Naïve Realism and Phenomenology

Exploring Selfhood, Temporality, and Presence

Daniel Sung Hyeok Kim

PhD

University of York

Philosophy

October 2023

Abstract

This thesis is about perceptual experience, its subjective character, and how it is essentially structured. It focuses specifically on how the nature of perception is shaped not only by our acquaintance with the world but also by the very structure of experience itself. My central claim is that perceptual consciousness incorporates different aspects, some of which constitute the very way in which experiences are organized, sustained, and structured.

Over the course of this thesis, I develop and defend an original account of the nature of perceptual experience by integrating naïve realism, a prominent contemporary Anglophone theory of perception, with insights and ideas from the Phenomenological tradition. In particular, I argue that there are fruitful grounds for combining naïve realism and a phenomenologically grounded account of the essential *structural* features of experience ('minimal self', 'temporality', 'anticipation').

Naïve realism holds that perception is fundamentally a matter of being in direct contact with some mind-independent entities. Proponents of naïve realism often emphasize the 'object-dependent' nature of perception. The appeal to the structural features of experience offers us a promising way to delineate the oft-overlooked 'subject-dependent' nature of perception and capture the phenomenological richness of our conscious experiential life.

This thesis offers a rich, phenomenologically informed account of the nature of perception which in turn places us in a better position to understand the nature of hallucination. The integration of naïve realism and the structural approach to consciousness I develop in this thesis yields a novel solution to the problem of hallucination: *structural disjunctivism*. According to this view, the 'partially overlapping' psychological nature of perception and hallucination is accounted for in terms of their structural similarities and differences. I seek to show how detailed analyses and reflections on the structures of perceptual experience pave the way to reconceive the phenomenological basis of naïve realism.

Declaration

I hereby declare that this thesis is a presentation of original work and I am the sole author. This work has not previously been presented for a degree or other qualification at this University or elsewhere. All sources are acknowledged as references.

Acknowledgements

List of Contents

Chapter 1: The Problem of Hallucination

1. Introduction

This thesis investigates how the integration of the analytic and phenomenological approaches to perceptual consciousness can yield unique contributions to our understanding of the nature of perception and hallucination, showing how phenomenologically informed discussions of the essential *structures* of consciousness can enhance our understanding of the 'phenomenal' ('what it is like') character of perceptual experience in a novel way.

The primary aim of the thesis is to develop and defend an original account of conscious perceptual experience that incorporates naïve realism, a prominent contemporary Anglophone theory of perception (Campbell, 2002; Martin, 2002; 2004; 2006; Brewer, 2006; 2011; Fish, 2009; Soteriou, 2013; Allen, 2016), and a phenomenologically motivated account of the *structural* properties that are essential to *all* human conscious experience. I focus specifically on issues about the relation between perceptual consciousness and self-consciousness (Chapter 2), the temporal nature of perceptual experience (Chapter 3), and the role of anticipation in perception (Chapter 4).

Drawing on insights and ideas from the Phenomenological tradition (Husserl, 1913/2012; Merleau-Ponty, 1945/2012; Sartre 1943/1998; Zahavi, 2014; Noë, 2004), I argue that these ubiquitous *structural* aspects of consciousness (namely, 'selfhood', 'temporality', 'anticipation') that constitute the very 'subject-dependent' nature of perception can fruitfully supplement the particular emphasis naïve realists often place on the 'object-dependent' nature of perception. Once the relevance of these structural features of experience is justified, I then go on to show how the general structural approach to perceptual phenomenology can help us better understand and elucidate the nature of both actual and hypothetical forms of hallucination (Chapters 5 and 6).

Naïve realism is the view that perception is fundamentally a matter of being directly aware of or acquainted with some mind-independent entities (e.g., objects, properties, events) in one's immediate environment. Contemporary naïve realists typically hold that the view provides the best explanation of the 'phenomenal' character of experience or 'what it is like' for a subject to have an experience (Nagel, 1974). Or, as Martin puts it, it "best articulates how sensory experience seems to us to be just through reflection" (Martin, 2006, p. 354). The thought behind this 'phenomenological'

motivation for naïve realism is that the theory best captures the sense that in perceiving, we are 'directly' and 'immediately' presented with the world around us and things in it. There are also other alternative ways of motivating naïve realism.[1] Although interesting and important in their own rights, consideration of these various motivations for naïve realism will not be the main concern of my discussion. Instead, I draw attention to how the materials from the Phenomenological tradition can help to enhance the theoretical framework of naïve realism in a novel way, providing tools to address the longstanding problem of hallucination.

Given that naïve realism offers an account of the 'good' case of veridical perception, the possibility of 'bad' cases of illusion and hallucination (where things are not as they *seem*) is a threat to the theory. Accounting for cases of hallucination (where it *seems* to the subject as if there is something in the environment that isn't there at all) is a particularly pressing issue for the theory as it threatens to undermine our common-sense or 'naïve' conception of perceptual experience as involving a direct and immediate presentation of the reality.[2] When faced with the problem of hallucination, naïve realists typically endorse a 'disjunctivist' approach, according to which perception and hallucination are most fundamentally different *kinds* of mental events and thus require different explanations (Hinton, 1967; 1973; Martin, 2004; 2006; Snowdon, 2008; Fish, 2009; Soteriou, 2013).

This chapter examines the plausibility of one prominent version of disjunctivism about the phenomenal character of hallucination, developed by Martin (2004; 2006). According to his version of 'negative epistemic disjunctivism', the phenomenal character of some hypothetical form of hallucination (that is not distinguishable by the subject from a veridical perception) is to be characterized solely in terms of the fact that it is *introspectively indiscriminable* from a certain veridical perception. Section 2 sets the stage, outlining the current dialectic between two rival theories of perception, representationalism and naïve realism (or relationalism).[3] Section 3 introduces and discusses the core of Martin's influential argument for naïve realism based on his negative epistemic conception of hallucination. Section 4 addresses two pressing objections to Martin's version of

---

[1] Campbell (2002), for instance, claims that naïve realism best accounts for the fact that we have knowledge of demonstrative reference that is more primitive than our thoughts about mind-independent objects. Some have suggested that it can help to undermine Cartesian scepticism about the possibility of our knowledge of the external world (McDowell, 2008; Johnston, 2006). Martin (2002) argues that reflection on the nature of 'sensory imagination' favours naïve realism. See Fish (2009, Ch. 1) for an overview of different motivations for naïve realism.

[2] I focus specifically on issues related to the possibility of hallucinations, thereby excluding other important issues related to the nature of illusory experiences. This is partly because illusions are generally understood to be (successfully) caused by external stimuli like veridical perceptions, whereas 'genuine' hallucinations are not based on anything in external reality. I take the latter to be more problematic for naïve realists.

[3] In contemporary scholarship, naïve realism and relationalism are often taken to be alternative names for the same thesis. The relationalist commitment of naïve realism will be discussed in more detail in Chapter 2.

negative epistemic disjunctivism, presented by Siegel (2004; 2008) and Sturgeon (2006; 2008). Section 5 expounds on the need for a more robust, positive characterization of hallucination as a remedy to the current dialectic impasse.

2. Naïve Realism and the Argument from Hallucination

2.1. Two Rival Theories of Perception

The nature of sense perception has long been a chief concern of philosophers of mind and perception. The two presently dominant theories of perception are representationalism (or intentionalism)[4] and naïve realism (or relationalism).[5]

Representationalism is the view that perception is a matter of *representing* the surrounding environment being a certain way and some worldly objects as having certain properties. According to this view, perceptual experience has representational content that characterizes the experience's conditions of veridicality or satisfaction. This means that an experience is veridical provided that the world really *is* the way the experience represents it as being. For example, my visual experience of the apple on my desk is veridical just in case there really is a red apple before me that is 'causally responsible' for my experience (representation) of it. Naïve realism, by contrast, maintains that perception is fundamentally a matter of being in 'contact' with, or directly aware of, the mind-independent world and things in it. Naïve realists claim that there are phenomenally conscious states whose obtaining requires the obtaining of a relation of *acquaintance* and whose nature cannot be specified independently of that relation.[6] The idea is that when accounting for the nature of perception, one misses out some aspects of the character of experience if one does not appeal to the obtaining of a *sui generis* non-representational relation between the subject and her surrounding environment. For the relevant relation of acquaintance is supposed to be more primitive and explanatorily basic than having some representational content.

---

[4] Representationalism is championed by Armstrong (1968), Peacocke (1983), Tye (1992; 1995), Dretske (1995), Lycan (1996; 1999), Byrne (2001), Siegel (2010), and Pautz (2010).
[5] Contemporary advocates of naïve realism include Campbell (2002; 2009), Martin (2002; 2004), Travis (2004), Brewer (2006; 2011), Fish (2009), Kalderon (2011a), Soteriou (2013), Allen (2016), and French and Phillips (2020).
[6] The notion of 'acquaintance' deployed in contemporary philosophy of perception derives from Russell's (1910) (early) conception of 'knowledge by acquaintance' as more primitive and explanatorily basic than 'knowledge by description' or 'propositional knowledge'.

One of the main explananda of theories of perception is the 'phenomenal' ('what it is like') character of perceptual experience (Nagel, 1974). On the one hand, the representationalist views that perception involves a subject being in certain representational states, and the phenomenal character of her experience is determined by, and thus to be explained in terms of, the content of those representational states (e.g., I see 'that there is a red apple on my desk'). On the other, the naïve realist holds that the phenomenal character of perceptual experience is inexplicable in terms of the content of representational states. The phenomenal character of the experience is to be explained 'at least in part' in terms of the obtaining of a non-representational relation of acquaintance to some mind-independent objects and properties that is *constitutive* of the phenomenal character of experience. On this construal, when I hear a familiar tune on the radio, the phenomenal character of my auditory experience is constituted by, and to be accounted for in terms of, *that* very tune that I am directly aware of.

It is worth noting that part of the motivation behind both naïve realism and representationalism is their rejection of sense-datum theory, a form of indirect realism which holds that perception of ordinary physical objects (e.g., tables, chairs) is mediated by a direct awareness of some distinct 'mind-dependent' entities called sense-data (Russell, 1912/1967). To the extent that they both dismiss the idea of introducing a *veil of perception* between us and reality, naïve realism and representationalism can be viewed as providing different ways of articulating the (broadly construed) 'direct realist' intuition that reflection reveals that we are directly presented with mind-independent objects.

What ultimately differentiates naïve realism and representationalism is a commitment to the idea of whether mind-independent objects and properties are *constitutive* of the fundamental, metaphysical nature of perceptual experience. Naïve realists hold that the mind-independent entities essentially constitute and characterize 'what it is like' to have perceptual experiences, whereas representationalists typically deny this. This thesis purports to provide an argument in support of the naïve realist account of the phenomenal character of perceptual experience by introducing and defending a richer, multi-faceted conception of perceptual phenomenology – by appealing to the presence of some essential *structural* features of consciousness. But first, let me draw attention to a longstanding problem for naïve realism.

2.2. The Problem of Hallucination

Accounting for the possibility of hallucinations is a particularly challenging task for naïve realist theories of perceptual phenomenology. The very possibility of non-veridical experiences threatens to

undermine our common-sense or naïve conception of veridical perceptual experience as involving a 'direct' and 'immediate' contact with the world around us. One of the key explanatory challenges for naïve realism is to provide a plausible response to the problem of hallucination.

The orthodox conception characterizes hallucination as a kind of conscious sensory experience one has in the absence of relevant mind-independent objects. That is, to have a hallucinatory experience of *p* is to have a conscious sensory experience of *p* in the absence of *p*. The 'philosophical' notion of hallucination needs further qualification. In particular, it refers to the possibility of a kind of hallucinatory experience that is 'subjectively indistinguishable' from a certain veridical perceptual experience. This means that when undergoing the relevant experience, it is not knowable to the subject whether she is genuinely perceiving or merely hallucinating. For example, in having a visual hallucination of a green tree that is subjectively indistinguishable from a veridical visual perception of a green tree, it merely *seems* to the subject that she is seeing a green tree when she is not. This is because the hallucinator is not in the right epistemic position to know that she is perceiving (and thus not hallucinating) a green tree. This way of characterizing 'philosophical hallucination' thus precludes so-called 'pseudo-hallucination' (the kind of hallucination that is recognized by the subject as 'unreal') and 'veridical hallucination' (that is said to involve the presence of some 'matching' objects in reality but are not causally dependent on such external objects).

The possibility of subjectively indistinguishable hallucination is said to pose a threat to naïve realism. The argument runs as follows:

P1. Hallucination can be subjectively indistinguishable from a veridical perception.

P2. If hallucination can be subjectively indistinguishable from a veridical perception, then veridical perception and matching hallucination possess the same phenomenal character.

∴ Veridical perception and matching hallucination possess the same phenomenal character.

The first premise is often taken for granted in that both proponents and opponents of naïve realism accept the possibility of there being a subjectively indistinguishable hallucination. Perhaps the intuitive force behind the first premise is grounded in the intuitiveness of the second premise (the 'generalizing' move) where the phenomenal similarity or subjective indistinguishability between veridical perception and matching hallucination is to be explained in terms of their shared phenomenal character.

Note that the argument is not an issue for the representationalist who can accept that the content of her representational experiential state may be exactly the same in both cases of veridical perception and hallucination where their phenomenal character may be exactly the same. That is, for example,

one's visual perception of a yellow banana and the corresponding visual hallucination may have the same representational content – e.g., I see '*that there is a yellow banana*' – and hence share the same phenomenal character.

However, the argument raises a serious challenge to the naïve realist who is likely to maintain that there is nothing *fundamentally* in common between a genuinely 'world-involving' perception and a 'non-world-involving' (or 'fictional-world-involving) hallucination. According to naïve realism, in the veridical case, there is an external object, a yellow banana, upon which the experience's phenomenal character constitutively depends. In the hallucinatory case, the experience is quite different insofar as there is no real object to be a constituent of her experience. From this, a critic of the view might conclude that, *if* hallucination can have the same phenomenal character as a successful perception despite the absence of the relevant object, *then* we should not (or there is no need to) appeal to the obtaining of a perceptual relation of acquaintance when accounting for the phenomenal character of veridical perception. Hence naïve realism is undermined.

When faced with the problem of 'subjectively indistinguishable' hallucination, the naïve realist typically rejects the underlying assumption of P2, namely that the sameness of phenomenal character of successful perception and the matching hallucination is what grounds and explains their indistinguishability: from the mere possibility of having a hallucination that is subjectively indistinguishable from a veridical perception (the antecedent of the conditional), it does *not* follow that the two experiences share the same phenomenal character (its consequent). Or so the naïve realist argues. In this way, the problem of hallucination motivates the naïve realist to endorse a 'disjunctivist' approach.

Disjunctivism is the general view that there is no fundamental experiential element that obtains in both a veridical perception and an indistinguishable hallucination (Hinton, 1967; 1973; McDowell, 1982; 1994; 2008; Snowdon, 1990; Martin, 2002; 2004; 2006). According to the 'disjunctivist' naïve realist, the sort of experience involved in veridical perception and the sort of experience involved in the matching hallucination are fundamentally different in kind. That is, there is no fundamental experiential feature that obtains in both veridical perception and non-veridical hallucination.[7] The sort of experience that is involved in a successful perception is genuinely 'world-involving' whereas the sort of experience involved in a subjectively indistinguishable hallucination only *seems* that way. On the rival 'common kind' theories or conjunctivism, veridical perception and matching hallucination are

---

[7] There exist 'non-naïve-realist' disjunctivists as well (e.g., McDowell). But given that the primary aim of this thesis is to provide a phenomenological argument in support of naïve realism (by appeal to the essential structures of conscious experience), the focus of my discussion in what follows will be on developing a plausible disjunctivist account of hallucination that is fully committed to the naïve realist framework.

of the same fundamental, psychological kind and their shared phenomenal nature accounts for the subjective indistinguishability of the two cases.

2.3. The Causal Argument

In contemporary Anglophone philosophy of perception, one particularly influential version of the problem of hallucination has been the so-called 'causal argument'. (Robinson, 1985; 1994). The causal argument from hallucination considers the purely hypothetical cases of 'causally (e.g., neurally) matching hallucination'. Consideration of the common causal condition for veridical perception and its hallucinatory counterpart is supposed to be much stronger and thus more threatening to naïve realism than positing the mere possibility of two phenomenally indistinguishable experiences.

A version of the causal argument can be formulated as follows:

P1. Causally matching hallucination is possible.

P2. If causally matching hallucination is possible, then the common effects will obtain in veridical perception and causally matching hallucination.

P3. The common effects are sufficient to account for the phenomenal character of causally matching hallucination.

P4. If the common effects are sufficient to account for the phenomenal character of causally matching hallucination, they will be sufficient to account for the phenomenal character of veridical perception.

P5. If the common effects are sufficient to account for the phenomenal character of veridical perception, then disjunctivism is false.

∴ Disjunctivism is false.

P1 assumes that it is possible to induce hallucinations by synthetically activating neural processes involved in genuine perception. A causally matching hallucination involves the same kind of proximate neural cause and brain state as a veridical perception. What underlies P2 is the principle of 'same proximate cause, same immediate effect'. As the argument goes, from P1, it follows that the experiences involved in genuine perception and their causally matching counterpart must be explained in the same way in terms of their common (cognitive or behavioural) *effects*, because they have the same proximal neural *causes*. The sort of effect that is produced in a causally matching hallucination is also produced in the case of veridical perception. P3 is that the common effects of a

veridical perception and the causally matching hallucination are sufficient to account for the phenomenal character of causally matching hallucination. From this one may infer that these common effects are also sufficient to account for the phenomenal character of veridical perception (P4). This then undermines the naïve realist's disjunctivist approach (P5).

This line of thought paves the way for the so-called 'screening off' worry which threatens to undermine naïve realism. The worry is, *if* we don't need to appeal to anything more than these common effects (that are produced in both cases of veridical perception and hallucination) when providing an account of causally matching hallucination, *then* this must mean that the occurrence of these common effects is sufficient to account for the phenomenal character of causally matching hallucination and that of genuine perception. This then 'screens off' the special explanatory role proponents of naïve realism assign to the relation of acquaintance and the presence of mind-independent entities in accounting for the phenomenal character of perceptual experience.

Disjunctivists tend to view this sort of 'effect-based' functionalist account of phenomenal character as a vice, resisting the idea that the nature of conscious sensory experiences is exhausted by, and can be fully explained in terms of, their effects or functional roles alone. Proponents of naïve realism may try to avoid such a 'consequentialist' vice by appealing to the obtaining of a non-representational relation of acquaintance in veridical perception. That is, even if the two experiences have the same 'effects', veridical perception and causally matching hallucination are still fundamentally different kinds of experience *because* only in the veridical case the subject stands in the acquaintance relation to her surroundings.

The disjunctivist insists that genuine perception has a phenomenal property that cannot be possessed by causally matching hallucination. She may then respond to the causal argument by suggesting that to say that a genuine perception and a causally matching hallucination can yield common 'effects' is not yet to establish that there are no psychological 'differences' between them. The claim is that there are some significant psychological differences between the sort of experience that is involved in a successful perception and the sort of experience involved in a causally matching hallucination despite their subjective indistinguishability and common effects. What the disjunctivist aims to show is that such psychological differences are what grounds the differences in their phenomenal character.

3. Negative Epistemic Disjunctivism

In what follows, I examine a prominent disjunctivist response to the causal argument that is defended by Martin (2004; 2006). His favoured version of 'negative epistemic disjunctivism' is based on an epistemically-oriented conception of hallucination. According to negative epistemic disjunctivism, the phenomenal character of veridical perception is constitutively dependent on some mind-independent entities, whereas the phenomenal character of (causally matching) hallucination is exhausted solely by some 'negative epistemic' condition, namely that of being *introspectively indiscriminable* from corresponding veridical perception.[8]

3.1. An Epistemic Conception of Hallucination

Martin develops a disjunctivist response to the causal argument based on his epistemically-oriented conception of hallucination. His argument can be simplified and reformulated as follows:

> P1. The subject of causally matching hallucination *cannot know*, through introspection alone, whether she is hallucinating or genuinely perceiving.
>
> P2. If the subject of causally matching hallucination *cannot know*, through introspection alone, whether she is hallucinating or genuinely perceiving, then the phenomenal character of hallucination is exhausted by the fact that her experience is 'introspectively indiscriminable' from a veridical perception.
>
> ∴ The phenomenal character of hallucination is exhausted by introspectively indiscriminability.

Martin argues that, if it is possible to generate a causally matching hallucination, then the phenomenal character of such a hallucinatory experience is determined entirely by the experience's negative epistemic condition, namely that of being introspectively indiscriminable from a corresponding veridical perception. The phenomenal nature of a causally matching hallucination is thus 'exhausted' by the experience's introspective indiscriminability.[9] This means that causally matching hallucination has no *positive* mental characteristics, other than that of being introspectively indiscriminable from a veridical perception.[10] This indiscriminability condition is supposed to be both necessary and sufficient for the occurrence of a causally matching hallucination. On this view, the causal argument can be

---

[8] For other 'disjunctivist' naïve realist responses to the causal argument, see also Fish (2009), Logue (2012a; 2013), Hellie (2013), Allen (2015), Moran (2019), and Sethi (2020).

