or skid to a halt) and towards what she has just done (what she did in her immediate past); without which she would not have the same awareness of what it is she is doing *now*.

O’Shaughnessy expresses this point by saying that there is “no action without intention, and no intention without a mental posture directed towards the future (not to be confused with the capacity to *think* about the future)” (*ibid.*: 53). The last parenthesis is important here for the current project. What is at issue is an awareness the *immediate* future, that portion of time into which one’s acting continues, rather than merely the distant future portion of time one can hypothesise about.<sup>217</sup> For this to be of use in the current context, we need to show that this posture to the immediate past and future is not merely a feature of how we describe an agent’s actions, but of how she experiences the actions she is engaged in.

For O’Shaughnessy, “[t]ime lies at the heart of the intention” (*ibid.*: 54). Explaining this point, he says that in intention-explanation we explain a present phenomenon irreducibly by reference to a future phenomenon. At least part of this idea seems to be captured by the following claim. The way in which we have a perspective in time, revealed in how a subject experiences her own intentional activity, cannot be captured by simply talking about the temporal relations between the occurrences that the subject is experientially aware of. In intentional action, discharging an intention requires an awareness of what is the case *now*, at the time of discharge, and what one anticipates unfolding in the immediate future. An awareness of a time as *now* also allows for the subject to be aware of

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<sup>217</sup> We can also find the connection between a psychological orientation to the future and action in Augustine’s *Confessions*, where he says: “...we often plan our future actions in advance, and that the advance planning itself exists in the present, whereas the action being planned does not yet exist, because it is in the future. Once we have got it under way, and have begun to put what we were planning into action, then that action will be existent—because it is at that point not in the future but existing in the present” (Augustine Book XI, 18; 2016: 227). While Augustine illustrates the connection between action and an orientation towards the future from the present, it should be stressed that the account being advanced in the current section does not require the explicit planning of future actions, in the sense in which Augustine appears to have in mind.

particular activity as what is *now* being-performed and as that which she was aware of immediately previously as intended-to-be-performed.

In intentionally acting over some period of time a subject is, over that time, poised to act: to continue with the performance of an action and/or to change the course of her action.<sup>218</sup> Being in this position of readiness/potentiality to act is expressible as an awareness that ‘I can  $\varphi$ ’, whether or not I want to  $\varphi$  or I try to  $\varphi$ .  $\varphi$ -ing will, in any such a case, be something I am aware that I can do in the immediate future, should I *now* form the intention to perform the action. This awareness – that ‘I can  $\varphi$ ’ – need not be too reflective.<sup>219</sup> Rather than a subject explicitly entertaining the thought that ‘I can  $\varphi$ ’, this should be taken as giving voice to something more primitive. When I awake in the morning, I am aware that I can swing my legs out of bed, that I can try to recall my dream, or try to imagine my meeting later that day, or simply lay still. I am aware that I can  $\varphi$ , whether or not I choose to, and without explicitly entertaining the thought that ‘I can  $\varphi$ ’. The cognitive form of awareness that ‘I can  $\varphi$ ’, such as entertaining this proposition in thought, is a higher and more sophisticated form of what is a distinctive property of the experience of agency.<sup>220</sup>

In the typical case, a subject engaged in intentional action has expectations about what will occur in her own immediate future and an awareness of what was experienced as occurring in her own immediate past. I have suggested that having such attitudes is vital to the generation of action and the management of ongoing actions. To illustrate, suppose there is a subject stood upright, with her

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<sup>218</sup> In a discussion of the phenomenology of action, Elisabeth Pacherie (2008: 195) says that a typical agent has both a sense of initiation and sense of control over the actions being performed. Regardless of what the reader thinks of the distinction between these two senses, I take both to be captured by the readiness/potentiality to act under discussion.

<sup>219</sup> That we are – or at least can be – so aware of what we are doing is suggested by other passages in the literature. See, for example, O’Brien’s suggestion that: “we can obviously fail to know that we are acting, as when we are acting absent-mindedly . . . But it does not seem to be the case that our actions can be, as a matter of brute fact, beyond our ken . . . It seems to me that we cannot, in Shoemaker’s phrase, envisage a creature which is simply self-blind with respect to all their actions in this way . . . Surely if I have the power to initiate or stop what I am doing then what I am doing must normally be in some way accessible to me” (O’Brien, 2003: 364-6).