[9] For detailed discussion of the epistemic notion of indiscriminability, see Williamson (1990).

[10] The opponent of negative epistemic disjunctivism may take issue with P1 (on the grounds that it is unclear what Martin means by the condition of 'what is unknowable by introspection alone') or with P2 (on the grounds that the consequent of the conditional does not follow from its antecedent). In fact, the tenability of P2 stems from the plausibility of P1 which in turn depends on what Martin's notion of introspective indiscriminability amounts to. This will be the main focus of my discussion in Section 4.

resisted because the common (cognitive or behavioural) effects produced in veridical perception and its causally matching hallucinatory counterpart simply amount to (and are to be accounted for in terms of) the fact that they are not discriminable by the subject through introspection alone. But the indiscriminability condition alone does not suffice for the phenomenal (and psychological) sameness of the two cases.

How does Martin's version of negative epistemic disjunctivism avoid the 'screening off' concern? Wouldn't the introspective indiscriminability condition (that is supposed to be both *necessary* and *sufficient* for the occurrence of a causally matching hallucination) undermines or 'screen off' the explanatory value of the sort of explanation that the naïve realist gives in accounting for veridical perception (in terms of our direct 'contact' with the world as a *necessary* condition)?

Martin's strategy to avoid the screening off worry is to appeal to the distinctive explanatory role assigned to the phenomenal character of veridical perception. He argues that whilst a successful perception and the causally matching hallucination may share the property of being introspectively indiscriminable from a certain veridical perception, such a negatively specified epistemic property is only fundamental to the hallucinatory case but not to the veridical case. What is fundamental to veridical perception is some metaphysical property of *being* a 'world-involving' veridical perception. According to the negative epistemic disjunctivist, the former, the indiscriminability property, is "the most inclusive conception we have of what sensory experience is" (Martin, 2004, p. 56), whereas the latter amounts to a metaphysical condition that is only applicable to the veridical case that involves worldly entities (e.g., objects, properties, events). Although the two cases may share the same property of being indistinguishable from a veridical perception, perception and hallucination differ in their fundamental nature because the former is 'constituted' by some mind-independent entities whereas the latter is not. According to Martin, the explanatory potential of the more fundamental, metaphysical property of veridical perception (i.e., that of *being* a veridical perception) 'grounds' and therefore is not 'screened off' by the presence of the common negative epistemic property (i.e., that of *being introspectively indiscriminable from* a veridical perception). Martin argues that the explanatory value of the indiscriminability condition only *derives from* and is thus *parasitic upon* that of actually being a veridical perception. He remarks,

> if the property of being a veridical perception lacks any explanatory role, then we can no longer show that being indiscriminable from a veridical perception has the explanatory properties which would screen off the property of being a veridical perception (Martin, 2004, p. 69).

In this way, the phenomenal properties of a genuine perception are not 'screened off' by the phenomenal properties of causally matching hallucination because the indiscriminability property is only fundamental to hallucination and its explanatory power is only derivative and secondary.

3.2. Negative Epistemic Disjunctivism

Martin's version of negative epistemic disjunctivism about the phenomenal character is two-fold as it attempts to integrate (1) the naïve realist conception of 'veridical' perceptual experiences, and (2) a negative epistemic conception of 'non-veridical' hallucinatory experiences.

First, on naïve realism, in good cases, external worldly items and their properties constitute one's conscious experience and thereby "shape the contours of the subject's conscious experience" (Martin, 2004, p. 64). On this account, when a subject undergoes a successful perceptual experience, she becomes directly and immediately aware of the mind-independent world and things in it (e.g., objects, properties, events). It is worth emphasizing here that naïve realism is a substantive *metaphysical* thesis about the phenomenal nature of veridical perception. Naïve realists typically hold that conscious sensory experiences are phenomenally typed by certain properties that are metaphysically constituted and grounded by the perceptible properties of those worldly objects to which the subject stands in a relation of acquaintance.

Second, Martin's negative epistemic conception of hallucinations amounts to the idea that the phenomenal character of a causally matching hallucination is fully determined by the experience's negative epistemic condition alone, that of being subjectively indistinguishable from a veridical perception. According to him, naïve realists who embrace disjunctivism should affirm that in cases of subjectively indistinguishable hallucination, the phenomenal character of the experience is exhausted by the fact that it is not knowable to the subject, by introspective reflection alone, that her experience is not a veridical perception, and that there is nothing more to (be said about) 'what it is like' to have a subjectively indistinguishable hallucination other than such a fact. Based on his negative epistemic conception of hallucination, Martin argues that the naïve realist should deny the possibility of giving any *positive* account of the kind of experience that would occur in causally matching hallucination.

On Martin's account, whereas the phenomenal character of a veridical perceptual experience is constitutively dependent on, and thus to be accounted for in terms of, the relevant part of the external world to which the subject is acquainted, the phenomenal character of the causally matching hallucinatory experience is determined solely by some negative epistemic condition of being 'introspectively indiscriminable' from corresponding veridical perception. His disjunctivist response to

the causal argument can be viewed as comprising two core claims: (1) that the phenomenal character of causally matching hallucination is constituted and exhausted by the relevant experience's introspective indiscriminability (an epistemological claim about the phenomenal character of hallucination), and (2) that the introspective indiscriminability is only fundamental to the nature of causally matching hallucination but not to the nature of veridical perception (a metaphysical claim about the fundamental nature of hallucination and perception).

It is worth mentioning at this point that there is another prominent line of argument for negative epistemic disjunctivism, defended by Fish (2009). According to his 'effect-based' or 'eliminativist' account of hallucination, causally matching hallucination may not possess any phenomenal character of its own and the indiscriminability condition of the relevant (hallucinatory) experience is to be explained solely in terms of the common (cognitive or behavioural) effects that are produced in both cases of veridical perception and causally matching hallucination. This thesis aims to enhance and enrich the phenomenological basis of naïve realism. For this reason, the main focus of my discussion in what follows will be on developing a *positive metaphysical* version of disjunctivism as an alternative Martin's version of negative epistemic disjunctivism.[11] We now turn to examine the plausibility of Martin's response to the causal argument.

4. Objections

Several objections have been raised against Martin's version of negative epistemic disjunctivism. Taking issue with his epistemic conception of hallucination, critics often contend that the notion of introspective indiscriminability he invokes cannot adequately accommodate the phenomenal nature of hallucination (Siegel, 2004; 2008; Sturgeon, 2006; 2008).[12] For this reason, one of the main focal points of the current dialectic between the proponent of negative epistemic disjunctivism and the opponents has been on the tenability of the notion of introspective indiscriminability. The issue here is not a merely verbal one in that one's conception of the nature and scope of introspection matters when it comes to accounting for the metaphysical nature of experience and its phenomenal character.

---

[11] Here I am assuming that causally matching hallucination possesses some phenomenal character of its own in as far as it is constitutive of the cohesively unified, flow-like 'stream of consciousness' and thus has a distinctive temporal (ontological) profile of unfolding.

[12] For critical discussion of Martin's version of negative epistemic disjunctivism, see also Johnston (2004), Hawthorne and Kovakovich (2006), Pautz (2010; 2011), Logue (2012b, 2013), Hellie (2013), and Sethi (2020).

In this section, I focus on addressing two particular objections concerning (1) the relation between introspective indiscriminability and 'cognitive capacity' ('the dog problem') and (2) the sort of 'reflective knowledge' one can have about one's experiential situation ('the alignment problem'). Consideration of these objections to Martin's epistemic conception of hallucination will help to clarify the scope and limits of negative epistemic disjunctivism.

4.1. The Dog Problem

The first objection to Martin's epistemic conception of hallucination concerns whether the notion of introspective indiscriminability can accommodate the different kinds of hallucination that can be undergone by some creature (e.g., a dog) that lacks the cognitive capacities to make reflective judgments about their own experiences (Siegel, 2004; 2008). As the objection goes, we cannot appeal to the epistemic notion of indiscriminability to characterize the sort of hallucinatory experiences that could be had by such a cognitively unsophisticated dog. For the dog, all her experiences will be such that she cannot know and judge that it is distinct from a veridical perception. On the negative epistemic disjunctivist's account, all the dog's experiences will seem the same (indiscriminable) to the dog, meaning that her hallucinatory experience could be of *anything* – regardless of, say, whether she is hallucinating a sausage, an apple, or a white picket fence. This would then lead to a counterintuitive conclusion that every hallucinatory experience the dog undergoes would have the same phenomenal character – whether it is of a sausage, an apple, or a white picket fence. Or so the objection goes.

Martin's (2006) response to this objection points to an *impersonal* notion of indiscriminability. In saying that a hallucination is introspectively indiscriminable from a veridical perception, Martin does *not* mean that it is not possibly known to be different from some veridical perception by a particular subject or a group of subjects. Rather, it describes an experiential situation where it is not possibly known to the subject (whether she is hallucinating or genuinely perceiving) in an impersonal, objective sense. That is to say, one particular creature's 'cognitive capacities' are irrelevant in elucidating what the impersonal notion of indiscriminability purports to capture. This impersonal talk of indiscriminability Martin invokes here is comparable to the way we talk about what is 'visibly indiscriminable' in terms of what vision can and cannot discern, regardless of what an individual perceiver would or would not see. For example, a masterfully crafted soap could be impersonally visually indiscriminable from a lemon. But from this, it does not follow that the object is a real lemon.

How exactly is this impersonal conception of indiscriminability meant to help with the dog problem? The impersonal notion of indiscriminability is meant to capture the idea that whatever the kind of

experience that the hallucinating dog is having, its phenomenal character cannot be fully explained in terms of that individual dog's cognitive capacity to make a judgment about what kind of experience she is having (i.e., whether she is hallucinating or perceiving). The relevant 'impersonal', 'unrelativized' notion of indiscriminability should not be thought to be *reducible to* what a given subject would or would not know about her experiential situation in a 'personal', 'relativized' sense. In this way, the negative epistemic disjunctivist is not committed to the idea that cognitively unsophisticated creatures cannot have different conscious hallucinatory experiences simply because they lack the cognitive capacities to make reflective judgments about their experiences. For, according to Martin, the impersonal notion of indiscriminability is equally applicable whether it is a dog's experience, an experience of an inattentive human subject, or a perfectly cognitively sophisticated human adult.

Siegel (2008) raises a further worry that the crucial question for the disjunctivist is to explicate "what it could be for a dog's experience to have such an impersonal indiscriminability" (Siegel, 2008, p. 211). She argues that the modalized, impersonal notion of indiscriminability Martin appeals to cannot help to delineate the phenomenal nature of a hallucinating dog's particular experiential situation. The issue is not simply that it is unclear whether the impersonal notion of indiscriminability is meant to capture (1) how the dog could *ideally* introspect on her hallucinatory situation, (2) how I (as a human subject) could *ideally* introspect on the imagined experiential situation of the hallucinating dog, or (3) how an *ideal* introspector could be in the dog's experiential situation. But, more importantly, the impersonal notion invokes such counterfactual situations and "there is no reason to think that the counterfactual […] explicates what it is to have an experience [i.e., an experiential situation]" (Siegel, 2008, p. 213). The point is that the impersonal notion cannot capture 'what it is like' to have a conscious experience in the hallucinating dog's experiential situation. We cannot pick out the relevant (particular) kind of conscious hallucinatory experience simply by appealing to the modal, impersonal notion of indiscriminability alone.

4.2. The Alignment Problem

On Martin's epistemic conception of hallucination, reflection plays a crucial role in grounding our knowledge of the phenomenal character of experiences. In characterizing what the notion of introspective indiscriminability should amount to, Martin claims that a perfect, introspectively indiscriminable hallucination "is such that it is not possible to know *through reflection* that it is not one of the veridical perception" (Martin, 2006, p. 364; emphasis added). For him, it is 'through reflection' on one's experiential situation one can (or cannot) know whether one's experience is a case of genuine perception or that of hallucination.

Sturgeon (2006; 2008) takes issue with the 'through reflection' clause, insisting that the negative epistemic disjunctivist must tell us exactly what goes on when a hallucinating subject reflects on her epistemic context (i.e., what is available to the hallucinating subject in simply reflecting on her circumstances). According to him, there is a 'misalignment' between what the disjunctivist must and must not say about what a hallucinating subject can know 'through reflection' on her experiential situation. On the one hand, the relevant notion of reflection *must* restrain the hallucinating subject from making use of certain background beliefs as she might use them to 'figure out' that she is hallucinating. As Martin states,

> we need to bracket the relevance of the additional information you have acquired through testimony. This is what the appeal to 'through reflection' is intended to do (Martin, 2006, pp. 364-365).

Yet, on the other hand, the 'through reflection' condition *must* also allow for making use of some background beliefs to make sense of any 'positive knowledge' gained from the relevant hallucinatory experience she is undergoing as well as any knowledge gained from our everyday cases of successful perception. That is, the disjunctivist seems obliged to say, for example, that in having a perfect hallucination of a red apple, the subject must know by reflection alone that it is not an experience of a yellow banana, a white picket fence, a pink elephant, and so on. According to Sturgeon,

> That is a huge amount of knowledge to be got solely by reflection […] and *not* by reflection on the visual character of [the hallucination] […] The only way that could be true is if background beliefs are generally available to reflection on context (Sturgeon, 2008, p. 138).

The complaint here is that the disjunctivist fails to provide a plausible explanation of what the relevant 'through reflection' condition amounts to. For, in his view, it is difficult to tell which information in background beliefs should count as 'reflective knowledge' and which information should be disqualified by not being available through introspective reflection (in the hallucinatory case). The negative epistemic condition of introspective indiscriminability must restrict the role of some background beliefs to exclude the relevance of the subject figuring out that she is not in a good case through testimony. But, at the same time, it must allow for the relevance of some background beliefs to ensure that it *seems* to the subject that she is in a good case (i.e., the *appearance* of a particular veridical perception). The point is that Martin's conception of reflection and his impersonal notion of introspective indiscriminability doesn't seem able to capture the role of background beliefs in grounding such 'positive' knowledge that obtains or would obtain, by reflection, in the case of a causally matching hallucination (i.e., what it *seems* or *would be like* for one to have a veridical perceptual experience). This is because, for the negative epistemic disjunctivist, hallucination must be

identified solely in terms of some 'negative' fact of impersonal introspective indiscriminability (i.e., that the relevant experience is not discriminable through reflection from a veridical perception).

In sum, the shared sentiment in the above-discussed objections is that Martin's negative epistemic disjunctivism hinges on an inadequate definition of indiscriminability, which fails to provide a plausible account of (1) 'what it is like' for a cognitively unsophisticated dog to have a causally matching hallucination, and (2) what kind of knowledge the subject of a causally matching hallucination would gain by reflecting on her own experiential situation.

4.3. Martin's Alternative Model of Introspection

The point of tension between Martin and his opponents lies in their conception of the nature and scope of introspection that underlies his notion of introspective indiscriminability. The tenability of Martin's defence of naïve realism in the face of the argument from causally matching hallucination is ultimately dependent upon the defensibility of the modal notion of indiscriminability that he invokes that is, in turn, dependent upon his conception of what introspection is or amounts to.

The notion of introspection recommended by Martin is not meant to denote one's cognitive capacity to form a judgment about how things seem to one (Siegel) or reflect on one's epistemic context (Sturgeon). From his perspective, to interpret the indiscriminability condition as a condition on a subject's cognitive capacity for reflective discrimination that is *independent of* her phenomenally conscious experiences would be to 'overintellectualize' it. Rather, the notion of indiscriminability is meant to describe a condition on one's experiential perspective itself – that is, whether the hallucinatory situation the subject is involved in is itself discriminable from a veridical perception regardless of her cognitive capacities for making reflective judgments about her own experiences. This means that Martin rejects the sort of reflection-based model of self-knowledge that he takes to underlie his critics' objections. Instead, he endorses an alternative model of introspection.

On Martin's preferred model of introspection, our introspective perspective on our own experiential situation 'coincides' with our experiential (perceptual) perspective on the world. This is the coincidence thesis. He writes,

> [t]he negative epistemological condition when correctly interpreted will specify not a subject's cognitive response to their circumstances – and hence their knowledge or ignorance of how things are with them – but rather their perspective on the world. This is sufficient for it to be true of a subject that there is something it is like for them to be so (Martin, 2006, p. 376).

In claiming that a subject's introspective perspective on her own experience *coincides with*, and thus is *not independent of*, her perceptual perspective on the world, Martin suggests that the negative epistemic condition of introspective indiscriminability should be read as a condition on the subject's very introspective *access* to her default experiential perspective on the mind-independent world 'at all time'. For him, to specify what is introspectively discriminable or indiscriminable in the case of a causally matching hallucination is therefore to specify the sort of experiential perspective one has in virtue of simply having that experience. On Martin's account, the indiscriminability condition understood in this way suffices to guarantee a phenomenally conscious perceptual experience (in the case of a causally matching hallucination).

Martin thinks that there is no special mechanism of introspection that takes place independently of the sort of mental event involved in having a conscious perceptual experience, denying that there needs a more substantive explanation of introspective indiscriminability. The worry, however, is that such a 'minimalist' model of introspection may be viewed as opaque and uninformative (or untheorized) as it leaves unexplained what exactly goes on when introspective awareness (which *coincides with* perceptual awareness) occurs, and what introspection has to do with obtaining some relevant positive epistemic facts, reflective knowledge, or cognitive effects that are to be produced in both cases of causally matching hallucination and veridical perception (e.g., judgment, belief).

We seem to have reached a dialectic impasse. On the one hand, the critics cast doubt on the idea that the indiscriminability of causally matching hallucination from a corresponding veridical perception suffices to explain the experience's phenomenal character, demanding an explanation of how the notion of indiscriminability is meant to be understood (i.e., in the case of a cognitively unsophisticated dog's causally matching hallucination, in relation to the role of background beliefs that ground our reflective knowledge about our experiential situation). On the other hand, the negative epistemic disjunctivist insists that the notion of indiscriminability is not meant to specify the subject's 'cognitive' capacity to form 'reflective' judgments about her experiential situation based on some background beliefs, but rather to specify the sort of 'perceptual' perspective one has on the world.

4.4. Residual Worries

The intricate dialectic between the proponent and the opponents of negative epistemic disjunctivism gives rise to two particular residual worries. First, the disjunctivist who denies that (causally matching) hallucination can have the same phenomenal character as a veridical perception will need to provide a distinct explanation of how it is that the hallucinating subject can be in an epistemic position to know

anything at all – given that the same "positive epistemic facts" (Siegel, 2008, p. 218) or 'cognitive effects' are supposed to obtain in both cases of veridical perception and causally matching hallucination. The relevant phenomenological datum to be respected here is that, in both 'good' (veridical) and 'bad' (hallucinatory) cases, it seems to the subject as though she is in a 'good' case (i.e., having a veridical perception of something when she is not). The issue is that, in the 'bad' case where the subject is not perceptually related (acquainted) to the world, there still obtains some positive facts that it *introspectively*, albeit *merely*, seems to her that she is genuinely perceiving. That is to say, in having a causally matching hallucination as of a red apple, the subject would (positively) *know* that she is not seeing a yellow banana, a brown wallet, a white picket fence, and so on.

Since the negative epistemic disjunctivist holds that hallucination does not in fact have the same phenomenal properties as a corresponding veridical perception, he will then need to explain how the hallucinating subject can come to know what it is (or would be) like to have a veridical perception of *p* at all through simply having a hallucination of *p*. From a sceptic's perspective, it is unclear how the relevant notion of indiscriminability the disjunctivist invokes (to specify the subject's 'perceptual' perspective or how things 'perceptually' *seem* to her) is meant to be applied in the bad case where there is no equivalent perceptual perspective on the external world (i.e., in the absence of relevant external-worldly entities to which the subject is acquainted).

Second, the intricate and complicated reasoning that Martin provides is meant to develop a defensible naïve realist response to the problem posed by the causal argument and the screening off objection. For this reason, the scope of his epistemic conception of hallucination is limited to accounting for the 'purely hypothetical' forms of hallucination that are supposed to be introspectively indiscriminable from certain veridical perceptions in some impersonal sense. One worry is that, in this way, Martin's epistemically-oriented characterization of such hypothetical forms of hallucination that are merely possible might be taken to amount to a *partial* explanation of the nature of hallucination. Its explanatory scope does not (and is not meant to) extend to accommodating the various kinds of experience that are involved in actual, real-life cases of hallucination (e.g., schizophrenic voice-hearing, Charles Bonnet syndrome, drug-induced hallucinations).