<sup>220</sup> That there is such an experience of agency may be somewhat supported by the clinical observation that this experience can be lost; in such cases one’s movements are observed in much the same way as the movements of others. See, for example, the discussions of Mellors (1970: 18) and Spence *et al.* (1997: 2000). On the loss of agency also see O’Shaughnessy (1963: 386).

left foot forwards, who shifts her weight from front to back in the course of moving her body. If this activity-part is all that she is aware of, and if she is not aware of her stepping forward with her left foot immediately previously, nor stepping back with her left foot as what will occur immediately subsequently, she can scarcely be said to be aware of what she is doing as salsa dancing. Yet we think that such a subject can be aware of what she is doing as salsa dancing, and so it appears plausible that she does have such an awareness of her immediate past and future.

Experience does not only possess a tripartite temporal structure in the context of intentional bodily action. Consider a subject who is experientially imagining salsa dancing. We can assume that the subject would imagine subsequent temporal parts of this dance turn (though she is also aware that she can stop imagining this, if she so wishes). As the subject is engaged in this intentional mental activity and imagining dancing, over the course of 10-15 seconds at any time she anticipates what she will be doing over the next few seconds – presumably, continuing to imagine further parts of her dance. If she failed to have such attitudes that orient her towards her immediate future it is difficult to see how she could experience her imagining the dance as the (mental) activity that it is. It remains the case that awareness of the activity one is engaged in depends, in part, on an awareness of what one anticipates occurring in the immediate future and what one recalls occurring in the immediate past.

### **3.3. The enduring subject and time passing**

With the tripartite temporal awareness being independently motivated, we can return to consider the objects of experience being presented as enduring. I said that on a proposal that merely appeals to a feature of what is presented in perceptual experience, we are left facing the following problem: it is not obvious that the presented object can *seem* to be numerically identical to an object perceived at earlier/later times than the perceived present, because this requires

an awareness of these earlier/later times.<sup>221</sup> I further suggested that an appeal to episodic memory – as an awareness of the object at an earlier time – was not sufficient to account for the sense in which time seems to pass. With appeal to the tripartite temporal structure of experience an alternative can be offered.

In wakeful experience, the subject is psychologically oriented to a time as what *she has* experienced immediately previously and to another as what *she anticipates* experiencing immediately subsequently, where this is contrasted with the time which is currently given in experience. Considering an object presented in experience, we can say that this object is experienced as wholly present now (in contrast to an occurrence), even though the subject is aware of experiencing it as wholly present immediately previously and anticipates experiencing it as wholly present immediately subsequently.

To be wholly present at one temporal location and then wholly present at another the object has to alter its temporal location relative to something (or something needs to move relative to it). To the subject, the object does not positively seem to be changing its temporal location relative *to her*. Perceptual experience is temporally transparent; it is not as though either the subject or the object seems to be left behind, in time. The object and subject do not seem (at least they need not seem) to be moving across space, phenomenologically speaking. Rather, the object's temporal location – and the subject's – seems to be changing relative to time. Time seems to be passing; passing the subject and the object.

It does not follow from the above that time seeming to pass depends on perceiving objects as enduring; that the subject also seems to endure appears to be enough for time to seem to pass. In their discussion of the notion of endurance, Hofweber and Velleman suggest that “[o]ne has the sense ... of being all there, or wholly present, at each moment of one's life” (Hofweber and

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<sup>221</sup> I suggested that this is a problem with Prosser's proposal, as stated, but Prosser may be able to say more at this point. If we take what he says about time seeming to pass together with what he says in the context of discussing DSMs, it may be that he would want to appeal to the object presented in experience being explicitly represented, with it being implicitly represented that this object existed at earlier times. Given that I have already rejected an appeal to DSMs in Chapter 2, I will not consider here whether, or precisely how, such a proposal would work.