One may think that consideration of the various forms of 'real' hallucination is relevant in this context because the philosophical notion of hallucination necessarily stems from our common-sense conception of hallucination or "everyday knowledge of Badness" (Sturgeon, 2008, p. 125) (i.e., the sense that at least in some actual, real-life cases of illusion and hallucination, we may come to know, in a non-testimonial manner, that we are not veridically perceiving). In other words, the explanandum of negative epistemic disjunctivism (i.e., the phenomenal character of causally matching hallucination)

is to be shaped and construed based on our common-sense understanding of certain anomalous hallucinatory experiences that actually occur or have occurred in reality (e.g., psychosis, sensory deprivation, hallucinogens). As it currently stands, standard naïve realism seems to lack the resources to provide such a general account of the nature of hallucination that applies to both actual and hypothetical forms of hallucination.

In response, the negative epistemic disjunctivist is likely to complain that *neither* he is committed to providing such a uniform account of hallucination that applies to all forms of hallucinatory experience *nor* we are warranted in assuming that there is such an account to be given. For it could be argued that different kinds of mental events may fall under the same heading of 'hallucination' without sharing any common psychological or phenomenal nature. As Austin, for instance, noted,

> there is no neat and simple dichotomy between things going right and things going wrong; things may go wrong, as we all know quite well, in lots of *different* ways – which don't have to be, and must not be assumed to be, classifiable in any general fashion (Austin, 1962, p. 13).

In one sense, the negative epistemic disjunctivist's appeal to the *modal*, impersonal notion of indiscriminability seems to fare well with the fact that 'things may go wrong' in many different ways due to different factors at work on different occasions. However, it is far from obvious that this should mean that the naïve realist who is committed to negative epistemic disjunctivism is completely free from the commitment of providing a *metaphysical* account of the relevant kind of experience involved in causally matching hallucination. To see why, consider the following line of reasoning.

Naïve realism is generally understood as a *metaphysical* thesis about the phenomenal character of veridical perception (i.e., that it is 'constituted', at least in part, by some mind-independent entities). From this, the sceptic may then demand that the naïve realist who embraces disjunctivism ought to provide an equivalent, *metaphysical* thesis about the phenomenal character of hallucination (i.e., what kind of stuff 'constitutes' the phenomenal nature of hallucination as a basic psychological kind as distinct from veridical perception). Yet, the form of disjunctivism defended by Martin offers an *epistemological* account of the phenomenal character of a causally matching hallucination (i.e., what one can or cannot know about what it is like to have a causally matching hallucination). On one interpretation, one may think that Martin's version of negative epistemic disjunctivism bypasses or is simply not meant to provide a *metaphysical* thesis about the phenomenal nature of hallucination (that is, beyond its appeal to the property of introspective indiscriminability that is shared by both perception and hallucination). On an alternative reading, a critic might contend that he makes an unwarranted *metaphysical* claim that introspective indiscriminability 'constitutes' the phenomenal

character of causally matching hallucination (and is also, trivially, partly 'constitutive' of the nature of veridical perception).[13]

The sceptic's demand for a *metaphysical* thesis about the phenomenal character of causally matching hallucination may be justified to the extent that a fully-fledged disjunctivist defence of naïve realism against the causal argument would require both the 'good' disjunct (veridical perception) and the 'bad' disjunct (causally matching hallucination) to be accounted for in *metaphysical* terms. This provides some grounds for thinking that the naïve realist, in the face of the argument from causally matching hallucination, ought to give a more robust, positive characterization of hallucination (Dancy, 1995). The explanatory task for the naïve realist who takes up this challenge – to meet the sceptic's demand – would be to provide a plausible 'positive' (rather than 'purely negative'), 'metaphysical' (rather than 'purely epistemological') thesis about the phenomenal nature of hallucination.

This thesis aims to offer one such account, showing that there is a viable way to characterize the phenomenal nature of hallucination that is applicable to both actual and hypothetical forms of hallucination. To anticipate, I argue that there are some (but not all) essential 'structural' properties of consciousness itself that may contribute to shaping the phenomenology of veridical perception and hallucination. On my proposed account, both the question of what one can know about the phenomenal character of hallucination and perception (an epistemological concern) and the question of what constitutes the fundamental nature of hallucination and perception (a metaphysical or ontological concern) can be suitably answered by appeal to the structural similarities and differences of perception and hallucination. The structural approach that I am going to develop and defend over the course of this thesis purports to offer a richer, phenomenologically informed account of the nature of perception and hallucination that is explanatorily superior to the negative epistemic disjunctivist's appeal to introspective indiscriminability.

5. Overview

The primary objective of this thesis is to develop an original account of the nature of perception and hallucination by integrating naïve realism with key insights and ideas from the Phenomenological tradition. I argue that naïve realism can be fruitfully supplemented by a phenomenologically grounded

---

[13] On another interpretation, others have suggested that hallucinations simply lack the sort of phenomenal character that sensory experiences typically have (Sturgeon, 2006; 2008; Fish, 2009).

account of the essential *structural* features of consciousness that are inherent in *all* forms of conscious perceptual experience.

From the naïve realist's perspective, one such example is the relation of 'acquaintance' that obtains between a subject and some aspects of the mind-independent world in the case of veridical perception. In the subsequent chapters, I identify and elucidate three other such structural features – namely (1) 'selfhood' (Chapter 2), (2) 'temporality' (Chapter 3), and (3) 'anticipation' (Chapter 4). They amount to the very *way* or *manner* in which perceptual experiences are organized, contextualized, and sustained *by the subject* to whom experiences are manifest.

The appeal to the structural features of experience, I argue, offers a richer, phenomenologically informed account of perception that places us in a better position to understand the nature of hallucination. In particular, it help the naïve realist to better appreciate the character shaping role of the subject in determining and accounting for the overall phenomenology of conscious perceptual experiences. This way of shedding light on the oft-neglected 'subject-dependent' nature of perception (and hallucination) complements the particular emphasis naïve realists often place on the 'object-dependent' nature of perception.

Here is an overview of how the rest of the thesis is structured. Chapter 2 considers the nature of the relationship between naïve realism, a contemporary Anglophone theory of perception, and experiential minimalism, a 'pre-reflective' model of self-consciousness originated in the Phenomenological tradition (Zahavi, 2014). I argue that combining naïve realism with the phenomenological notion of the 'minimal self' helps to clarify two core theoretical commitments of naïve realism, relationalism and transparency.

Chapter 3 considers how the integration of the relationalist or extensionalist commitment of naïve realism with the phenomenological notion of a 'temporal horizon' (Husserl, 1966a/1991; 1966b/2001; Merleau-Ponty, 1945/2012) offers a highly attractive account of the phenomenal character of conscious temporal experience. I argue that every conscious perceptual experience is temporal (i.e., dynamically constituted) by virtue of the temporal (horizonal) structure of the experience itself.

Chapter 4 develops a novel solution to the so-called 'problem of perceptual presence' (Noë, 2004) by incorporating insights from two contemporary theories of perception, naïve realism and sensorimotor theory. I argue that the combination of the notions of 'acquaintance' and 'sensorimotor anticipations' yields a rich, phenomenologically sensitive account of how we can experience an 'object' both in its partiality and in its entirety.

Chapter 5 outlines a general account of hallucination that applies to both 'actual' and 'hypothetical' forms of hallucination. I show how the appeal to these structural features of experience itself places us in a better position to understand the dynamic structure of hallucination. The combination of the structural approach to perceptual consciousness and the dynamic model of hallucination provides us with a form of disjunctivism that characterizes the nature of perception and hallucination in terms of their essential structural properties. This is what I call *structural disjunctivism*.

Chapter 6 demonstrates how 'structural disjunctivism' can give us a novel solution to the initial problem posed by the causal argument, and overcomes the objections raised against Martin's version of negative epistemic disjunctivism. This leaves us with a form of naïve realism that offers (1) a rich, phenomenologically informed account of the nature and structures of perception, and (2) a highly plausible disjunctivist story about the nature and structures of hallucination.

Chapter 2: Minimal Self

1. Introduction

This chapter illustrates how phenomenological discussions of pre-reflective or 'minimal' self-consciousness can enhance our understanding of the phenomenology of conscious perceptual experiences. I investigate how naïve realism, a prominent contemporary Anglophone theory of perception, can be integrated with experiential minimalism (or the 'minimal self' view), a pre-reflective model of self-consciousness originated in the Phenomenological tradition, in a novel way.

Once I outline two key theoretical commitments of naïve realism (Section 2) and motivate the minimal self view (Section 3), I present a plausible way of integrating the two seemingly disparate theories within a single cohesive framework (Section 4). My key suggestion is that combining naïve realism and experiential minimalism can yield a highly plausible, phenomenologically apt account of the phenomenal character of conscious perceptual experience. When elucidating perceptual phenomenology, there are reasons to think that they are natural allies.

In this chapter, I also introduce a phenomenologically motivated 'structural' approach to phenomenal consciousness, according to which there are some invariant structural properties that are constitutive of the subjective dimension of the phenomenology of every conscious experience. I argue that minimal or pre-reflective self-consciousness can be construed as one such *structural* feature which helps to delineate the contribution the 'subject' of experience makes to the phenomenology. The emphasis on the 'subject-dependent' nature of perception in turn helps us to get clear on the naïve realist's key commitments to relationalism and transparency.

2. Naïve Realism

Naïve realism holds that veridical perception involves a subject's direct sensory awareness of some mind-independent entities. When accounting for the 'phenomenal' ('what it's like') character of experience, naïve realists typically highlight the object-dependent nature of perceptual experience,

stressing the explanatory role of the mind-independent entities (e.g., objects, properties, events) to which the subject stands in a relation of acquaintance. It is widely held that naïve realists are centrally committed to 'relationalism' and 'transparency'. This section has two main aims: (1) to clarify what these commitments amount to and (2) to introduce a way of characterizing what is fundamental to the nature of perceptual experience – in terms of how it is 'structured'.

2.1. Relationalism

There is a broad consensus among most mainstream advocates of naïve realism that the theory entails relationalism (Campbell, 2002; 2009; Martin, 2002; 2004; Brewer, 2006; 2011; Soteriou, 2013).[14] According to relationalism, perceptual experience is *relational* in the sense that the obtaining of a perceptually conscious state requires the obtaining of a relation of acquaintance between a subject and some mind-independent entities (e.g., objects, properties, events) which cannot be specified independently of that relation.

Naïve realists who are relationalists are committed to three core claims about the relation of perceptual acquaintance:

(1) It is constitutive of the *phenomenology* of conscious sensory experience,

(2) It is *non-representational*, and

(3) It obtains between the subject and some *mind-independent* entities.

First, it is constitutive of the *phenomenology* of every veridical perceptual experience. This is a metaphysical thesis about the contribution made to the overall phenomenology of experience by the acquaintance relation. Second, it is essentially *non-representational* and thus cannot be explained in terms of representational contents. This gives the naïve realist reason to resist strong reductive forms of representationalism that attempt to reduce the talk of phenomenology to the talk of representational content (Tye; 1992; 1995; Dretske, 1995; 2003; Byrne, 2001; Siegel, 2010).[15] Third, it obtains between subjects and some *mind-independent* items. This expresses the naïve realist's

---

[14] Some reject the consensus and argue otherwise. Steenhagen (2019), for instance, challenges the standard relationalist interpretation of naïve realism, denying that the theory entails relationalism. I shall return to discuss the plausibility of his version of non-relationalist naïve realism in Section 4.

[15] Some 'non-reductive' variants of representationalism may be compatible with such a characterization of relationality. McDowell (1994; 2008; 2013), for instance, endorses a 'hybrid' view according to which perception is both relational and contentful (representational). He thinks that in the case of veridical perception, how things 'seem' to one subjectively is *not independent of* how things are in the environment. On a relationalist reading, this necessary epistemic dependence of the sort of knowledge one attains in having a perceptual experience on the external reality may need to be accounted for (at least in part) in terms of the acquaintance relation. But, for him, the relational character of experience is not more primitive than the content of experience.

externalist tendency in that the relevant acquaintance relation obtains between a subject and her external-worldly surroundings (e.g., apples, tables, chairs), rather than, say, some mind-dependent 'sense data' (Russell, 1912/1967). This also indicates that the relevant acquaintance relation only obtains in cases of veridical perception and not in the non-veridical case of hallucination. According to naïve realism, the *sui generis* non-representational relation of direct awareness of worldly aspects that is characteristic of veridical perception is missing from the case of 'non-world-involving' hallucination.[16]

The naïve realist's relationalist commitment has important implications. First, the distinctive explanatory role assigned to the acquaintance relation and the mind-independent entities clarifies how naïve realism contrasts with sense-datum theories, the view that experiences involve a relation of acquaintance with some mind-dependent sense-data. Second, it partly contributes to giving rise to the tension between naïve realism and the mainstream accounts of perceptual experience that are associated with reductive representationalism. On naïve realism, the phenomenal character of experience is inexplicable in terms of the content of representational states alone. For it must be accounted for at least in part in terms of the obtaining of a *sui generis* non-representational relation of acquaintance to some mind-independent things that is distinct from and explanatorily more basic than the obtaining of a representational state with certain veridicality conditions (e.g., thought, belief).

This chapter aims to draw a link between naïve realism and phenomenological discussions of minimal, pre-reflective self-consciousness. This is motivated by the thought that naïve realism, as it currently stands, lacks resources to do full justice to its commitment to relationalism and the latter can help to remedy this.[17] The central idea is this. The motivating thought behind relationalism is that perceptual experience *appears* 'relational' to us by reflection. This means that it *appears* to involve (at least) two relata, an object relatum and a subject relatum.[18] Standard naïve realism often places emphasis on the constitutive and explanatory role assigned to the mind-independent entities in the environment (i.e., the 'object relatum'). In this way, the character shaping role of the 'subject relatum' has often

---

[16] On this characterization, illusions (conscious sensory experiences of some things as other than they actually are) also involve the relevant acquaintance relation. For example, in looking a white wall looking red in peculiar lighting, I am directly acquainted with some mind-independent object, the wall, regardless of which colour property I therein come in contact with.

[17] This is not to say that the appeal to the notion of minimal self can and will do all the explanatory work in delineating the role of subjectivity in characterizing the phenomenology of experience. Rather, this is simply to pinpoint that recognizing its explanatory potential is a crucial first step towards a proper, phenomenologically informed account of the nature of perception. This will come out more clearly in the context of the whole thesis as I go on to identify and expound the relevance of other essential *structural* features of experience (e.g., 'temporality', 'anticipation') in accounting for the 'subject-dependent' nature of experience.

[18] Some characterize the perceptual relation as a three-place relation (Campbell, 2009; Brewer, 2009). See also French (2018) for discussion on the 'third relatum' factor.

been overlooked. [19] The point is that to do full justice to the naïve realist's commitment to relationalism, there needs a distinct explanation of the contribution the subject makes to the phenomenology. A fuller understanding of the relationalist commitment of naïve realism requires consideration of the phenomenological basis of naïve realism. We now turn to the second core commitment of naïve realism concerning the phenomenology of 'transparency'.

2.2. Transparency

It is generally thought that theories of perception are committed to accommodating the *transparency* intuition (Moore, 1903; Harman, 1990; Tye, 2000; Crane, 2000; Martin, 2002; Speaks, 2009; Soteriou, 2013; French, 2018). This is the idea that perceptual experiences are 'transparent' or 'diaphanous' in the sense that, when introspecting or reflecting on our experience of some things, we *see right through* the experience. That is, introspective reflection reveals that the properties we become aware of in perception are attributed to those perceived objects and their properties and not to the perceptual awareness itself. For example, in looking at the red, round apple on my desk, it seems to me as though the only features that I end up finding are the apple itself and some features of the apple (e.g., its colour, shape, size, etc.).

The transparency intuition comprises two claims:

> The positive thesis: when reflecting on one's own experience, one's attention invariably points to the objects perceived and the properties of those objects.

> The negative thesis: when reflecting on one's experience, one does *not* thereby become aware of anything other than the objects perceive and the properties of those objects.

There are (at least) two interpretations of transparency: (1) Strong Transparency and (2) Weak Transparency. On a 'strong' interpretation of transparency which encompasses both the positive thesis and the negative thesis, introspection does not reveal any properties of anything else other than the mind-independent objects of experience and the properties of those objects. When reflecting on my own experience, I only find those objects and properties that I perceive (e.g., the apple, redness, round-shapedness). This leaves no room for the possibility of becoming aware of any properties of the

---

[19] Many representationalists who are driven by the naturalistic externalist tendency face a similar problem. In response, the representationalist may take 'modes of presentation' as a built-in feature of representational content of experience (Crane, 2009). This means that the subject's experiences can have different contents when they represent their objects in different ways or manners. Part of my general aim in this thesis is to show that there is a viable way to spell out the character shaping role of the subject within the naïve realist framework (without appealing to the representationalist framework).

experiences themselves through introspection. Representationalists typically endorse this strong reading of transparency, contending that introspection only reveals the properties that are attributed to the mind-independent objects of experience, and in this sense, experience has no other properties that would pose problems for materialism (e.g., qualia).[20] Tye (1995; 2003), for instance, appeals to the strong transparency claim in support of his favoured version of representationalism, according to which the phenomenal character of experiences is identical with or contained within their representational or intentional contents. He suggests that there are no introspectable features of experiences *over and above* those implicated in their intentional contents. Similarly, according to Dretske (1995), one is never directly aware of one's own experiences, not even when one is reflecting or introspecting.[21] For experiences do not have any intrinsic and non-intentional qualities of their own; rather, the qualitative character of experience is entirely constituted by the properties things are represented as having.

There is, however, an alternative 'weaker' interpretation of transparency that one may prefer over the strong interpretation. On Weak Transparency, when reflecting on one's own experience, one's attention invariably points to the objects and properties that are experienced, but this does *not* rule out the possibility of thereby becoming aware of some properties that are possessed not by the objects perceived but by the experience itself. According to this reading, introspection *can* reveal the properties of the experience itself 'when attending to the objects and properties of the world', meaning that there may exist some 'non-diaphanous' or 'non-transparent' aspects of experience that do not simply derive from the objects of experience but are nevertheless introspectively accessible to us. In this way, the weak transparency claim leaves open the possibility that both features of the perceived mind-independent objects and features of the subject's experience itself contribute to determining the phenomenology of perceptual experiences. Arguably, this is much closer to the original view of G.E. Moore who introduced the idea of the transparency or diaphaneity of experience. He wrote,

> When we try to introspect the sensation of blue, all we can see is the blue: the other element is as if it were diaphanous. Yet it *can* be distinguished if we look attentively enough, and if we know that there is something to look for (Moore, 1903, p. 450).

---

[20] The transparency argument is often formulated in terms of cases of visual and auditory perception, though not entirely exclusively. Tye (1995) and Crane (2003), for instance, seek to extend the scope of the transparency claim to address bodily sensations such as pain – in support of representationalism.
[21] On Dretske's radical version of transparency, we cannot introspect anything about a perceptual experience if 'introspect' has its usual meaning of internally 'attending' to the experience.

After all, Moore himself was sympathetic to the idea that we *can* become aware of some properties of our own experiences with effort and attention (through introspection).

One pressing issue with the strong transparency claim is that it entails an austere form of *phenomenal externalism*, according to which perceptual consciousness is strictly 'world-presenting' and thus the phenomenal character of perceptual experience is fully determined by the mind-independent entities to which the subject is acquainted. On this account, the phenomenal character of my visual experience of the red apple on my desk is 'exhausted' by *that* very apple and its sensible properties (e.g., redness, round-shapedness, etc.). Such a strong externalist commitment, however, gives rise to several concerns that require consideration.

First, strong phenomenal externalism comes in direct tension with the naïve realist's commitment to relationalism. Naïve realists typically hold that naïve realism entails relationalism on the grounds that perception *appears* 'relational'. As mentioned, the apparent relationality of perception implies that there is an awareness of (at least) two relata, an object relatum and a subject relatum. The issue is that, on Strong Transparency, the relational character of experience is exhausted by one of the relata, the 'object relatum', since it maintains that introspection does not reveal any properties other those of the perceived mind-independent objects. Weak Transparency has an important advantage over Strong Transparency since it allows for the possibility that experiences are not *only* object-dependent and world-disclosing but *also* subject-presenting. To this extent, the weaker reading of transparency seems to align better with the naïve realist's commitment to relationalism in as far as it is not committed to strong phenomenal externalism.

Second, given the object-oriented tendency, strong phenomenal externalism does not seem well-placed to capture the phenomenological richness of our conscious experiential life. As Zahavi puts it, it is difficult to see

> how phenomenal externalism can account for the phenomenal character of distress, despair, hopelessness, relief, satisfaction, […] struggling to remember something, or feeling confident versus uncertain about something (Zahavi, 2014, p. 32).

If phenomenal externalism disregards any 'non-object-dependent' constituents of phenomenology, it seems ill-suited to accommodate the various aspects of 'affective' phenomenology. The basic thought is that our conscious experiential life is by no means exhausted by 'perceptual' phenomenology and the phenomenal externalist doesn't seem well-positioned to account for this.

To this worry, the externalist might respond that aspects of affective phenomenology (e.g., pain, pleasure, emotion) should be distinguished from aspects of perceptual phenomenology (e.g., colour,

shape, size) since the former is strictly speaking 'non-perceptual' or 'post-perceptual'. However, there are grounds for thinking that perceptual experiences are non-neutral with respect to affectivity. To illustrate this point, Merleau-Ponty offers an example of a child's experience of the light of a candle. After a burn, he writes, the appearance of the same candlelight changes as it no longer attracts the child's hand but instead becomes "repulsive" (Merleau-Ponty, 1945/2012, p. 52). The suggestive point is that perception is most fundamentally affectively charged and value-laden, rather than purely sensational, and it is not a straightforward matter to separate affective aspects of the phenomenology from its perceptual or sensational aspects. It is unclear how the externalist can accommodate this.

Third, it is unclear how the externalist can draw a distinction between a 'non-conscious' worldly state or event (e.g., a C-D-E melody) from a 'conscious' mental state (e.g., my conscious auditory awareness of the melody) – *unless* some additional ('non-diaphanous') properties are presupposed as a necessary condition for the occurrence of a conscious state at all.

The above considerations may not themselves suffice to establish a knock-down argument against Strong Transparency. Nevertheless, they do provide some reasons to be cautious when clarifying the naïve realist's commitment to the transparency claim and the scope of phenomenal externalism.

Are there reasons to prefer Weak Transparency over Strong Transparency? It is worth noting at this point that proponents of naïve realism routinely assert that the phenomenal character of perceptual experience is 'at least in part' determined (constituted) by some mind-independent entities. This indicates that there is a sense in which naïve realists intend to remain not committed to the idea that perceptual experiences are 'entirely' transparent (i.e., in the 'strong' sense). At the very least, this aligns better with the weak transparency claim which leaves room for the possibility of becoming aware of some 'non-diaphanous' aspects of experience that are accessible through introspection.

One notable virtue of the weak transparency claim is that it enables the naïve realist to account for phenomenal variations without the variation in the perceived mind-independent entities by reference to the 'non-diaphanous' aspects of experience that are not entirely 'object-dependent'. In this way, when elucidating a phenomenological difference without a difference in the perceived object, the naïve realist is free to choose whether to appeal to (1) some features of the perceiving subject (e.g., attention, perspective on the environment) (Logue, 2012a), (2) some facts about the relation of acquaintance (Soteriou, 2013), or (3) a third relatum which encompasses various environmental conditions and situational factors for the occurrence of perceptual experiences (e.g., lighting condition, standpoint) (Campbell, 2009; Brewer, 2011).

Part of my aim in this thesis is to legitimize the phenomenal significance of certain 'non-diaphanous' features of experience that are intrinsic to the nature of conscious experience itself. My emphasis is on the relevance of some 'structural' features that are inherent in *all* forms of conscious perceptual experience.

2.3. Structural Features of Experience

Structural properties of experience can be broadly construed as (1) invariant and intrinsic features of experience that are (2) not simply a matter of the apparent objects of experience, but are nevertheless (3) constitutive of the phenomenal character of experience. Non-structural features, by contrast, are constitutive of the character of experience but derive from the apparent objects and sensible aspects in the environment.

Consider, for example, two such structural properties that are specific to vision: (1) visual field and (2) visual acuity. In elucidating the phenomenological difference between vision and proprioception (bodily awareness), Martin (1992) invokes the notion of a 'visual field' which refers to some regions of space within which some visible objects are (to be) located. He argues that the visual field is a feature of the phenomenology of visual experience that is determined not solely by some spatially located objects but also by the very spatial regions that are either occupied or potential to be occupied by some visual objects. One notable aspect of visual phenomenology is that when undergoing a visual experience, there is a sense in which what I see is only a subregion (part) of a larger space (whole) and also a sense in which there would be more to see if my spatial viewpoint were to be altered. As Richardson puts it, "in vision having this feature [i.e., the visuospatial field], it seems to me as if I am limited sensorily" (Richardson, 2010, p. 239). Such a 'limitation' aspect of visual phenomenology is not an aspect of some entity one is seeing in addition to the apparent object of awareness (like the wooden 'frame' of a painting); rather, it accounts for one's own sensory limitations that one becomes aware of in having the visual experience.

The spatial limitation of the visual field is an introspectable aspect of the phenomenal character of every conscious visual experience that is not entirely determined by some worldly entities but amounts to "the way in which one's visual awareness of those objects and events seems to be structured" (Soteriou, 2013, p. 117). The idea is that the phenomenology of an ordinary visual experience is not solely determined by the spatially organized aspects of the environment that one becomes aware of, but also determined, in part, by the way one's visual awareness is spatially structured and viewpointed (and thus limited). In this way, the visual field can be construed as a

'structural' feature of ordinary visual experience which accounts for the common *way* or *manner* in which one is visually aware of some scenes and things. It is vision-specific in that it is only present in visual experiences (e.g., whether I am seeing a red apple on the table with both my eyes open or with my right eye closed), and not in proprioception or experiences in other modalities. The point is that whatever differences there are between visual experiences, the phenomenal differences between them are not entirely constituted by the differences in the objects of visual awareness, but need to be accounted for at least in part by reference to the sensory limitations of one's visual field (e.g., in seeing the apple with my right eye closed, there is a sense that my experience is more limited and restricted by my own sensory limitations than in seeing it with both my eyes open).

Second, the experience of blurry vision reveals another essential feature of visual experience, namely visual acuity (the sharpness of vision). When I remove my glasses, things appear very different, blurred and hazy. Seeing things blurrily in this way is not the same as seeing something fuzzy (e.g., seeing a low-resolution screen). For I can see the fuzzy screen in a perfectly sharp, non-blurry way – say, with my glasses on. Nor is it the same as seeing things *to be* blurry in that the latter describes how things really *are* or how one takes the world to *be*, rather than saying how things *look* or *appear* to one. The blurriness of vision differ from other object-dependent features of experience (e.g., the redness and round-shapedness of the apple that I see). It is a feature of the visual experience itself that derives from the inherent acuteness that is intrinsic to every visual experience.

What the above examples are meant to show is that there is more to the character of our conscious perceptual experiences than what simply derives from the apparent objects of sensory awareness and that these 'non-object-dependent' or 'non-diaphanous' aspects of experience are worthy of attention and explanation. One way of making sense of the contribution such non-diaphanous (structural) features of experience make to the overall phenomenology would be to say that perceptual phenomenology depends, constitutively, on *both* (1) the mind-independent items one becomes aware of in having the relevant experience *and* (2) the way in which one's experience is 'structured'.

While some structural features are modality specific (e.g., visual field, visual acuity), it is important to recognize that there are also more universal, structural features that are inherent in *all* forms of conscious perceptual experience (across different sense modalities). From the naïve realist's perspective, one such example is the relation of 'acquaintance' which obtains between a subject and some mind-independent entities. It is a universal aspect of experience that is non-specific to one particular modality but is necessary for the occurrence of *any* conscious perceptual experience. On this construal, the phenomenology of my visual experience of the red apple on my desk differs from the phenomenology my tactile or gustatory experience of the same apple, partly because the way I

am visually related to the apple in vision differs from the way I am tactually or gustatorily related to the very same apple in touch or taste. Nevertheless, whether I am seeing, touching, or tasting the apple, what remains constant and invariant is the fact that I am perceiving the same apple to which I stand in a relation of acquaintance.

2.4. The Phenomenological Tradition

This way of characterizing more universal, structural features of experience stems from the Phenomenological approaches to the nature of consciousness originated in the early twentieth century (Husserl, 1913/2012; 1952/1989; Sartre, 1943/1998; Merleau-Ponty, 1945/2012). Phenomenology as a philosophical tradition aims to offer rigorous and systematic analyses of various types of experience (e.g., perceiving, remembering, imagining, thinking, etc.) by describing the particular ways in which experiences are 'given' or 'manifest' to the subject.[22]

In aiming to develop a phenomenological account of experiences as a descriptive philosophical foundation of the sciences of the mind, phenomenologists typically undercut or 'bracket' the various metaphysical questions and issues about the nature of consciousness which might distort or overlook the subject matter of inquiry and instead turn attention back to our own experiences or 'phenomena' themselves. From the phenomenologist's perspective, when delineating the nature of our everyday experience, the distinction between the 'phenomenal' world (i.e., how things *seem* or *appear* to us) and the 'noumenal' world (i.e., how things *are in and of themselves*) is 'suspended'. This is to isolate what is essential to the nature and structures of experience (e.g., intentionality, temporality, affectivity, embodiment, intersubjectivity). The phenomenologist's chief aim is to delineate the essential structures of experience in terms of how we things appear as we 'live through' the world in which we are situated. Regardless of one's credence to the original 'methods' of Husserlian phenomenology (e.g., phenomenological reduction, eidetic reduction), what unites both early and contemporary phenomenologists (Husserl, 1913/2012; 1952/1989; Sartre, 1943/1998; Merleau-Ponty, 1945/2012; Gallagher, 2005; Thompson, 2007; Zahavi, 2014; Smith, 2016; Ratcliffe, 2017) is the idea that the phenomenology of our experience of the world is much richer and more meaningful than mere sensations or intuitions.

This is somewhat comparable to what analytic philosophers of mind often speak of in terms of the qualitative or subjective character of experience (i.e., qualia) (Jackson, 1982) or the notion of 'what it

---

[22] See Spiegelberg (1976) and Moran (2000) for an overview of the history of the Phenomenological tradition. For an ahistorical, methodological introduction, see Smith (2016, Ch. 1) and Zahavi and Gallagher (2012, Ch. 1).

is like' to experience something (Nagel, 1974). However, it is important to recognize the fundamental difference between the philosophers of mind who attempt to *explain* the nature of consciousness and the mind-brain relation, and the phenomenologists who are concerned with how to properly *describe* the essential structures of our ordinary, everyday experience.

For one thing, qualia theorists or anti-physicalists point to something that is not captured in purely neuroscientific or physicalist terms but is only available to the subject in some first-personal manner. The word 'phenomenology' is often used to refer to this feature (e.g., 'pain' has a phenomenology). Phenomenologists take this intuition further and attempt to develop a systematic 'descriptive' analysis of the subjective nature of experience in terms of how they are essentially *structured*.[23]

This thesis is phenomenological in emphasis throughout. The objective is to develop a detailed, phenomenologically informed account of the nature and structures of perception by drawing on key insights from the Phenomenological tradition. In particular, I identify three particular *structural* properties of experience that are inherent in the phenomenology of *all* forms of conscious perceptual experience (i.e., 'minimal self', 'temporality', 'anticipation'). This means that, necessarily, every conscious perceptual experience is given to the subject in a 'perspectival' manner insofar as it has these essential *structural* features.[24] The key thought is that the phenomenal character of veridical perceptual experience is much more 'complex' than a mere 'contact' (acquaintance) with some particular worldly entities (*contra* what many proponents and opponents of naïve realism assume). I argue that the explanatory role of the notion of acquaintance is best understood within a broader context of understanding how these various structural features contribute to characterizing the phenomenology of conscious perceptual experience. For the rest of this chapter, I consider how the notion of acquaintance can be integrated with the phenomenological notion of the minimal self.

3. Minimal Self

---

[23] It is worth stressing that phenomenology as a philosophical-scientific approach is very much alive in contemporary scholarship, particularly in the context of a revived interest in the subjective or phenomenal nature of consciousness in the philosophy of mind (e.g., the 'hard' problem of consciousness) (Dennett, 1991; Searle, 1992; Strawson, 1994; Chalmers, 1995; 1996), in the wake of 4E (embodied, embedded, enacted and extended) approaches to cognition in cognitive sciences (Varela, et al., 1991; Damasio, 1994; O'Regan & Noë, 2001; Noë, 2004; Clark, 2008), and in the field of phenomenological psychopathology (Sass & Parnas, 2007; Fuchs, 2007; 2013; Ratcliffe, 2008; 2014; 2017; 2023; Stanghellini, 2009; Stanghellini & Rossi, 2014).

[24] This is not an exhaustive list of the structural features of experience.

The issues of selfhood and self-consciousness are recurring themes in the classical Phenomenological tradition (Husserl, 1913/2012; 1931/1960; 1952/1989; Sartre, 1943/1998; Merleau-Ponty, 1945/2012), as well as in the mainstream literature on phenomenological psychopathology (e.g., the ipseity-disturbance model of schizophrenia) (Sass & Parnas, 2006). Despite much recent interest in the phenomenological tradition, the notion of 'pre-reflective' or 'minimal' self-consciousness has not yet found its way to the analytic philosophy of mind and perception in a substantive way. This chapter aims to show that the phenomenological accounts of a minimal, pre-reflective form of self-awareness can fruitfully supplement naïve realism. In this section, I outline the basics of the minimalist account of selfhood and self-consciousness (Zahavi, 2005; 2010; 2014) and address some of the key challenges that put pressure on the minimal self view.

3.1. For-me-ness

Experiential minimalism holds that there exists a basic, minimal form of selfhood that pervades our conscious experiential life. (Zahavi, 2014). The minimal self amounts to the very first-person givenness of experience, accounting for the fact that every conscious experience is given to me as *my* experience or *for me* (not as *your* experience or someone else's).

The minimal self is characterized as a 'pre-reflective' form of self-consciousness that is 'implicit' and 'pervasive'. It is *pre-reflective* in the sense that it contrasts with 'reflective' forms of self-awareness that obtain whenever one reflectively attends to one's own experiences. The point is not to dismiss reflective forms of self-awareness but to suggest that there is a more basic, 'pre-reflective' form of self-awareness that is presupposed by them. Prior to reflection, experiences are manifest to me as mine or for me. The minimal self is *implicit* in that it does not require one to reflect on one's own mental state in an 'explicit' thematized manner (i.e., awareness of oneself 'as such') but involves a tacit form of awareness. It is also *pervasive* insofar as all our conscious experiences are characterized by the same fundamental first-person givenness and thereby individuated as one's own. According to the minimalist, this primitive form of self-consciousness serves as a necessary presupposition for any phenomenally conscious experience to occur, and yet this has been largely overlooked in contemporary studies of consciousness.

Experiential minimalism comprises two core claims about the nature of minimal selfhood:

1. Universality: the minimal self is an essential feature of consciousness that is inherent in all forms of conscious experience.

2. Phenomenality: the minimal self is a constitutive feature of phenomenal consciousness.

The first claim stresses the *formal* nature of the minimal self, suggesting that there exists an ontogenetically primitive and fundamental form of self-experience that serves as a necessary condition of possibility for the occurrence of every conscious experience. All our experiences are characterized by the same invariant, fundamental first-person givenness or for-me-ness. The second claim concerns the *constitutive* link between phenomenal consciousness and self-consciousness, indicating that phenomenal consciousness entails an implicit form of self-consciousness in the sense that the phenomenal character of experience is 'at least in part' constitutively dependent on the 'way' (mode) in which the experience is given in a first-person manner.

Note that the minimal self does not and is not meant to refer to some mind-independent entities but rather to the very 'mode' of experiencing them. On the minimalist view, in seeing the red apple on my desk, I become aware of not only some worldly object (the apple) and sensible properties (redness, round-shapedness, etc.) but also the fact that the relevant experience is given to me in a unique, first-person manner. As Zahavi states,

> The for-me-ness or mineness in question is not a quality like scarlet, sour, or soft. It doesn't refer to a specific experiential content, to a specific *what*, nor does it refer to the diachronic or synchronic sum of such content, or to some other relation that might obtain between the contents in question. Rather, it refers to the distinct givenness or *how* of experience (Zahavi, 2010, p. 59).

The thought behind this 'content-mode' distinction Zahavi puts in place is that there exists a *modal* (or what I call *structural*) dimension of phenomenal consciousness that is neither reducible to nor explainable in terms of the 'content' of experience alone. To put it differently, the phenomenal character of conscious perceptual experience is determined by and thus to be accounted for in terms of (1) the presence of some external-worldly objects and properties that constitute the ever-changing 'content' of experience (e.g., sourness, lemon) and (2) the way in which the relevant experience is manifest to the subject as her own (i.e., the invariant first-personal 'mode' of experience).[25]

3.2. Motivations

---

[25] Admittedly, the content-mode distinction is contestable. For one may argue that the minimal self can just feature in the 'content' (rather than the 'mode') of experience. Crane (2009), for instance, views 'modes of presentation' as a built-in feature of the representational content of experience (in a quasi-Fregean sense), suggesting that experiences can have representational contents without involving purely propositional (Russellian) contents. On this view, minimal self could just belong to the non-propositional, non-conceptual 'contents' of experience – where experiences may have different contents whilst having the same for-me-ness in such contents.

A number of considerations help to motivate the minimal self view. In particular, the minimalist insists that the view best captures the 'individuation' and coherent 'unification' of consciousness, thereby doing justice to the subjectivity of consciousness.

First, the notion of minimal self view serves to account for the most basic 'individuation' of my experiences from the experiences of others in terms of the first-person givenness of experience that is unique to each individual subject. Being consciously aware of the white wall before me requires that *this* very visual experience that I am having right now is somehow manifest or known to me in some direct and unique (first-personal) manner and thus unavailable to others in the same manner. That is to say, even an ideal perfect twin of mine who would have a *type*-identical visual experience of the same white wall would not have the same epistemic access that I enjoy to my own experiences. It would not make sense to say that I am having a conscious experience if the relevant experience were not manifest to me in such a unique, distinctive manner. That is, were the experiencing of the white wall not 'individuated' in this way (i.e., from the experiences had by others), it would not make sense to say that *I* am (not *you* are or some*one* else is) consciously experiencing the wall.

Second, a minimal form of selfhood is required for a coherent 'unification' of consciousness that is necessary to make our conscious experiences intelligible and meaningful to us. When I glance out of the window and see the pear trees in my back garden while enjoying my breakfast with Bill Evans' *Waltz for Debby* on Jazz FM, I am aware of a large number of things via different sensory modalities. Nevertheless, all these things that I see, hear, smell and taste are experienced *as coherently unified*. What accounts for the unity of these experiences? The minimalist's answer is to appeal to the persistent presence of a minimal self as a single, invariant subject of those individual experiences. That is to say, I am aware of these multimodal experiences 'together' (i.e., both simultaneously and over time) *as mine* insofar as they are all given, first-personally, *for me*. What unites them as a single 'stream' of consciousness is the fact that *I* am undergoing them in a first-person manner.

One might worry that in certain pathological cases of self-disturbance (e.g., schizophrenia, Alzheimer's disease), the coherent unification of consciousness is disrupted and there is a genuine distortion of one's basic sense of self (Mishara et al., 2014; Nelson et al., 2013; Gallagher, 2005). People with schizophrenia often report that they are experiencing some alien thoughts (thought insertions) and movements that are not their own (delusions of control). However, the minimalist insists that even in such cases of self-disturbance, there still remains at least some sense of 'ownership' or 'mineness' (i.e., the minimal self). For the basis of the patients' complaints is the fact that they do recognize that they are, not somebody else, experiencing those intrusive, alien thoughts, voices, and movements. As Gallagher (2005) sees it, we can understand the disoriented and disorganized character of

schizophrenic experiences in terms of the lack of a sense of 'agency' while the sense of ownership or mineness remains invariant and unimpaired. The claim is that, even in the most severe cases of schizophrenia, patients retain some minimal sense of oneself as the immediate *subject* of experience to whom the relevant experiences are (self-)manifest.[26]

The key motivation behind experiential minimalism is the idea that the notion of minimal self could play a legitimate explanatory role in accounting for the 'subjective' character of experience. Subjectivity is one of the fundamental characteristics of phenomenal consciousness. All our conscious experiences are *subjective* in the sense that whenever one undergoes a conscious experience (e.g., perceiving, remembering, imagining), there is something it is like *for one* or *for the subject* to have that experience. Subjectivity is required for the coherent unification and individuation of experiences. My various multimodal experiences are 'coherently unified' by virtue of the fact that *I* (the subject) am the sole subject of those experiences. They are 'uniquely individuated' from the experiences of others insofar as they are given, first-personally, to me (the subject) (i.e., to whom those experiences are given). On the minimalist view, the notion of the minimal self is deployed to account for this subjective ('for-me') character of experience by reference to the first-person givenness of experience.

Part of what motivates the minimal self view is the assumption that the predominant 'higher-order' theories of self-consciousness (HOTs) fail to take the subjectivity of consciousness seriously (Armstrong, 1968; Rosenthal, 1986; 2005; Lycan, 1987; 1996; Carruthers, 2000). According to HOTs, self-consciousness obtains between two distinct non-conscious mental states. That is, conscious states obtain their conscious or subjective character solely by virtue of being related to other higher-order representational states. It is the presence or absence of a meta-mental state that makes a first-order state conscious or non-conscious. Although HOTs offer some ways to explain how conscious states can come about (e.g., by positing some higher-order representational states like thought and belief), such accounts face a serious 'regress' problem. That is, for a mental state to be conscious means for it to be characterized by a higher-order state that requires a higher-higher-order state that requires a higher-higher-higher-order state and so on, *ad infinitum*. In essence, the infinite regress is generated because proponents of higher-order accounts take self-consciousness as an 'objectifying' form of awareness. This means that self-consciousness emerges only insofar as the first-order state is 'objectified', that is, posited or represented as an *object* (of some 'higher-order' thought or belief).