Velleman, 2011: 48). This is illustrated by Hofweber and Velleman in terms of the structure of episodic memory and imagination. The authors claim that in episodic recollection the subject takes herself to be wholly existing as the subject recollecting and as the subject that wholly existed while experiencing the state of affairs now being recalled. In this case, they say “I am conceived as entirely present at a single point in time, either as me-here-and-now, entertaining the memory, or as ‘me’-there-and-then, having the experience” (*ibid.*: 49), where the subject picked out in each case is taken to be numerically identical. In other words, the subject who occupies a perceptual perspective on occurrence  $x$  seems to be wholly present as she perceives  $x$ ;<sup>222</sup> the subject who occupies a perspective from which she recalls perceiving  $x$  seems to be wholly present as she recalls perceiving  $x$ ; and the subject in each case is taken to be numerically identical. The subject therefore seems to have changed in her temporal location; hence we arrive at the idea that there seems to have been some change relative to *time*.

We may not wish to commit ourselves to the claims Hofweber and Velleman make regarding episodic memory, and with what has been said regarding the tripartite temporal structure of experience we do not need to commit ourselves to such claims in order to arrive at a sense in which the subject seems to endure. For a wakefully conscious agent, as experiencing continues on (and even if she is not perceiving a particular object), it is not as though the time she has an experiential point of view on – the PSP – is all of the time that there is. In the typical case, the subject has expectations about what will occur in her own immediate future – which she anticipates possessing an experiential point of view on, and/or in which she will proceed to perform a later portion of an action – and an awareness of what was experienced as occurring in one’s immediate past – which she possessed an experiential point of view on, and/or in which she was performing an earlier portion of an action. In virtue of this tripartite temporal structure of awareness, the subject is aware of a succession of times as successive, of herself occupying a given perspective in time, and of immediately previously occupying a perspective on an immediately preceding time.

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<sup>222</sup> The authors say: “At a particular moment, one is not the entirety of one’s temporally extended self, but one is entirely oneself, possessed of a personal identity fully determined within the moment” (*ibid.*: 50).



The experiencing subject's asymmetrical awareness of other times makes the time which the subject is aware of as 'now' – that which is given in experience – *seem* to be one which is incessantly changing. In ongoing wakeful experience the subject is aware of occupying successive perspectives on successive times while the subject does not seem to be moving; rather it is *time* which seems to change. This is the sense in which time *seems* to pass: time seems to pass the subject who seems to endure.

This proposal allows us to account for the phenomenological ingredient at issue when theorists say that time *seems* to pass, without supposing that this is presented in perceptual experience. On this proposal, developed from O'Shaughnessy, the two psychological orientations to the immediate past (as the subject experienced it) and future (as the subject anticipates experiencing it) bookend the time given in experience. This is how the subject is aware of a succession of times as successive; this makes the time the subject is aware of in experience seem to be incessantly changing and passing the subject. This proposal also accounts for the pervasiveness of the phenomenon, with time seeming to pass as long as the subject is wakefully conscious and experiencing, with her experience possessing this tripartite temporal structure.

### **3.4. Qualifications**

The account offered of time seeming to pass is in need of several qualifications. Firstly, this has been offered as an account of the phenomenology. I have argued that objects and the subject of experience seem to endure, that this is explained through appeal to the tripartite temporal structure of experience, and that this structure of experience is responsible for the subject's awareness of a succession of times as successive. This is, I have suggested, the explanation of time seeming to pass. It might be possible to describe what must be the case with the subject (in order for this account of the phenomenology to be correct) without appealing to tensed or perspectival terms, but this is not to give an account of

the phenomenology.<sup>223</sup> What is the correct account of the metaphysics of reality is then a further question; we needn't think the phenomenology determines this.

Secondly, note that while I have said that time seems to pass because of how the subject of experience seems to endure over time, this is not committed to any greater claims about how the structure of experience leads us to conceive of 'the self', or what we should say about how 'the self' in fact fills time. The proposal offered above is consistent with there being many other factors that feed into how we come to conceive of 'the self'. As Hofweber and Velleman illustrate, there may be a role for episodic recollection; there will also be various other features of one's mental life which play a role in how the subject comes to conceive of 'the self' and how it persists.

Thirdly and finally, having stressed that the tripartite structure of experience gains traction in agency, one immediate question would be: what about a conscious state in which there is complete passivity? This would be a state in which a subject is not only not engaged in overtly bodily activity, but a state where she is engaged in no activity whatsoever;<sup>224</sup> where the subject is not lost in thought (assuming this would itself qualify as a form of mental activity), but lost *between* or *without* thoughts. Perhaps that which is sometimes colloquially spoken about as 'being in a daze' or 'a trance' would fit this description.

In response, it is worth emphasising that the account I have advanced is an account of time's seeming to pass for experiencing subjects in *wakeful consciousness*. It is difficult to say whether a state of complete passivity, absent of any intentional activity (mental or bodily), has any positively characterisable phenomenology.<sup>225</sup> Even if it does, it is not at all obvious whether such a state should be thought of as a state of wakeful consciousness. As such, it is not at all

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<sup>223</sup> We can say in non-perspectival terms what must be case, while the phenomenology may nonetheless be irreducibly perspectival. This can be read as the force of much of Nagel's work (1974 and 1986); few people are persuaded that the non-perspectival sort of explanation gives us an account of the phenomenology of a bat, for example.

<sup>224</sup> Where such activity is to be construed as being poised to act or to change the course of the action one is engaged in.

<sup>225</sup> This may be one way of understanding Paul's (2010) claim that in order to experience time passing a subject would minimally have to be aware of *contrasts* with respect to properties of her thoughts.

clear whether we should say that time does seem to pass for a subject in such a state, although more would have to be said about what such a state consists in order to make a decisive commitment either way.

### **Concluding remarks**

In order to account for the sense in which time seems to pass I have proposed that we should not be merely trying to articulate some feature of what is presented in perceptual experience. Developing some of O'Shaughnessy's (2000) claims, I argued that we should be trying to articulate an aspect of wakeful consciousness that concerns the experiencing subject's temporal perspective and the times which bookend the (interval of) time presented in experience. Through a discussion of the phenomenology of agency, I developed and motivated O'Shaughnessy's view of the tripartite temporal structure of wakeful consciousness, explaining how it can account for time seeming to pass.

In wakeful consciousness, as well as being perceptually presented with some time (the PSP), an experiencing subject has a primitive and asymmetrical form of awareness of what was experienced in the immediate past and what is anticipated in the immediate future. This is an experiencing subject's tensed temporal perspective. That the subject is aware of what she just experienced and what is anticipated, in this distinctive sense, captures the sense in which the time an experiencing subject has a vantage point upon seems to be incessantly changing. This is the sense in which time *seems* to pass.

## Concluding remarks

In this thesis I have presented a phenomenological investigation of our experience of time. I have argued that articulating the sense in which we have a point of view in time, and what this is a point of view upon, is crucial to an account of how things are for an experiencing subject. I previously suggested that the usefulness of this approach – focusing on an experiencing subject’s point of view in time – was to be demonstrated in how it can solve puzzles that arise in connection with our experience of time. I take myself to have shown this, in different contexts, in each of the five preceding chapters.

Throughout the focus has been upon the specious present, in one form or another. In the first chapter, the conceptualisation of the specious present as the PSP was introduced. Rather than taking the specious present to be introduced in the service of offering an explanatory account of our experience of motion/change, I said that – as the PSP – it is to be introduced in offering an account of the phenomenal character of experience. The specious present – the PSP – is to be understood as an interval of time presented in experience; it is the interval of time that a subject seems to have a point of view upon in wakefully conscious experience.

Granting a role to the PSP, I argued that the PSP also fulfils the explanatory role of the ESP: in order to experience motion/change a discriminable amount of motion/change must be presented over this interval. Yet I demonstrated that in granting a role for the ESP it does not follow that one need grant a role for the PSP. This demonstrates that the ESP and the PSP are conceptually distinct. While the PSP entails a role fitting the ESP, the reverse is not true. As consequence, without presenting further considerations one cannot infer that there is a PSP from the claim that there is an ESP, as some proponents of the specious present appear to have assumed; equally, one does not show that there is not a PSP merely by demonstrating that this does not follow from there being an ESP, as some recent opponents of the specious present appear to have assumed.