Experiential minimalism does not face such a regress problem as it offers a 'non-objectifying' alternative to HOTs. As Sartre remarks,

---

[26] In Chapter 3, I discuss how disturbances of self-experience are related to alterations in time processing in the case of schizophrenia.

there is no infinite regress here, since a consciousness has no need of a reflecting [higher-order] consciousness in order to be conscious of itself. It merely does not posit itself to itself as its own object (Sartre, 1936/2004, p. 6).

According to the minimalist, self-consciousness obtains not only when one reflectively attends to one's own experiences in an explicit 'objectifying' manner, but whenever one undergoes an experience and therein implicitly (or tacitly) becomes aware of oneself as the one who is experiencing, that is, as the *subject* of experience. The minimalist insists that HOTs are bound to fail as their conception of 'objectifying' self-consciousness implies the existence of two distinct non-conscious states (i.e., a 'reflecting' or 'objectifying' state, on the one hand, and a 'reflected' or 'objectified' state, on the other). On the contrary, the minimal form of self-awareness only requires a single experiential state that is pre-reflectively lived-through and is thereby manifest to the subject as 'for me' or 'mine'.[27]

The minimalist who is phenomenologically motivated challenges the evidential basis of the reflection-based, representationalist theories of self-consciousness, contending that one's conscious awareness of oneself *as an object* (by means of representing oneself) must itself be based on a more basic, pre-reflective form of self-awareness which serves as a necessary condition for any reflection-based, objectifying forms of self-awareness. This is not to dismiss the possibility of forming higher-order mental states but merely to pinpoint that it necessarily requires a non-objectifying, pre-reflective form of self-consciousness as its condition of possibility. To this extent, the minimalist's non-objectifying alternative seems better placed (than HOTs) to give an adequate account of self-consciousness proper and to do justice to the subjectivity of consciousness.

In sum, the minimal self view is motivated by the thought that a minimal form of selfhood is necessary to elucidate the coherent unification and individuation of consciousness in terms of the first-person givenness of experience (as an essential, ubiquitous aspect of our conscious experiential life; even in psychopathological cases). This captures the subjective (perspectival) character of experience in non-objectifying, non-representational terms.

---

[27] Self-representationalism offers a similar 'same-order' alternative to HOTs but retains the representationalist framework (Kriegel, 2003; 2009). On this (neo-Brentanian) view, self-consciousness is a *sui generis* type of object-consciousness that obtains when the subject is only peripherally aware of being in the mental state rather than being focally (attentively) aware of being in a specific mental state. However, one worry is that this variant of representationalism requires a very 'special' (e.g., essential, non-derivative, specific) form of representation in order to do justice to the subject's 'direct' and 'intimate' epistemic relation to her own experiential states. Given this, it becomes less and less obvious whether appealing to such an unfamiliar, unusual form of object-consciousness has any explanatory advantage over appealing to a 'non-objectifying' pre-reflective form of self-awareness (Zahavi, 2014) or some other related notions such as 'self-acquaintance' (Duncan, 2018; Giustina, 2022).

3.3. Objections

Part of what obscures the current discussions about the nature of selfhood and self-consciousness is the fact that these notions are far from univocal. There are several distinct ideas and claims that have been raised and discussed under the headings of self and self-consciousness across the various disciplines ranging from philosophy of mind, developmental psychology, psychiatry, and cognitive neuroscience. The issue is that the relations among these ideas are complex and the complexity feeds back into the more fundamental questions about the relation between self-consciousness and phenomenal consciousness.

In what follows, I address three particular challenges to experiential minimalism, concerning (1) the ontological status of the minimal self, (2) its relationship to the transcendental ego and (3) the selflessness of unreflective experience. This will help to get clear on the explanatory scope of experiential minimalism.

3.3.1. Ontological Status of the Minimal Self

The first challenge takes issue with the explanatory and evidential value of the phenomenology of self-experience in establishing the reality of a 'metaphysical' self (i.e., an unchanging and ontologically independent self-entity). Eliminativism or anti-realism about the self denies the reality of selfhood, maintaining that one should not make an unwarranted claim about the existence of a 'real' self based on the 'illusory' feeling of *being a self* (i.e., the phenomenology of self-experience).

Hume (1739/1975) famously held that reflection reveals no continuously existing self but only a series of changing experiences and perceptions. More recently, following this broadly Humean scepticism about selfhood, Metzinger (2003; 2011) has argued that there is no need to assume the existence of a self, for a truly fundamental account of reality can dispense with the self. According to him, although most of us do experience a feeling of *being some* or *a self* (a phenomenal self), we should not confuse this sense of self with a really existing and persisting self-entity (a metaphysical self). Based on his neuroscientific, representationalist framework, Metzinger argues that the appearance of a phenomenal self (i.e., the subjective feeling of for-me-ness or mineness**)** is a persistent 'illusion' that is generated by a multitude of interrelated neural correlates in the brain. It is 'illusory' in the sense that there is no real self-entity that exists.

What underlies the eliminativist's position is the assumption that "metaphysics is underdetermined by phenomenology" (Metzinger, 2011, p. 294). This means that, even if the illusory feeling of self is present in experience, we shouldn't take the appearance at face value and thereafter postulate the reality of an ontologically distinct, persistent self-entity. One should not take an unwarranted leap from what a self merely *seems* (a phenomenal self) to what a self *is* (a metaphysical self) because the phenomenology of self-experience is neither *necessary* nor *sufficient* to establish the reality of a metaphysical self or the ontology of subjectivity. The eliminativist concludes that the no-self view should be the default position for all rational approaches to the nature of subjectivity and self-consciousness. The eliminativist puts pressure on experiential minimalism by downplaying the explanatory value of the phenomenological notion of minimal self in illuminating the ontology of subjectivity and the world.

However, it is important to recognize that the minimalist conception of self is quite different from the 'homunculus-like' notion of self-entity targeted by the eliminativist. For it is not meant to establish a separately existing and persisting self-entity that is ontologically distinct from a subject's experiential life; rather, it purports to highlight the phenomenal significance and relevance of the first-person givenness of experience as an essential, ubiquitous aspect of our conscious experiential life that deserves attention and scrutiny.

In response, the sceptic might retort that such a phenomenologically motivated approach to selfhood simply deflates important metaphysical questions (about the reality of the world, subjectivity and selfhood) that need addressing and answering. Taking the metaphysical challenge seriously, the eliminativist by contrast offers a robust functionalist explanation of what the first-person perspective of experience amounts to – in terms of the ongoing information-processing mechanisms in the brain on the 'subpersonal' level. On this account, there is no really existing self, metaphysically speaking. For all that exists are some complex representational processes and neural activities in the brain that give rise to some fictional sense of *being a self* (when there is no such a 'personal' self).

However, there is still a more fundamental presupposition against the eliminativist's sceptical stance, namely that it is our pre-reflective, lived self-experience or 'self-*appearance*' (i.e., the sense of being a self) that gives rise to the metaphysical questions about the *reality* of the self in the first place. As Strawson (2000) rightly points out, it is the metaphysical investigation of the self that is 'subordinate to' the phenomenological investigation, not the other way around. Nothing can count as a metaphysical self unless it faithfully adheres to the phenomenology of self-experience. This gives the minimalist grounds to believe that the self *is* as it *appears* and that the minimal self has experiential reality for it is constituted 'in and through' self-experiences. The phenomenology of the minimal self

just is the metaphysics of such a self.[28] To this extent, the eliminativist challenge is misguided since it fails to recognize the correct order of philosophical inquiry: from the phenomenological to the metaphysical.

One potential ramification of the eliminativist's sceptical stance is that, if one were to deny the explanatory value and primacy of the phenomenology of self-experience and the phenomenologically motivated notions of self, one might thereby be forced to concede that not just the self but the world we live in, know, and care about could *all* be illusory. In other words, there is a genuine worry about whether the 'no-self' view might ultimately pave the way to global scepticism (i.e., a 'no-world' view). Of course, this is not a desirable outcome for the eliminativist since it is clearly at odds with our natural or common-sense conception of the external world and the apparent 'world-disclosing' or 'relational' character of experience. In seeing the red apple on my desk, for example, there is an intuitive sense that my visual experience of *this* apple involves a really existing apple in a really existing world.[29]

3.3.2. Transcendental Self

The second line of objection concerns whether there are sufficient grounds for thinking that the minimal self is both *universal* (i.e., 'formal') and *phenomenal* (i.e., 'experientially given'). Given the minimalist's appeal to the explanatory potential of the minimal self in accounting for the unity and individuality of experience, a critic might contend that the minimal self easily collapses into a 'purely formal' notion of self that serves as a necessary 'condition of possibility' for (the unification and individuation of) experiences that is not itself phenomenally manifest.

The idea that every conscious experience by conceptual and metaphysical necessity requires a subject of experience is a familiar one that can be found in Kant. As Kant remarks, "I cannot cognize as an object itself that which I must presuppose in order to cognize an object at all" (Kant, 1781/1998, A402). The Kantian 'transcendental' *I* (i.e., the 'I think' of the transcendental unity of apperception) highlights our *inferential* access to the world, to other minds, and our thinking selves. On the Kantian view, the self is a unifier of experience that is by conceptual and metaphysical necessity presupposed by every content of experience but is not itself experientially given – hence 'transcendental'. On this view,

---

[28] A parallel story could be told about the appearance and reality of the external world. From a phenomenologist's (transcendental) perspective, the naïve realist has reasons to believe that our experiences of the world and things in it are as they *appear* (as 'world-disclosing'), for it is the *appearance* of the world that we perceive that gives rise to the metaphysical questions about the *reality* or the ontological status of the world in the first place.

[29] This 'direct realist' intuition about the external world is also fundamental to the phenomenological basis of naïve realism.

although no self figures in experience as the subject of experience (*contra* the minimal self view), we can nevertheless *infer* that the subject (self) must exist as a necessary principle of unification and individuation of conscious experience.

Searle has recently defended a similar view, though without a commitment to the Kantian framework of transcendental idealism. He argues that the self is not part of the content of experience but we can nonetheless *infer* that it must exist (Searle, 2005, pp. 16-18). He claims that to make sense of our 'conscious field' (of experiences), we must postulate a point of view or the self as a principle of unity. Searle agrees with the minimalist's claim that the self is not the object of consciousness and is not part of the content of experience but denies that we have any pre-reflective *experience* of a self at all. For him the self is non-experiential; it is merely a metaphysical relation that we infer from our experience of the sense of ownership.[30]

Two initial points can be made to distinguish the minimal self from such a 'purely formal' notion of self. First, the former (unlike the latter) is not meant to refer to something 'over and above' experience, an *extra-experiential* principle that is necessary to establish the coherent unity and individuated identity of experiences; rather, it denotes the very first-person givenness of experience as an *intrinsic* feature of experience that is inherent in all forms of experience. Second, the minimalist conception of self is not a mere abstraction or a purely conceptual construct but is itself grounded in the phenomenological datum, namely the fact that I enjoy unique first-personal access to my own experiences that is in principle unavailable to experiences of others and vice versa. Both the minimalist and her Kantian critic agree that reflection reveals no awareness of the self *as an object*. They nevertheless differ with respect to whether the self can figure in experience at all. On the Kantian view, the self is *transcendental* in that it is construed as a 'condition of the possibility' of the unification and individuation of experiences. The minimalist by contrast maintains that the self has experiential reality and figures in experience *as the subject* (i.e., as 'to whom the experience is manifest first-personally'). One obvious concern here is whether the claim that the (minimal) self figures in experience *as the subject* is indeed warranted. On what phenomenological grounds does the minimalist argue for the experiential presence of the self-subject?

The very same question about the phenomenological grounds for subjectivity and selfhood concerned early phenomenologists including Husserl and Sartre. At the time of *Logical Investigations*, Husserl, for example, argued against the Kantian notion of the transcendental *I* (construed as a purely formal

---

[30] Prinz (2012) also makes a similar point, suggesting that the self-as-subject is not phenomenally manifest but amounts to a kind of (external) 'constraint' on *what* we experience. He argues that we can form judgments about ownership but there is no real sense of ownership or for-me-ness proper that is constitutive of experience.

principle of the unity of experience), writing that he has been "unable to find this ego, this primitive, necessary centre of relations" (Husserl, 1900/2001, p. 92). He nevertheless acknowledged that reflection reveals the 'empirical ego' as the totality of experiences. For in reflection, we are aware of our own experiences or "acts in which the ego directs itself to the appropriate object" (p. 92). He argues that the way in which we become aware of our empirical ego through reflection is analogous to the way in which we become aware of some external things in sense perception. In his own words, "[w]e perceive the ego, just as we perceive an external thing" (p. 92).

In his later writings (notably *Ideas I* and *II*), however, Husserl takes an 'egological turn', deploying the notion of the 'pure ego' that cannot be equated with a bundle of experiences. He argues that in all 'intentional' (i.e., conscious) experiences, there must exist an ego that is implicitly given not merely as an object but as the 'ego-pole' of intentionality from which all experiences are directed. That is to say, the pure ego figures in experience not as the *object* of some intentional state (e.g., as 'that which is perceived' 'imagined' 'remembered'); but, rather, as the very *subject* of the experience (i.e., as 'that which is directed to the perceived, to the imagined, to the remembered') whose identity persists through the various experiences. The identity of the pure ego (or self) *transcends* the identity of individual experiences or acts that arise and vanish in the ever-changing stream of consciousness (hence 'transcendental'). Nevertheless, Husserl insists that the pure ego is present *within* experience, constitutive of the very structure of lived experiences (hence 'immanent'). In this sense, the Husserlian pure ego resides in consciousness as a "transcendence in immanence" (Husserl, 1913/2012, p. 122).

The point here is simply that, according to Husserl, being consciously aware of something (e.g., some external-worldly object in sense perception) entails a reference not only to the object of awareness (e.g., a red apple) but also an implicit reference to the subject who is so aware (i.e., my-self or the pure ego), not just *someone*. The pure ego is phenomenally manifest insofar as it is necessary for this intrinsic and "absolute individuation" (Husserl, 1952/1989, p. 103) that demarcates *my* experiences from the experiences of others. The minimalist notion of self is a descendant of Husserl's notion of the pure ego. In defence of the Husserlian claim that the 'pure' or 'minimal' self is given in all experience without being manifest as an object, Zahavi argues that self-awareness obtains not when one reflectively attends to some particular experience but whenever one's experience is given to one*self* "in the first-personal mode of presentation" (Zahavi, 2005, p. 126).

3.3.3. Selfless Experience

The claim that the self or pure ego figures in experience *as the subject* may be challenged on phenomenological grounds. One may argue that there is no minimal form of selfhood (or ego) that pervades our conscious experiential life at the 'pre-reflective' level. For genuine self-awareness is only manifest on special occasions, that is, whenever one exercises the capacity to reflect on one's own experiences in an explicit, thematic manner.

Dreyfus (2005; 2013), for instance, argues that pre-reflective experiences are entirely *anonymous* (that is, *selfless*). When a chess grandmaster plays lightning chess, for example, he is 'fully absorbed' in the sense that he simply responds to the patterns on the board unreflectively rather than reflecting on every speedy move he has to make through the game. According to Dreyfus, no self or self-experience is required in such absorbed coping, for the player's immersed engagement with his environment is totally *oblivious* of himself. No self is phenomenally manifest on the pre-reflective level. Though his denial of the pervasiveness of a 'pre-reflective' self does not entail a denial of subjectivity *per se*, Dreyfus insists that it is a 'mentalistic myth' to infer the existence of a persistent self from the undeniable presence of a transient flow of our embodied coping. On his view, we have the capacity to reflectively attend to our own experiences of the world that is only occasionally exercised and actualized by disrupting our mindless (and thus selfless) coping. In our everyday engagement with reality in full absorption, however, there is no pervasive, pre-reflective self. There is only some short-lived self that is occasionally manifest by virtue of reflective forms of self-awareness.

This line of objection echoes Sartre's (1936/2004) famous critique of the Husserlian pure (transcendental) ego in his *Transcendence of the Ego*. He argues that Husserl's appeal to the presence of a pure ego to *explain* the unity of individuality of experience is superfluous. For Husserl, claims Sartre, conscious experiences are (1) 'unified' by virtue of some form of synthesizing activity of a transcendental ego whose identity (as an ego-pole of all experiences) persists through the various experiences, and (2) 'individuated' (i.e., as mine, not yours) insofar as they belong to one single ego. According to Sartre, however, neither unity nor individuality of experience requires the existence of such an ego. To illustrate this, he writes,

> When I run after a tram, when I look at the time, when I become absorbed in the contemplation of a portrait, there is no *I*. There is a consciousness of the *tram-needing-to-be-caught*, etc. […] In fact, I am then plunged into the world of objects, it is they which constitute the unity of my consciousness, which present themselves with values, attractive and repulsive values, but as for *me*, I have disappeared (Sartre, 1936/2004, p. 13).

The idea is that in my everyday engagement with the world, I am aware of no pure ego as the subject that figures in the ongoing stream of conscious experiences, but only of some object (e.g., the train)

appearing in a specific way (e.g., as 'needing-to-be-caught'). An awareness of a pure ego is not a necessary condition for the unity and individuality of experiences.

Sartre argues that Husserl mistakenly derives a *de facto* conclusion from a *de jure* claim that was originally made by Kant, contending that the Kantian 'I think' that is *capable of* accompanying each of my experiences does not *actually* accompany all my experiences. His core claim is that the postulation of the transcendental ego to explain the unity and individuality of experiences is unnecessary *because* it is consciousness that unifies and individuates *itself* – without the help of an ego who inhabits it. For him, there is no ego or I until one 'reflects'.[31] On this Sartrean picture, in 'unreflected' phenomenal experience (i.e., absorbed coping), there is no awareness of an ego that is manifest *as the subject* of my stream of consciousness (*contra* Husserl); rather, prior to reflection, there is only an *anonymous* and *impersonal* stream of consciousness.[32] Without delving further into the details of Sartre's complicated arguments and setting aside the accuracy of his interpretations of Kant and Husserl, Sartre's claim about the anonymity of pre-reflective experience puts pressure on Husserl's insistence on the phenomenal presence of the pure ego (and on the minimalist claim about the pervasiveness of minimal self).

One crucial worry with the non-egological picture advocated by Sartre is that it is unclear how, on such a view, one can meaningfully speak of the phenomenology of unreflected experience (i.e., absorbed coping) at all – that is, if the experience is entirely mindless and selfless and thus totally oblivious of itself.[33] In particular, it is unclear how one can appropriate an experience *as one's own* (through reflection) if one lacks selfhood when engaged in everyday pre-reflective coping? On the Sartrean account, the (transcendent) ego is generated via reflection in the sense that it is found in 'reflected' consciousness by virtue of 'reflecting' consciousness. But if the latter were entirely impersonal and

---

[31] To clarify, on Sartre's characterization of self-consciousness, whenever there is an awareness of some worldly objects to which one's attention is directed, there is what he calls a 'non-positional' consciousness of consciousness. He argues that non-positional (pre-reflective) consciousness is *egoless* in that there is no further question of what it is to be aware of my experience *as mine* (which implies the presence of an ego or me as the owner of the experience) but simply the question of what it is *for one* to have an experience (*anonymously*). For a similar objection, see Smith (2016, Ch. 7) and Krueger (2011).

[32] Whilst rejecting the Husserlian 'transcend*ental* ego', Sartre also makes a positive claim about his own notion of an ego: that reflection generates an ego that is transcendent to consciousness (i.e., exists *outside* it; *in* the world). According to him, the 'transcend*ent* ego' is a product of reflection and is thus not itself part of unreflective phenomenal experiences. This is equivalent to (early) Husserl's reflection-based notion of the 'empirical ego'.

[33] As noted in the previous footnote, Sartre's overall picture is not exactly 'non-egological' in the sense that he defends the existence of a reflection-based, transcendent ego. Nevertheless, the label seems appropriate in the present context insofar as the very core of his critique of the Husserlian transcendental ego is that there is no pure ego to be found in experience at the lived, pre-reflective level.

selfless, it is unclear how both the reflecting and reflected consciousness could appear to *one*, as they do, as belonging to *one and the same ego* or *subject* (Smith, 2016).

For the minimalist, there is a natural answer to this: whenever one is conscious of one's experience by way of simply undergoing it, there is an implicit awareness of the unreflected (pre-reflective) experience *as mine*. This is what is necessary for the reflecting and reflected consciousness to be manifest to me as belonging to a single subject (i.e., my*self*). In this picture, reflection can have the illuminating effect it has only because it is grounded in a more basic, pre-reflective form of self-awareness that serves as a necessary condition for reflective self-awareness. In other words, reflection is necessarily constrained by the pre-reflectively lived experiences that are already imbued with some basic reference to (the ownership of) one*self*. Simply put, I cannot have been totally 'mind-blind' and 'self-blind' prior to reflection.

This sort of explanation is unavailable to the non-egological critic who denies that there is any reference to the ego or self in the unreflected phenomenal experience that is anonymous and impersonal. To make this more concrete, consider, for example, cases of pain or itch. In being aware of a pain in my left arm or itchy feet, it seems plausible to think that this immediate, unreflected bodily sensation is in fact presented *for* me or as had by *myself*. That is, it is not presented as any other feeling that could be had by *somebody* (anonymously) but as a pain or itch that 'matters' to *me* personally. It seems plausible to think that such cases of unreflected experience are *non-neutral* with respect to 'to whom they are presented'. This in turn casts doubt on the non-egological picture of pre-reflective experience as being totally anonymous and impersonal.

How the above dialectic in the classical phenomenological literature should fuse into contemporary discussions about the notion of the minimal self is contestable. One thing to note here is that, like Husserl, there is an important shift between the account of self-awareness Sartre offers in *The Transcendence of the Ego* and the account presented in his later writings. By the time of *Being and Nothingness*, Sartre (1943/1998) no longer holds that the unreflected phenomenal experiences are 'impersonal' but instead characterizes them as involving some (minimal) form of selfhood. Whilst retaining his non-egological stance (i.e., that the ego is *transcendent to* consciousness), he argues that the fundamental selfness of consciousness "under certain conditions allows the appearance of the Ego as the transcendent phenomenon of that selfness" (Sartre, 1943/1998, p. 103). Given this characterization, one may (plausibly) think that Sartre's later non-egological view is consistent with the minimalist conception of experiential selfhood, according to which there is an implicit self-

reference in pre-reflective experiences that functions as a necessary condition for reflective self-awareness.[34]

3.3.4. The Scope of Experiential Minimalism

There is an important worry about the scope of experiential minimalism which concerns how the 'minimal' self is related to other more advanced forms of self. How does the minimal self *develop into* or *become* a personal self?

In response, Zahavi (2014) endorses a *multidimensional* approach to selfhood, the view that there are different aspects and levels of selfhood to be accounted for in terms of different notions of self that are not incompatible with each other (e.g., 'minimal' self, 'narrative' self, 'social' self). On the multidimensional model, when elucidating the subjective character of human consciousness, we need to appeal, not just to the minimal self, but to different notions of self that may require more advanced cognitive (e.g., linguistic, conceptual) capacities. Nonetheless, the minimalist insists that recognition of the existence of the most basic, minimal form of self is a crucial starting point for an understanding of more elaborate forms of self. This is because the minimal self is the 'thinnest' form of selfhood that is not based on narrative identity, linguistic capacities or any social interaction but is a prerequisite for other more advanced forms of selfhood – but not vice versa. For him, the identity of the pure or minimal self is left untouched and unaffected by changes in the personal self.

The latter claim about the primacy and independence of minimal selfhood has recently been challenged by several authors (Ratcliffe, 2017; Krueger, 2011; Belt, 2019; Vesterager, 2019; Bortolan, 2020). There are questions about whether the notion of the minimal self can do the explanatory job that it promises, namely capturing the subjective aspects of the phenomenal character of experience (which is a 'personal' matter, not a 'sub-personal' or 'pre-personal' one), and whether it can offer a compelling story of the developmental or transformative path between the minimal 'pre-personal' self and the 'personal' self.[35]

The following analogy will suffice here. Roots are a fundamental part of a tree's anatomy and function which provides the tree its stability, anchor to the ground and so on. Not just that a tree cannot survive

---

[34] Merleau-Ponty (1945/2012) makes a similar claim about the 'silent' or 'tacit cogito' that serves as a necessary condition for the Cartesian (reflective) cogito.

[35] For present purposes, I set aside this difficult issues about what such a developmental trajectory would look like and 'how thick' the minimal personal selfhood should amount to – e.g., whether it should encompass pre-linguistic narrative capacity, intersubjectivity or sociality (Ratcliffe, 2017), normativity (Korsgaard, 2009), sedimentation and development of habits (Belt, 2019; Vesterager, 2019), or affectivity (Bortolan, 2020).

or grow without roots but a 'rootless' tree is a contradiction in terms. Nevertheless, it is important to recognize that a root is not *in and of itself* a tree. It cannot amount to the 'entirety' of a tree which is a complex organism that consists of various structures and parts (e.g., leaves, branches, fruits). While a root is an integral 'part' of a tree, it does not fulfil all the necessary characteristics and functions that define a tree. Likewise, although the first-person givenness or for-me-ness of experience as a constitutive feature of the phenomenology of all forms of experience may well play a crucial role in the ontogenesis of a person, it cannot *in and of itself* be a (personal) self *per se*. A 'selfless' person is a contradiction in terms but what the notion of the minimal self amounts to (namely, the first-person perspective) does not possess all the necessary characteristics that are required to define a fully personal self to whom the external world matters *personally* and is thus *phenomenally manifest*.

The main take-home lesson is this. Although the explanatory potential of the notion of minimal self should not be overstated, it is safe to say that recognizing the phenomenal relevance of a minimal form of selfhood is a crucial first step towards a proper understanding of the very 'subjective' (perspectival) nature of perception. In the next two chapters, I further elaborate on the 'subject-dependent' nature of the phenomenology of experience by appealing to the presence of other structural properties of experience, namely 'temporality' (Chapter 3) and 'anticipation' (Chapter 4). This way of spelling out the essential structural properties of experience helps to further delineate the contribution the subject of experience makes to the phenomenology.

Let's take stock. In this section, I have addressed three particular objections raised against experiential minimalism. Concerning (1) the ontological status of the minimal self, I argued that the eliminativist objection is misguided as it fails to recognize the correct order of philosophical inquiry: from the phenomenological to the metaphysical. Concerning (2) its relationship to the transcendental ego, I showed that the notion of minimal self differs from the purely formal, Kantian notion of self as it is grounded in the phenomenological datum, namely that the self figures in experience not as an *object* but as the *subject*. Concerning (3) the phenomenological grounds for the implicit self-reference in pre-reflective experience, I argued that there are reasons to resist the claim that unreflected experiences are entirely anonymous and impersonal, given the non-neutrality of phenomenology (e.g., pain, itch).

4. Combination

I have so far discussed two key theoretical commitments of naïve realism (Section 2) and phenomenological motivations for experiential minimalism (Section 3). This section offers a positive

account of how the two seemingly disparate theories are to be integrated within a single cohesive framework. I argue that the notion of minimal self is not only compatible with but can supplement naïve realism in a novel, substantive way. In particular, the combination helps to clarify the naïve realist's core commitments to relationalism and transparency.

4.1. Perceptual Acquaintance and Self-acquaintance

The notion of minimal self describes the way that a conscious experience is given, first-personally, to the subject whose experiential limitations shape the perspectivalness of the relevant experience. It refers to the unique, first-person access to one's own experiential life that is unavailable to others. In this sense, the minimal self can be characterized in 'relational' terms – as a unique, non-representational relation of 'self-acquaintance' that obtains between the conscious subject and her own experiential life.

Recall that naïve realism is committed to three core claims about the relation of 'perceptual acquaintance':

(1) It is constitutive of the *phenomenology* of conscious sensory experience,

(2) It is *non-representational*, and

(3) It obtains between the subject and some *mind-independent* entities.

In comparison, experiential minimalism can be construed as encompassing the following three claims about the relation of '(minimal) self-acquaintance'[36]:

(1) It is constitutive of the *phenomenology* of every conscious experience,

(2) It is *non-representational* in that it is pre-reflectively given, and

(3) It obtains between the subject and her *own experiential life* (and her own experiential states that fall within it).

Concerning the first pair of premises, neither naïve realism nor experiential minimalism has to be seen as presenting an *exhaustive* account of perceptual phenomenology, and thus they are compatible with each other. The combined claim would be that the phenomenal character of a conscious perceptual experience is *not only* constitutively dependent on the obtaining of a relation of perceptual acquaintance *but also* on the obtaining of a relation of self-acquaintance. This sort of 'phenomenal

---

[36] There is a sense in which experiential minimalism can be construed as a 'naïve realist' theory about the self. Whereas the original naïve realist theory of perception concerns the existence of a mind-independent world that is partly constitutive of the character of experience, experiential minimalism concerns the existence of a (minimal) self that is partly constitutive of the character of experience.

pluralism' is fully compatible with naïve realism in that it offers a highly plausible reading of the naïve realist claim that the phenomenal character of perceptual experience is 'at least in part' determined by some mind-independent things to which the subject is acquainted (i.e., the object relatum). In this way, combination with the minimal self view can help the naïve realist better spell out the contribution made to the phenomenology by one of the relata (i.e., the subject relatum) in terms of the fact about the self-manifestation of experiences (i.e., that they are necessarily first-personally given and subjectively lived-through).

The second pair is also consistent in that their combination would simply amount to the view that both relations occupy the non-representational (pre-reflective) dimension of our conscious experience. Neither perceptual acquaintance nor self-acquaintance requires any contentful talk (in the traditional sense). For both naïve realism and experiential minimalism posit that perception is fundamentally a matter of obtaining a 'non-representational' acquaintance relation (to the world or oneself) that is more primitive than, and thus inexplicable in terms of, the representational content of experience. Naïve realism resists strong reductive representationalist theories of perception, whereas experiential minimalism opposes higher-order representationalist theories of self-consciousness.

Combining the third pair, on the face of it, might seem more problematic. The naïve realist's externalist tendency and the role of the *mind-independent* entities in determining the phenomenal character of experience seems to be in tension with the apparent 'internalistic' characterization of the self-acquaintance relation which obtains between a conscious subject and her *own experiential life*. Note that, however, the relevant self-acquaintance relation should not be equated with the sort of acquaintance that may obtain between a conscious subject and some mind-dependent sense data. To resolve the tension, consider the fact that both perceptual acquaintance and self-acquaintance are 'psychological' relations that constitute the condition of possibility for the occurrence of veridical perceptual experiences. One crucial difference is that the former is a condition of possibility for the occurrence of conscious perceptual experience that is distinctive of veridical perception of the mind-independent world, whereas the latter is a more general condition for the occurrence of any conscious experience (e.g., perceiving, imagining, remembering).

The key thought is that were we not subjects whose self-acquaintance is pervasive and universal, we would not be perceptually acquainted with things in the environment at all. For how could one be aware of any worldly entities at all if one were not consciously (self-)aware of that very awareness? The relation of perceptual acquaintance is connected with the relation of self-acquaintance by the fact that, necessarily, if one is perceptually acquainted with some mind-independent entities in the environment (e.g., watching a flying bird), this implies that one is also self-acquainted with one's own

experiential life in the sense that the perceiver is in the right epistemic position to be aware of herself (i.e., to whom this particular bird-watching experience belongs). Importantly, this is not merely to say that one could not appropriate an experience *as one's own* (as such), but rather to say that, in the absence of self-acquaintance, there would not be *any* phenomenally conscious experience at all. In other words, conscious experiences cannot lack the first-person givenness or self-manifestation without ceasing to be experiences. The relation of perceptual acquaintance is dependent on the self-acquaintance relation in this crucial sense. In this way, the tension between the naïve realist's externalist tendency and the seemingly internalist characterization of the self-acquaintance relation can be resolved.

In this proposal, the phenomenal character of conscious perceptual experience is constitutively dependent not just on (1) some particular mind-independent objects and properties to which the subject is acquainted (e.g., a red apple rather than a yellow banana) and (2) some particular *way* or *manner* in which she is *perceptually acquainted with* such mind-independent entities (e.g., seeing the apple rather than touching or tasting it) but also on (3) the very *way* or *manner* in which she is *self-acquainted to* her own conscious experiential life (e.g., the sense that I am perceiving the apple rather than remembering or imagining it).

Combination with experiential minimalism enriches the naïve realist framework, providing the resources to better capture of the phenomenological richness of perceptual experiences. In particular, this way of delineating the neglected role and place of the subject relatum (in terms of the first-person givenness of experience) allows the naïve realist to live up to her relationalist commitment and provides reason to endorse Weak Transparency over Strong Transparency.[37]

4.2. Weak Transparency and Minimal Self

---

[37] One might worry that the inclusion of a 'self-acquaintance' condition in this way could make perceptual experience more *demanding* in the sense that it requires perceivers to also have self-awareness, and that this runs the risk of excluding creatures with limited cognitive skills to be genuine perceivers. A typical minimalist response would be that the minimal self is so fundamental and basic (and thus *undemanding*) that it can be attributed to all sentient creatures who possess the capacity for phenomenal consciousness, including human infants and non-human animals. For this reason, the minimal self is often characterized as 'pre-linguistic' and 'pre-conceptual'. Alternatively, one might dispute the idea that infants have a self at all (Kagan, 1998). However, one worry with such a view is that there needs a developmental story to explain the *qualitative* differences between the for-me aspect of the pre-reflective experience of 'human infants' and 'non-human animals' and the for-me aspect of the pre-reflective experience of 'human adults'. There needs an explanation of the ontogenetic nature of experiential selfhood and how it is related to the emergence of the pre-linguistic self and the acquisition of higher-order cognitive (e.g., linguistic, conceptual) capacities.

How does the combination fare with the naïve realist's commitment to transparency? The issue was that standard naïve realism, given its strong externalist tendency, seems to lack resources to account for the presence of some 'non-diaphanous' aspects of perceptual phenomenology. My suggestion here is that experiential minimalism is not only compatible with but can substantiate the naïve realist's commitment to the 'weak' transparency claim.

The minimal self can be construed as a *non-diaphanous* (structural) feature of experience in two important senses. First, it does not simply derive from the perceived, external-worldly objects. The minimalist holds that every conscious experience involves the most basic, primitive dimension of selfhood that is *not* grounded in, or constituted by, some external-worldly objects and properties in the way that the qualitative or sensory aspects of perceptual phenomenology are (e.g., sourness, lemon). The minimal self does not refer to a feature of some external-worldly entities but to the very *way* in which one's conscious experiences of those mind-independent things are manifest to oneself in a first-personal manner.

Second, the minimal self can be construed as a non-diaphanous feature of experience insofar as it aims to capture the phenomenology of *pre-reflective* experience that is often taken for granted and left unaccounted for. On experiential minimalism, self-awareness obtains not only whenever one explicitly and deliberately attends to one's own experiential state *through reflection*, but whenever one *pre-reflectively* 'lives through' an experience. This pre-reflective form of self-awareness amounts to a primordial form of self-directedness upon which other more advanced, reflective forms of self-awareness (which may require further conceptual and linguistic capacities) are grounded. The point is that acknowledging such a pre-reflective dimension of experience is a crucial first step towards a phenomenologically sensitive account of conscious perceptual experience that rightly respects and honours the place and role of the subject in the characterization of perceptual phenomenology.

Weak Transparency is preferable over Strong Transparency primarily because it implies 'phenomenal pluralism' which leaves room for the subject's contribution to the overall phenomenology, whereas the latter entails 'strong phenomenal externalism' which simply neglects it. Combination with the minimal self view equips the naïve realist to better spell out the 'non-diaphanous' aspects of experience partly by reference to the minimal self that is 'non-object-dependent' and 'pre-reflectively given'.

4.3. Relationalism and Minimal Self

The proposed combination also clarifies the naïve realist's commitment to relationalism that is grounded in the basic phenomenological fact that perception *appears* 'relational' (i.e., as involving two relata, an object relatum and a subject relatum). I have shown that one persistent challenge for naïve realists is to explicate how one should spell out the role of the 'subject relatum' in determining the phenomenology of conscious perceptual experiences. Combination with experiential minimalism can help the naïve realist in this respect. For the minimal self amounts to an essential structural properties of experience itself. It *is* constitutive of the 'subjective' (for-me) dimension of the phenomenal character of *all* conscious experience. This in turn complements the particular emphasis naïve realists often place on the role assigned to mind-independent entities and thus the 'object-dependent' nature of experience. The combined view provides a way to resolve the tension between the externalist, object-directed tendency of naïve realism and the fact that naïve realists typically characterize perceptual phenomenology as being 'partly' (i.e., non-exhaustively) constituted by such mind-independent things (i.e., resisting strong phenomenal externalism).

It is worth noting here that when expounding on the naïve realist's relationalist commitment, there is an important distinction to be drawn between (1) the claim that we are aware of both relata and (2) the claim that we can be aware of the acquaintance relation itself. Some contemporary naïve realists have suggested that perceptual awareness of external-worldly items involves an implicit awareness of some aspects of the relation itself or how the relation is 'structured' (Logue, 2012; French, 2014; 2018; Soteriou, 2013). My proposed view is consistent with these accounts of naïve realism which allow for the phenomenal character of experience to be determined, at least in part, by the 'way' in which one is perceptually related to one's mind-independent surroundings. But my upshot is to go further by suggesting that there are phenomenological grounds for thinking that every perceptual experience involves an implicit awareness of *oneself* as the subject of experience, thereby contributing to the phenomenology as a 'non-diaphanous' feature of experience. Why think that perception involves an implicit, pre-reflective awareness of oneself as the subject of experience, not just some facts about the relation of perceptual acquaintance itself? This, I argue, best captures the place and role of subjectivity in shaping the phenomenology of experience (i.e., the subject's contribution to the phenomenology), thereby fully embracing the naïve realist's central commitment to relationalism and transparency.

Taking the subjectivity of consciousness seriously in this way is also important because without fully embracing the character shaping role of the subject (i.e., recognizing oneself as the centre of one's own experiences), one would never be able to recognize the experiences of other subjects *as theirs* (i.e., *not mine*). In brief, the suggestion that perception involves an implicit reference to oneself as the subject can play a crucial role in developing a viable form of naïve realism that can accommodate the

issues of intersubjectivity and experiencing other minds (i.e., direct social perception). On the contrary, one potential ramification of strong phenomenal externalism which characterizes perceptual phenomenology in a purely 'object-involving' way is that it is susceptible to the charge of solipsism.

Another virtue of the suggested alliance is that it equips the minimalist with a proper 'direct realist' ontology that is necessary for her to avoid any charges of solipsistic idealism. Commitment to a direct realist view of the external world is not always explicitly expressed or defended by phenomenologists. This is because their primary concern is to 'suspend' or 'bracket out' any ontological or metaphysical commitments one may have about reality to single out what is essential to the nature of consciousness. However, if one were to avoid any idealist charge, one ought to fully embrace the realist commitment to the existence of a mind-independent reality that is intersubjectively accessible (i.e., open to other subjects or selves, not only to myself). Combination with naïve realism provides the materials for this.

4.4. Non-relationalist Naïve Realism

My key suggestion in this chapter has been that the notion of minimal self can help the naïve realist better describe the role of the subject in shaping the phenomenology of perceptual experience. This, admittedly, relies on one crucial assumption, namely that naïve realism entails relationalism. Could the naïve realist's relationalist commitment be challenged?

Steenhagen (2019) takes issue with the consensus view, claiming that a 'non-relationalist' form of naïve realism is a legitimate option. He argues that when accounting for what is fundamental to the nature of perception, the naïve realist can dispense with the relationalist assumption that perception involves both relata. His 'argument from appearing' can be reformulated as follows:

> P1. Perceptual experiences are fundamentally *presentational*.
>
> P2. Mere appearances are fundamentally *presentational* but *non-relational*.
>
> P3. Perceptual experiences and appearances belong to the same fundamental kind insofar as they are *presentational*.
>
> ∴ Perceptual experiences are not fundamentally *relational*.

Steenhagen undermines the relationalist commitment of naïve realism, claiming that if the same kind of event could occur whether there is a conscious subject who experiences or undergoes it (i.e., perceptual experiences) or not (i.e., mere appearances), the relationality is not fundamental to the nature of perceptual experience.

Drawing on Russell's (1921) 'realist' conception of appearances, Steenhagen characterizes appearances as "phenomenal episodes or events" (Steenhagen, 2019, p. 1009) in which some mind-independent objects take part regardless of whether there is someone actually being there to register them. According to him, there could occur some 'mere appearances' where some phenomenal events occur in the presence of some mind-independent objects that appear to *nobody*. For even a photographic plate to form images of a bird would just suffice to say that the bird *appears* in some impersonal sense. On this view, mere appearances are by their very nature 'non-subject-involving' and thus 'non-relational'. Steenhagen insists that mere appearances, despite their non-relational nature, can belong to the same fundamental kind of events as perceptual experiences insofar as they are all fundamentally *presentational* (i.e., involve a presentation or appearance of mind-independent objects).

Much hangs on the plausibility of Steenhagen's characterization of mere appearances but the idea of something *merely appearing* without there being someone 'to whom it appears' is a bitter pill to swallow. For it is not clear how such a strictly 'non-subject-involving' occurrence (i.e., mere appearance) could ever yield or amount to a 'phenomenally conscious' event that involves the 'what-it-is-likeness'. Why, for example, would there be *anything it is like* for something to appear as such in the absence of a subject to whom it appears in some particular (e.g., first-personal) manner? That is, why would a mere appearance of the bird that is present to *nobody* still be an appearance of a bird at all? Steehagen's claim that mere appearances are 'phenomenal' events seems ill-founded. 'Phenomenally conscious' perceptual experiences would differ fundamentally from 'non-phenomenally conscious' mere appearances. Even if the suggestion is simply that we can make sense of the very possibility of there being some unperceived object that appears to *nobody*, there is little reason to think that such counterfactual situation (that *could* occur in the absence of a conscious subject) should belong to the same fundamental kind as the phenomenally conscious perceptual experiences that we undergo in our everyday engagement with the world.