In the second chapter I turned to consider snapshot models of temporal experience, these being models provided as alternatives to theories appealing to something akin to the PSP. Following the discussion of the first chapter, I said that while a dynamic snapshot model might be able to account for our experience of motion and change – though I suggested that even this is not straightforwardly the case – we are not independently motivated to endorse such a proposal. Considerations arising from theoretical claims and from empirical findings do not support an appeal to the snapshot model of temporal experience over the PSP; the temporal minima that a subject can become aware of in isolation in reflection upon her phenomenology provides a case against the snapshot model. There is an absence of evidence for supposing that, when a subject experiences a temporally extended occurrence, there are many experiences – experiential snapshots, successive in time – each presenting no temporal extent. What is presented in experience as occurring at a time is so presented in virtue of what is presented in experience as occurring over that time.

From introducing and defending an appeal to the PSP in the first two chapters, I turned to offer a phenomenological characterisation of the PSP and of how we are to characterise the experience of occurrences that unfold over super-intervals – such as plays, concerts, and football matches – in the third chapter. I said that the temporal location of an experiencing subject’s perceptual perspective on occurrences spanning the PSP seems, to her, to be transparent to the temporal location of the occurrences she seems to perceive; this contrasts with the perceptual perspective a subject seems to possess in the visuo-spatial case (and with the case of memory/imagination). Through developing Russell’s construal of what is *given* in experience, I said that the PSP is to be understood as the positive temporal extent a subject is invariably presented with in wakefully conscious experience, a temporal extent that her perceptual perspective is transparent to, where this interval marks the partition between the past and the future for the subject.

The PSP picks out a privileged interval, for experiencing subjects, in the sense that that subjects experience things that unfold over super-intervals of time through experiencing sub-intervals of the occurrence, as they fall within the PSP, over time. I further demonstrated that given the phenomenological characterisation of the PSP proposed, we can characterise our experience of occurrences that unfold over super-intervals without arriving at any principled way of individuating between discrete experiences. I ended by suggesting that what is to count as a token experience on a particular occasion may be somewhat context or interest relative.

In Chapter 4 I compared and contrasted the experience of objects and events, and the perspective an experiencing subject seems to possess in space and in time. I suggested that the sense in which an object is perceived as a voluminous whole, where there is more of it to be seen than a subject can see at a given time, is to be accounted for through drawing attention to how it is manifest to the subject that she is experiencing the object from a relative point of view. I said that the experiencing subject's visual experience of an object features perspectival-partialness and that the subject is aware that the perspective she possesses in space is one of many possible perspectives on the object. I demonstrated that in the temporal case our experience is not perspectivally-partial; spatiotemporal occurrences presented over the PSP do not seem to admit of any other possible perceptual points of view in time. Yet, getting right how things are for the subject requires an appeal to the sense in which the subject has an asymmetrical awareness of the times immediately prior and subsequent to the time presented over the PSP: that there were earlier times/temporal parts she experienced, and that there will be later times/temporal parts she will experience. In the fifth chapter I argued that this tripartite, asymmetrical awareness of times either side of the PSP is (partly) responsible for the sense in which time seems to pass.

In virtue of the tripartite temporal structure of awareness, a subject is aware of a succession of times as successive, of herself occupying a given perspective in time, and of immediately previously occupying a perspective on an immediately preceding time. The experiencing subject's asymmetrical awareness of other

times makes the time which the subject is aware of as 'now' – that which her temporal perspective is transparent to – *seem* to be one which is incessantly changing. This is to say that in ongoing wakeful experience the subject is aware of occupying a perspective that seems to be invariant over time and transparent to that which is given over the PSP, while she nonetheless seems to occupy a perspective on successive times. It is the time that the subject has a perspective upon that seems to be changing; this is the sense in which time *seems* to pass the subject.

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