In accordance with what I have argued in this chapter, a much more natural way of understanding the relationship between naïve realism and relationalism would be to draw a demarcation between perceptual experiences and mere appearances by appealing to the presence of the minimal self. For example, there is an intuitive sense in which the occurrence of a perceptual experience requires the presence of a minimal, pre-reflective form of self-awareness (as an essential structural feature of conscious perceptual experience), whereas the obtaining of a mere appearance does not. In this respect, it seems much more plausible to think that perceptual experience and mere appearances do not belong to the same fundamental kind. The key issue with the non-relationalist proposal is that, if

one were to undermine the relationalist commitment of naïve realism, one would be left with an impoverished conception of experience that cannot take the phenomenology seriously.

5. Conclusion

The chief aim of this chapter has been to legitimize the claim that when accounting for the phenomenal character of conscious perceptual experience, there are reasons to combine naïve realism, a theory of perceptual awareness of the external world, and experiential minimalism, a theory of self-awareness of one's own inner experiential life. Drawing a close connection between the minimalist conception of self and naïve realism's core theoretical commitments, I have shown that the notion of minimal self can supplement naïve realism in a novel, fruitful way – by giving substance to the naïve realist's account of perceptual acquaintance and weak transparency.

One notable issue concerned the question of whether the minimal self view is sufficient to do full justice to the subject's contribution to the characterization of perceptual phenomenology. My answer was negative in that the minimal self does not itself offer an exhaustive account of the 'subject-dependent' nature of perceptual experience. The subsequent chapters will further elucidate the subjective nature of consciousness with reference to the temporal structure of experience (Chapter 3) and the role of anticipation in perception (Chapter 4). The appeal to these essential structural properties of experience provides us with a richer, phenomenologically informed account of the nature of perception. Furthermore, the structural approach to perceptual consciousness will place us in a better position to understand the nature of hallucination. In Chapters 5 and 6, I develop and defend what I call 'structural disjunctivism' as a novel solution to the problem of causally matching hallucination.

Another potential benefit of the present discussion in the context of this thesis is that the combination of naïve realism and the phenomenological notion of minimal or pre-reflective self-awareness may help to make sense of one of the key assumptions that underlie Martin's version of negative epistemic disjunctivism: the 'coincidence' thesis. Recall that Martin, who is sceptical of our 'reflective' (self-)knowledge about the nature of experience, endorses a 'minimalist' model of introspection, according to which our introspective perspective *coincides with* experiential perceptive. He argues that there is no need to provide further explanation of our introspective perspective for there is no separate introspective awareness of our own experience that is over and beyond our perceptual awareness of the world. However, the critic might worry that his coincidence thesis leaves

unexplained exactly how our introspective self-awareness of our own experience contributes to determining (and accounting for) the characterization of perceptual phenomenology – and also the introspective indistinguishability of causally matching hallucination.

The proposed combination of naïve realism and experiential minimalism is instructive in this respect, for the distinction between 'pre-reflective' and 'reflective' forms of self-awareness enables us to diagnose the point of disagreement between the negative disjunctivist and his opponents. In brief, the suggestion that minimal or pre-reflective self-awareness is a built-in, *structural* feature of perceptual experience allows the naïve realist to better spell out the constitutive link between our perceptual awareness of the world and our (pre-reflective) introspective (self-)awareness of our own experiences. To be more specific, it can specify the contribution made by our introspective perspective to the overall phenomenology in terms of the phenomenal significance of the first-person givenness (for-me-ness) of experience. This offers the disjunctivist a better way to come to terms with his commitment to the coincidence thesis, without appealing to any representationalist theories of self-consciousness which may weaken the naïve realist framework (e.g., HOTs, self-representationalism).

Chapter 3: Temporality

1. Introduction

Naïve realists are realist about entities that are 'statically constituted' and are experienced 'at any one time' (e.g., objects, properties). But it is equally (if not more) important to recognize that they are also realist about entities that are 'dynamically constituted' and are experienced as 'happening over time' (e.g., events, occurrences, processes). Some naïve realists go on to suggest that our experiences of the latter kind are more fundamental than those of the former because perceptual experiences are most fundamentally temporally extended phenomena.

In contemporary discussions about temporal consciousness, this sort of view is often referred to as 'extensionalism', which holds that our experiences of temporal entities are themselves dynamically constituted, temporally extended phenomena (Dainton, 2000). In this respect, one may plausibly think that when accounting for the phenomenal character of our experience of temporal entities (e.g., some mind-independent occurrences), there is good reason to think that naïve realism entails or is committed to extensionalism. Proponents of the combination of naïve realism and extensionalism include Hoerl (2013a; 2013b; 2017), Soteriou (2007; 2010; 2013), and Phillips (2013; 2014a; 2014b; 2014c).

This chapter presents an account of the phenomenology of conscious temporal experience by integrating extensionalism with insights from the Phenomenological tradition. In particular, I draw on the notion of a 'temporal horizon', which has been discussed by early and contemporary phenomenologists (Husserl, 1952/1989; 1966a/1991; 1966b/2001; Merleau-Ponty, 1945/2012; Zahavi, 2005; 2007; 2010; 1999/2020; Gallagher & Zahavi, 2012; Ratcliffe, 2017; Smith, 2016). I argue that when elucidating the phenomenology of temporal experience, there are good reasons to combine them.

Section 2 outlines two differing interpretations of the 'transparency' claim applied to our experience of temporal entities (e.g., events), and examines Hoerl's (2018) argument for his 'strong' interpretation of temporal transparency and his favoured version of extensionalism: strong temporal externalism. Section 3 raises and discusses three key objections to Hoerl's externalist account of temporal phenomenology. Section 4 presents an alternative account of the phenomenology of

temporal experience – what I call the 'horizonal' view – which integrates the notions of 'acquaintance' and 'temporal horizon' within a single theoretical framework. I then illustrate how the horizonal view fares with the explanatory challenges posed against strong temporal externalism.

2. Strong Temporal Externalism

This section illustrates two different interpretations of transparency applied to the temporal case: (1) strong temporal transparency (STT) and (2) weak temporal transparency (WTT). I then discuss Hoerl's (2018) argument for STT in support of his favoured version of extensionalism: strong temporal externalism.

2.1. Temporal Transparency

One key motivation behind extensionalism is the 'transparency' claim which I discussed in Chapter 2. This is the idea that introspection or relation reveals that our experiences present the world to us in a transparent, diaphanous manner. Given that theories of perception are committed to accommodating the transparency claim, there arises an important question about the extent to which it applies to our experience of temporal entities.

There are (at least) two senses in which our experiences might be taken to be temporally transparent. On a 'strong' interpretation of temporal transparency (STT), the phenomenology of temporal experience is *exhausted* by the temporal properties of the objects of experience. According to STT, when one introspectively reflects on one's temporal experience, one can only find the temporal properties of the objects of experience, and not those of the experiences themselves. As Tye, for instance, puts it, "Continuity, change, and succession are experienced as features of the items experienced, not as features of experience" (Tye, 2000, p. 96). On this view, when hearing a melody, the temporal character of my auditory experience is fully determined by the temporal properties of *that* melody that I hear (e.g., temporal extension, duration, succession).

Alternatively, some have suggested that transparency has to be explained in a 'special' way when it comes to temporal properties of experience because "the transparency thesis looks rather different in the temporal case" (Phillips, 2009, p. 56). The following disanalogy will suffice here. In cases of colour perception, experiences do not themselves manifestly possess any colour properties. My visual

experience of a *red* apple does not itself possess *redness*. In the temporal case, however, there is an intuitive sense that my experiences of some mind-independent events are themselves given *in* time and encompass various temporal properties (e.g. temporal extension, duration, continuity).

Taking this intuition further, one may be attracted to a more moderate or 'weaker' reading of temporal transparency (WTT). It is 'weaker' in the sense that it is not committed to the strong claim that the phenomenal character of temporal experience is *exhausted* by the temporal properties of the objects of experience. Yet, it is still committed to the idea that perceptual experiences are 'temporally transparent' insofar as it is grounded in the phenomenological fact that the temporal properties of the objects of experience (e.g., the duration of a melody that I hear) and the temporal properties of the experience itself (e.g., the duration of my auditory experience of the melody) *seem* to 'match'.

On this reading, when the transparency claim is applied in the temporal case, it "seems to us that our experience itself unfolds alongside and in step with the temporal phenomena which we find ourselves attending to in reflecting on our experience" (Phillips, 2014b, p. 132). The claim is that we have introspective access to the temporal layout or structure of experience and "it is part of our ordinary conception of the mental that experience has a temporal structure of which we are aware" (Phillips, 2014b, p. 144). Phillips calls this 'inheritance', claiming that the temporal properties of experience *inherit* the temporal properties of the object of experience.[38] Proponents of STT deny this since, on their view, it is only the temporal properties of the objects of experience that one can find when introspectively attending to one's experience of them.

Soteriou offers a further characterization of WTT. He writes,

> Introspectively, it doesn't seem to one as though one can mark out the temporal location of one's perceptual experience as distinct from the temporal location of whatever it is that one seems to be perceptually aware of. Further, it seems to one as though the temporal location of one's experience depends on, and is determined by, the temporal location of whatever it is that one's experience is an experience of (Soteriou, 2013, pp. 89-90).

The claim is that the reason why the temporal location (or properties) of one's experience and the temporal location (or properties) of the objects of experience appear to 'match' is *because* introspection reveals that the former 'depends on, and is determined by' the latter. Temporal transparency is 'special' in the sense that both the temporal location of experience and the temporal location of the perceived object (event) – *as well as* the dependence of the former on the latter – are

---

[38] The same metaphor is used elsewhere in consideration of 'non-temporal' cases (e.g., colour perception) (Campbell, 1997; Kalderon, 2011).

phenomenally manifest to us, and this is what introspection can reveal to us about the temporal character of experience.[39]

Are there reasons to favour one reading of temporal transparency over the other? At first, the disagreement between those who endorse STT and those who prefer WTT might be viewed as a mere clash of intuitions. That is, one might think that they are at odds with each other simply on introspective grounds (i.e., how experience *seems* to one). This chapter aims to show that, if you are a naïve realist with a commitment to extensionalism, there are reasons to favour WTT over STT. In the following, I examine Hoerl's (2018) argument for STT based on his favoured version of extensionalism understood within the naïve realist or relationalist framework: 'strong temporal externalism'.

2.2. Strong Temporal Externalism

Hoerl maintains that the transparency claim applies to a particularly strong degree in the case of our experience of temporal entities, arguing that the phenomenology of temporal transparency is best explained in terms of a 'purely negative' property of experience, namely the experience's *lack of temporal viewpoint*. Temporally speaking, he claims, there is a sense in which temporal objects and properties are not given to us under any 'mode of presentation' at all. When accounting for the phenomenal character of temporal experience, there is no special 'way' or 'manner' in which the temporal properties of the relevant events are perceived, which also allows for other alternative ways of experiencing the same events and properties from different temporal points of view (i.e., at different points in time). In effect, this means that there are no temporal properties of the experience itself other than those of the experienced objects and events that are revealed to us through introspection (i.e., STT). Hoerl argues that this *purely negative* phenomenological feature of experience – the absence of temporal viewpoint – is what gives perceptual experience its distinctive *sui generis* character and explains "the particularly direct way in which temporally present events figure in sensory awareness" (Hoerl, 2018, p. 145).

In consideration of the 'phenomenology' of temporal experience, one of Hoerl's central claims is that there is no such thing as the *felt* temporal location or properties of the experience forming part of the phenomenology. For him, the reason why it doesn't seem that one can mark out the temporal location of experience as distinct from the temporal location of the objects of experience is *not* because both of these temporal locations figure in the phenomenology and are thus experienced as being 'identical'

---

[39] Soteriou (2010; 2013) presents an ontological argument for the claim that temporal transparency is better accommodated within a relationalist (extensionalist) framework than a representationalist one such as Tye's (2000; 2003).

or 'matching' (*contra* Phillips and Soteriou). Rather, this is because the former (the temporal location of the experience) is not a 'positive' feature that is constitutive of the phenomenology whereas the latter (the temporal location of the objects of experience) is. This means that there is no scope within a description of our experience of temporal properties for a distinction between those experienced temporal objects and properties themselves and a point in time *from which* they are experienced which would also allow for experiencing the same objects and properties at different points in time. Hoerl concludes that the temporal properties of experience do not form an exception to the transparency commitment, and the phenomenology of this 'strong' form of transparency concerning temporal properties is best explained in terms of the fact that perceptual experience lacks a temporal viewpoint.[40]

The key motivation behind Hoerl's argument for STT and the claim that experience lacks a temporal viewpoint lies in the apparent asymmetry between the phenomenology of (visuo-)spatial experience and the phenomenology of temporal experience. Hoerl's argument from phenomenological asymmetry can be summarized as follows:

> P1. In the visuospatial case, it seems that one can mark out the spatial location *from which* the relevant objects are perceived (i.e., here) as distinct from the spatial location of those objects (i.e., over there).
>
> P2. In the temporal case, it doesn't seem that one can mark out the temporal location *from which* the relevant objects are perceived (i.e., now) as distinct from the temporal location of those objects (i.e., now).
>
> P3. If P1, then perceptual experience is spatially viewpointed.
>
> P4. If P2, then perceptual experience is temporally viewpointless.
>
> ∴ Perceptual experience is spatially viewpointed but temporally viewpointless.

Hoerl maintains that perceptual experiences are spatially viewpointed insofar as our spatial viewpoint figures in experience as different from the spatial location of the objects perceived. In seeing pear trees in my back garden, for example, I seem to be able to mark out the spatial location from which the relevant objects are seen (i.e., the location from which the trees are seen; here). This indicates that we see objects in a particular way which also allows for other alternative ways in which such

---

[40] It is worth clarifying Hoerl's notion of viewpointedness. In his view, the notion of viewpoint or perspective refers to a phenomenologically salient aspect of experience that amounts to the very *way* in which things are experienced. According to Hoerl, our perceptual experiences of temporal entities lack a temporal viewpoint in the sense that there is no particular *way* in which those temporal entities are present to us, for they are present to us in a 'strongly transparent' manner.

objects could be seen, that is, if seen from other spatial locations (e.g., if I were closer to the trees) or under different lighting conditions (e.g., on a gloomy day).

According to Hoerl, the spatial viewpoint of visual experience may be construed as an invariant *structural* feature of experience that is constitutive of the phenomenology of every visuospatial experience. The ways in which the spatial relations among given objects in the scene figure in experience are always dependent on the way in which the spatial relation between the subject and the objects figures in experience. That is to say, the different ways in which the distance between the pear trees is manifest in experience (e.g., as distant, nearby) depend on my spatial viewpoint from which the trees are seen.

According to Hoerl, there seems to be no obvious equivalent 'viewpoint' in the temporal case. He argues that there is no 'temporal viewpoint' that we could discriminate, from *within* experience, from the time of the perceived objects and events. That is, we cannot discriminate the temporal location of the perceived objects and events and the point in time from which they are perceived. In hearing a C-D-E melody, it doesn't seem that I could mark out the temporal location and duration of my auditory experience itself from the temporal location and duration of the melody that I hear. Unlike in the visuospatial case, there seems to be no particular 'way' in which events figure in perception temporally that would also allow for other alternative (temporal) ways in which the same events might be manifest. In short, according to Hoerl, there is an important phenomenological difference between visuospatial experience and temporal experience which gives us reason to think that perceptual experiences are 'spatially viewpointed' but 'temporally viewpointless'. There are positive *structural* features of experience in the visuospatial case, but temporally speaking, experience lacks any such structural features.[41]

Hoerl's claim that it is the absence of temporal viewpoint in an experience that explains the distinctive phenomenology of temporal experience (the sense that the transparency claim applies to a particularly strong degree in the temporal case; STT) is best understood within the naïve realist or relationalist framework. His favoured version of extensionalism is motivated by the naïve realist claim that we are directly acquainted with some mind-independent occurrences. Hoerl's commitment to naïve realism gives us a fuller picture of his externalist view about the phenomenal character of temporal experience, which can be put as follows:

---

[41] Richardson (2010) suggests that there is a temporal field analogous to the visuospatial field that can be construed as a particular interval within which 'things have to change sufficiently' for us to perceive the change. In response, Hoerl argues that on this characterization it is unclear that the contribution made by the temporal field should be seen as a *structural* feature of experience that lies on the 'how' (rather than the 'what') of experience.

Strong temporal externalism: the phenomenal character of temporal experience is fully determined by, and thus to be explained in terms of, the temporal properties of some mind-independent events to which the subject stands in an acquaintance relation, not by the temporal properties of the experience itself (e.g., a temporal viewpoint).

On this view, the phenomenal (temporal) character of my auditory experience of a melody (e.g., duration, succession, order) is *exhausted* by the temporal properties of that very melody I am acquainted with. For, when introspectively reflecting on my experience, it seems that I have a direct awareness of the temporal properties of the object of experience, and not those of my awareness itself. Hoerl insists that there is no introspective evidence that there is such thing as a temporal viewpoint of the experience itself – *over and above* the temporal properties of the perceived object – that forms part of the phenomenology. Strong temporal externalism provides a way of motivating STT with a commitment to naïve realism.[42]

3. Objections

This section raises and discusses three particular objections to Hoerl's favoured combination of naïve realism and extensionalism concerning the question of whether it is capable of doing full justice to (1) its commitment to relationalism, (2) cases of temporal illusion, and (3) the distinctive kind of phenomenal unity of conscious experiences.

3.1. Relationalist Commitment

Hoerl (2013a; 2017) argues that what distinguishes the extensional view from alternative accounts of temporal experience is the fact that it is motivated by a 'relational' conception of perceptual experience. To recall, this is the view that perception is a matter of obtaining a *sui generis*, non-representational relation of acquaintance to mind-independent entities (Campbell, 2002; Brewer, 2011; Martin, 2004). He writes,

we can only be perceptually aware of events that presently impinge upon our senses, and in the sense that we can't experience those events as anything other than present. There is an

---

[42] Tye defends a version of strong temporal externalism that is committed to the representationalist framework he advocates.

intuitive sense in which past events are simply no longer around to figure as constituents of our experience in the way envisaged by the relational view (Hoerl, 2017, p. 177).

In defence of the relationalist commitment of extensionalism, Hoerl stresses the constitutive and explanatory role of the mind-independent events to which the subject stands in an "entirely generic relation" (Hoerl, 2017, p. 177). In this way, the idea that perceptual experiences are themselves temporally extended phenomena (extensionalism) is accounted for by appeal to the temporally extended, mind-independent occurrences to which the subject is directly acquainted.

However, there is a worry about whether the form of extensionalism defended by Hoerl can indeed fully embrace its commitment to relationalism. This is due to the tension between his externalist claim (that the phenomenal character of temporal experience is fully determined by the temporal properties of the objects of experience in the absence of a temporal viewpoint) and the relationalist idea that perception *appears* relational (i.e., as involving at least two relata, an object relatum and a subject relatum). The thought is that, given the 'objectification' of time (i.e., the tendency to characterize time in purely objective terms), the externalist seems ill-positioned to do full justice to the relationalist intuition that not only the object of experience but also the conscious subject figures in experience. In other words, given the particular emphasis placed on the role played by the perceived mind-independent events, the temporal externalist overlooks the 'subject' side of the relation that is implicated in the apparent relationality of experience (i.e., the contribution made by the *subject relatum* to the phenomenology of conscious temporal experience).[43]

The externalist might respond that the apparent relationality can be explained by appealing to the relevant experience's spatial viewpoint rather than its temporal viewpoint. However, this does not eschew the issue, for as long as he appeals to the presence of an acquaintance relation (that obtains between a subject and some mind-independent events) in defence of extensionalism, there needs a plausible explanation of how exactly the subject relatum contributes to the overall phenomenology of the relevant temporal experience. To this extent, Hoerl's favoured version of extensionalism seems ill-suited to do justice to the apparent relationality of perception (i.e., the idea that both the object of experience and the subject figure in the phenomenology on the 'personal' level).

3.2. Temporal Illusions

---

[43] This is an application of the same argument for the relevance of the minimal self in the previous chapter.

The second line of objection concerns whether Hoerl's favoured combination of naïve realism and extensionalism is capable of accommodating cases in which there is a mismatch between the objective time (of the perceived object or event) and the apparent or subjective time (as it *seems* to the subject). The challenge is that the externalist doesn't seem well-positioned to account for such cases of 'temporal illusion' where the subject *misperceives* the time of the perceived object or event. This threatens to undermine the 'direct realist' view about temporal entities.

One prominent example of temporal illusion concerns distortion of duration estimation.[44] In cases of 'duration distortion', there is a mismatch between the subjectively felt duration of the event and the objective duration of the perceived event. Suppose you are watching a football game on TV with a friend who has no interest in football. Although the same duration and sequence of events are perceived, the phenomenology of experiences will differ. For example, the same event can *seem* to last longer or shorter depending on something 'subjective' (e.g., one's interest in football, boredom). There could be 'intra-personal' variations in the phenomenology as well. For, at different times, the same event can *seem* to last longer or shorter to the very same person in different contexts (e.g., feeling bored when watching a replay of the same game). Duration distortion is often reported by survivors of life-threatening danger (e.g., car crash, high fall) who state that the traumatic events they experienced appeared to last much longer than they, in fact, did.[45] Duration distortion has also been studied under experimental conditions.[46] The explanatory challenge here is that, given the emphasis on the object-dependent nature of temporal phenomenology, the externalist doesn't seem well-equipped to explain such cases of temporal illusion where the 'objective' duration of the perceived event remains *constant* but the phenomenology of temporal experience *varies* depending on something 'subjective' (e.g., one's interest in football, mood, boredom, enjoyment, fear).

Recent experimental psychological studies indicate that there might be another variant of temporal illusion which involves not a distortion of judgment on the duration of events ('duration judgments')

---

[44] I set aside other interesting and relevant examples of temporal illusion that have been empirically studied, including the 'apparent motion' effect (Hoerl, 2015; Grush, 2005), the 'postdictive' effect (Geldard & Sherrick, 1972; Grush, 2007), the 'motion-silencing' illusion (Suchow & Alvarez, 2011; Watzl, 2013). See Phillips (2013; 2014a; 2014c) for a naïve realist account of these allegedly problematic cases.

[45] For empirical studies on this type of duration distortion, see Noyes and Kletti (1976; 1977), Flaherty (1999), Carson (1999), Ursano et al., (1999), and Hancock & Weaver (2005).

[46] One empirically studied case of duration distortion involves the *oddball* effect, where a unique stimulus (an oddball) embedded in a series of standard stimuli can seem to last longer than the standard stimuli (Tse et al., 2004; Kim & McAuley, 2013; Birngruber et al., 2015). It is a contestable matter whether the relevant subjective distortion in duration perception is due to 'greater attention' to the oddball stimuli (Tse, et al., 2004) or novel stimuli being more 'arousing' (Ulrich, et al., 2006). One general assumption shared by different explanations of the oddball effect is that standard stimuli are judged to have a shorter duration than the odd stimuli because they are 'more predictable' or 'expected' from the *subject*'s point of view. This, I shall show, is much in line with the idea that perception involves not a mere 'contact' with the actual duration of the perceived event but also (at least) some implicit form of anticipation-*in*-perception (i.e., the horizontal structure of experience).

but a duration of judgment on the speed of time passing ('passage of time judgments) (Wearden, 2015; Droit-Volet & Wearden, 2016; Tanaka & Yotsumoto, 2017). The idea is that there may be cases of temporal illusion which involve not changes in the feeling of 'how long' an event seems to last, but changes in the feeling of 'how quickly or slowly' the perceived event seems to or is likely to unfold. On key difference between duration distortion and distortion of the passage of time judgment is that the latter involves a distinctive kinds of 'comparison' that captures the intuitive sense that our remarks about how quickly or slowly time seems to be passing by (e.g., 'time *flies*', 'time *drags*') connote that it feels faster or slower than usual or expected. On this interpretation, the phenomenology of temporal experience can differ without changes in the actual duration of the perceived event in the sense that one's passage of time judgment can vary in different situations and for different people.

It is worth distinguishing two variants of the passage of time judgment. One variant obtains when an event ends sooner than expected (i.e., the feeling of faster-then-expected), meaning that it must be preceded by the *end* of that event, and another obtains when an event seems to last longer than expected and thus can arise *during* the event (i.e., the feeling of slower-than-expected). Drawing on their experimental findings, Tanaka and Yotsumoto, for instance, characterize the notion of passage of time judgment as "a function of the discrepancy between felt duration and temporal expectation of events" (Tanaka & Yotsumoto, 2017, p. 1), suggesting that the feelings of 'faster-than-usual' and 'slower-than-usual' arise as a result of a mismatch between the *actual* 'felt' duration of the event and the *expectation* of how long it should feel like.

One key hypothesis is that passage of time judgments involve an 'online' component, namely online anticipation of how likely the ongoing event is to end immediately. This online component indicates that we *implicitly* keep track of time at all times, anticipating how long an event should feel like even when not asked to do so. This is contrasted with another component, namely the 'post hoc' comparison between the actual and expected duration which must be preceded by the end of an event. On one reading, whereas the post hoc component may be responsible for some (post-perceptual) judgments about the speed of time passing *after* the event, the online (anticipatory) component might be taken to meant that the feeling of 'slower-than-expected' is constitutive of the phenomenology of temporal experience itself.

What can Hoerl say about cases of temporal illusion? One may think that the externalist is well-placed to account for duration distortion. When accounting for cases of duration distortion, the externalist is likely to argue that the duration of experience is exhausted (constituted) by and thus to be explained in terms of the actual durations of perceived events to which the subject is acquainted. In the case of life-threatening danger, for example, the externalist might say that the subject is acquainted with the

actual duration of the accident (e.g., a few seconds) but she may then form some post-perceptual belief or illusion about the length of the duration of the traumatic event.

Accommodating distortion of the passage of time judgment may seem more problematic, however. This is because the externalist is likely to maintain that only the *actual* duration of the event (to which one is acquainted) is, strictly speaking, 'perceived', whereas the *expected* duration would form part of one's thinking or cognizing (as distinct from perceiving). Or, alternatively, the externalist might contend that the contribution the feelings of 'faster-than-expected' or 'slower-than-expected' makes to the phenomenology is, strictly speaking, 'affective' (not 'perceptual'). That is to say, descriptions like 'time *flies*' and 'time *drags*' are just metaphorical and are meant to express changes in one's affective state or mood (e.g., enjoyment, boredom) rather than any genuine perceptual changes.

However, this way of demarcating what counts as perception, on the one hand, and what counts as thought, judgment or affective state, on the other, is not a straightforward matter. One concern is that it fails to respect the sense that, in perceiving, there is always more to the perceived world than what is at one instantaneous moment. When hearing a succession of C-D-E notes *as one whole melody*, for example, there is an intuitive sense that as the D-note sounds, I neither explicitly 'recollect' my previous awareness of the C-note nor 'think' of (or 'imagine') an upcoming awareness of the E-note. Rather, it seems intuitive to think that there is at least some genuinely 'perceptual' sense of 'what-has-just-been' (i.e., the C-note I just heard) and the sense of 'what-is-yet-to-come' (i.e., something like the E-note) *in the present*. My point here is simply that if the distortion of the passage of time judgment is based on an online anticipation that occurs during the perceived event, it seems plausible to think that changes in the feeling that time is passing by quickly or slowly should make a difference in the phenomenology at the level of perception rather than at the level of post-perceptual belief

To this extent, there are reasons to think that strong temporal externalism is not well-suited to accommodate cases of temporal illusion which involve variations in temporal phenomenology (e.g., distortion of duration estimation, distortion of the passage of time judgment) without the variation in the perceived event.

3.3. Phenomenal Unity

The third line of objection to Hoerl's favoured combination of naïve realism and extensionalism concerns the distinctive kind of 'unity' that is characteristic of our experience of events. The idea is that the extensionalist claim that our experiences of events are themselves temporally extended phenomena implies that they contain temporal parts or 'phases' of their own corresponding to the

successive phases of the perceived object or event. This in turn means that there must be a distinctive kind of phenomenal unity of those temporal phases of consciousness itself for us to experience something as enduring over time (as temporally extended).

The guiding assumption, as William James has famously remarked, is that a "succession of feeling, in and of itself, is not a feeling of succession" (James, 1890, p. 628). That is, a mere succession of experiences (or their temporal parts) does not itself provide us with an experience of succession because the latter requires a distinctive kind of 'phenomenal' unity *within* experience that is missing from the former. In hearing a succession of C-D-E notes (that sounds between t1 and t3), there is a sense that my awareness of the C-note (at t1) must somehow be *coherently unified* with my awareness of the D-note (at t2) and that of the E-note (at t3). For, otherwise, it would not make sense to say that I am hearing the melody *as a melody* but as three isolated tones played at three different instantaneous moments in time.

The relevant kind of phenomenal unity also encompasses multimodal experiences. Imagine a concertmaster performing in an orchestra who not only plays the violin and feels the pressure on his fingers but also gazes at the conductor's gestures whilst hearing sounds from neighbouring performers. In this case, there is multiple and nested sensory information coming from different sense modalities. The point is that all those things that the violinist sees, hears, and touches during the performance are somehow experienced *together* in an effortless manner. All sensory information is bounded together and integrated within a single coherently unified experience (of 'performing'), rather than given as a jumble of discrete and disconnected (visual, auditory, tactile) sensations. This requires the extensionalist to provide a plausible explanation of the relevant kind of unity that gives rise to the subjective 'feeling' of unity that may contribute to the phenomenology.

In response to this sort of worry, Hoerl (2013b) insists that the fact that we can have experiences of succession (as distinct from a mere succession of experiences) is to be explained not in terms of some additional unity relation that obtains and figures in the phenomenology but rather in terms of (1) our standing in an acquaintance to some parts of the objects of experience (the relationalist claim) and (2) the maximum interval of time that individual experiences can span (the specious present claim). He writes,

> I experience each of the three tones in turn and these experiences can make up one overall experience simply because the three tones fall within the scope of one specious present (Hoerl, 2013b, p. 412).

According to Hoerl, we can experience succession insofar as we are acquainted with some parts of a perceived object or event (e.g., each note of the melody) 'in turn', that is, one after another (e.g., being aware of the C-note, *then* being aware of the D-note, and so on) and those 'individual experiences' span over a limited interval of time. He maintains that the unity of experiences simply amounts to the fact that some individual experiences can fall under a certain limited interval of time that we can have cognitive access to. In other words, Hoerl rejects the idea that there is any 'extra-experiential' unification principle *over and above* individual experiences that itself figures in the phenomenology (as a missing ingredient in a mere succession of experiences). What unifies individual experiences is simply the fact that they fall within a limited interval that we can have a temporal awareness of (i.e., the 'specious present').[47]

One explanation of the unity of multisensory experiences might be that it requires an implicit temporal integration processing which 'enables' such a unity (Coull & Nobre, 2008). That is to say, it is the persistent presence and operation of some temporal integration mechanism (of the brain) that serves to bind multimodal information and thereby gives rise to the sense of unity. However, the externalist who appeals to this kind of neuroscientific explanation would deny that this temporal integration processing has any bearing on issues about the *phenomenology* of experience. For, on the externalist view, there is no room for any 'non-object-dependent' factor that contributes to the phenomenology of temporal experience. It is entirely determined by the temporal properties of the perceived object or event. In accounting for the apparent sense of unity, the externalist might then appeal to the idea that we are perceptually related to the temporal order of the mind-independent reality itself (which facilitates the temporal order of the relevant experiences), instead of claiming that there exists any underlying unifying function that binds distinct experiences together *and* is itself phenomenally manifest.

Hoerl and his colleagues attribute the relevant unification of experiences or 'temporal binding' to "a top-down effect on perception reflecting a belief in causality" (Hoerl, et al., 2020, p. 2). In brief, the thought is that it is one's belief or judgment about the causal relationships between different perceived events that shapes (the phenomenology of) the subjective time. However, it is not entirely obvious why the phenomenal unity of *perceptual* experiences should require such a non-perceptual or post-perceptual cognitive effect from a belief about those experiences. The phenomenological datum to be respected here is that the relevant experiences *appear* to be unified on the perceptual,

---

[47] Dainton (2000), by contrast, explains the relevant unification of individual experiences by appealing to the diachronic 'co-consciousness' relationship between experiences (*contra* Hoerl). In this view, my awareness of the C-note and my awareness of the D-note (and that of the E-note) are joined by the fact that they are 'co-conscious' of each other. For critical discussions of the primitive co-consciousness relation, see Zahavi (2007), Prosser (2016), Chuard (2017), and Hoerl (2013b).

personal level. This may indicate that the externalist account of the phenomenal unity presupposes a narrow or impoverished conception of what the phenomenology of temporal experience should amount to and thus fails to do justice to the phenomenological datum at issue.

A related empirical issue concerns the various anomalous temporal experiences that occur under certain psychiatric conditions where the subject's ability to experience time is significantly altered and disturbed. For example, schizophrenia is a paradigmatic disturbance in subjective temporality where the coherent unity of experiences that is taken for granted in a healthy, non-pathological experiential life is seriously disrupted (Minkowski, 1933/2019; Fuchs, 2007; 2013; Sass & Pienkos, 2013; Martin, et al., 2014; Stanghellini, et al., 2016; Sul, 2022). This gives rise to the feelings of strangeness, agitation, and alienation that accompany various anomalous temporal experiences in schizophrenia, including 'time fragmentation' and 'time immobility'.

Describing his experience of time as 'fragmented', a patient of Minkowski reports,

> sometimes everything is so fragmented, when it should be so unified. A bird in the garden chirps, for example. I heard the bird, and I know that he chirps; but that it is a bird and that he chirps, these two things are separated from each other. There is an abyss. Here I am afraid because I cannot put them back together again. It is as if the bird and the chirping having nothing in common with each other. (Minkowski, 1933/2019, p. 285).

Schizophrenic patients who describe their experiences as fragmented and disunified express that they find it difficult to make sense of the continuous flow of events over time. One influential interpretation of these self-reports has been that those afflicted individuals no longer experience time in a coherently unified, flow-like manner in that there is some sort of "disintegration" (Fuchs, 2013, p. 87) or "breakdown" (Stanghellini, et al., 2016, p. 49) of the very structure of conscious experience itself. As a result, the world no longer appears to them as a unified whole but as a series of fragmented snapshots.

Another paradigmatic case of schizophrenic temporal experience involves an experience wherein the patients feel as if "time stood still" (Stanghellini, et al., 2016, p. 50). Describing the 'immobility' of time, another patient reports,

> I continue to live now in eternity; there are no more hours or days or nights. […] time does not flow for me. […] Time is immobile. […] everything is immobile in me. Time has stopped (Minkowski, 1933/2019, pp. 285-286).

That time passes whilst worldly things remain the same is something that is taken for granted in our ordinary non-pathological life. We typically don't have to make any explicit effort to make sense of

this basic phenomenological fact. In the case of time immobility, however, the basic sense of the continuity and unity of the perceived world is lost, and experiences are no longer given in a seamless, flow-like manner. Schizophrenic patients often express that they feel stuck in the now-moment that is 'stopped', 'standing still', and 'no longer progressing'.

Both cases of anomalous temporal experience in schizophrenia indicate that there is a significant disruption in the way schizophrenic subjects experience time. Their experiences are no longer given to them in a coherently unified, flow-like manner but instead as disorganized, immobile and bothersome. Thus, in the case of schizophrenia, there seem to be some genuine phenomenological differences that reflect changes in the very *way* or *manner* in which schizophrenic subjects experience time. The meaningfully unified experiences that are simply taken for granted in ordinary healthy life are no longer available to those afflicted individuals. To this extent, one may construe the relevant kind of experiential unity as a phenomenologically salient aspect of our conscious experiential life insofar as its absence or disruption is noticeable and shows up on the 'personal' level.

One might contend that those subjects with schizophrenia no longer have the same 'access' to external time – just like people with colour blindness have no access to certain colours to tell the difference between them. However, this sort of response is not available to the externalist who is committed to extensionalism and relationalism. For, from the externalist's perspective, had the subject lost her *access* (acquaintance) to the time of the objects, there would not occur any temporally extended experience at all. The temporal extension and duration of experience presuppose the presence of some temporally extended mind-independent occurrence to which the subject is acquainted and thus has access. However, on one reading, this might be taken to mean that schizophrenic subjects (who lack access to the external time of the perceived object or event) simply do not have any relevant perceptual experience at all. This comes at odds with the intuitive thought that those afflicted individuals would not complain about the absurdity and uncanniness of their own experiential life *unless* they actually had such altered and disoriented temporal experiences in the first place.

Notwithstanding that the verbal self-reports from schizophrenic patients should be interpreted with much caution, it is safe to say that the reported disruptions in schizophrenic temporal experiences provide some grounds for thinking that strong temporal externalism is not well-positioned to accommodate such anomalous schizophrenic experiences as time fragmentation and time immobility. This is due to the view's object-directed tendency.

Summing up, I have presented three particular challenges that put pressure on Hoerl's favoured combination of naïve realism and extensionalism, arguing that there are reasons to think that his

externalist account of the phenomenology of temporal experience is ill-placed to accommodate (1) the relationalist commitment, especially the contribution made by the *subject relatum* in characterizing the phenomenology of temporal experience, (2) certain cases of 'temporal illusion' (e.g., duration distortions, distortions of the passage of time judgment), and (3) the phenomenal unity of everyday experiences that is noticeably disrupted and altered in cases of schizophrenic temporal experiences (e.g., time fragmentation, time immobility). Although these objections may not by themselves establish a knockdown argument against strong temporal externalism, there are some *prima facie* reasons to think that the externalist view leaves unaddressed the role of the subject in characterizing the phenomenology of conscious temporal experiences.

4. The Horizonal View

My aim in the rest of this chapter is to offer and defend an alternative account of the phenomenology of temporal experience that is consistent with naïve realism, shedding light on the oft-neglected role of subjectivity in shaping the phenomenology of conscious temporal experience. In particular, I draw a link between the relationalist element of temporal externalism (i.e., the notion of 'acquaintance') and the notion of a 'temporal horizon' that is discussed extensively in the Phenomenological tradition (Husserl, 1905; 1966a/1991; 1966b/2001; Merleau-Ponty, 1945/2012; Gallagher & Zahavi, 2012; Smith, 2016; Ratcliffe, 2017). Their combination yields what I call the 'horizonal' view.

I first introduce the notion of a 'horizon' that is central to phenomenological analyses of perceptual consciousness, where the 'horizonal' structure is taken to be a *necessary* 'constitutive' condition for our experience of spatial and temporal entities. I then show how the two seemingly disparate notions of 'acquaintance' and 'temporal horizons' can be integrated and understood within a single cohesive framework. The key claim is that the proposed combination yields a highly attractive, phenomenologically informed account of the phenomenology of temporal experience, giving reasons to prefer WTT over STT. The final section demonstrates how the horizonal view overcomes the above objections raised against Hoerl's strong temporal externalism.

4.1. Temporal Horizon

The notion of horizon plays a crucial role in phenomenological analyses of perceptual consciousness (Husserl, 1900/2001; 1907/2010; 1913/2012; 1931/1960; Merleau-Ponty, 1945/2012). It refers to the

implicit background of experience against which perceived things (e.g., objects, events) are manifest, thematized and made explicit to the subject (e.g., 'as objects', 'as events'). One way of characterizing the horizon of experience would be in terms of various possibilities implicated in perception which amount to "implicit references to further experiences one may have of the things one sees" (Romdenh-Romluc, 2009, p. 84). As Husserl remarks,

> 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, 1931/1960, p. 44).

The thought is that every conscious experience has a 'horizonal' structure in virtue of which one can go beyond one's current perspective. For one's current experience of a particular object (or an event) always incorporates other possibilities of experiencing the same object from different standpoints (e.g., seeing it from another angle or at a different point in time), some of which take the form of anticipation. These possibilities implicated in perception are organized in a structured manner, together constituting the sense that things are experienced as perceptually present.

In accounting for our visuospatial experience of three-dimensional objects (e.g., tables, chairs), Husserl (1900/2001; 1913/2012) distinguishes those aspects of the perceived object that are given with 'intuitive fullness' (e.g., the facing side of the table before me) and those aspects of the object that are merely 'co-given' (e.g., its rear side, underside).[48] The horizon of experience includes those co-given aspects of the perceived object by my anticipations of how the thing will look different if I were to move towards or around it. This means that it is the horizonal structure of experience which allows the same table to be encountered from different vantage points. Those co-given aspects of my current experience of the table can be revealed through further exploration and movement.[49]

The same applies to the temporal case where the temporal horizon of experience amounts to the way in which temporal objects and properties are manifest to the subject *as such* (e.g., as events, as temporally extended). The idea is that in every experience of an event, the ongoing now phase of the event is never experienced in isolation but always embedded in a horizon of what has just been in the

---

[48] Husserl further distinguishes between two sorts of horizons: internal and external (Husserl, 1954/1970, §47). The internal horizon in an experience includes those aspects of the perceived objects that are 'co-given' (e.g., the table's unseen sides), whereas the external horizon encompasses those other 'co-given' aspects of one's immediate environment (e.g., the sofa in my peripheral vision).

[49] Chapter 5 further elucidates the essential, anticipatory (horizonal) structure of experience, addressing the so-called 'problem of perceptual presence' (Noë, 2004) concerning the possibility of perceiving three-dimensional entities in spite of our perspectival limitations.

immediate past and what is yet to come in the immediate future which contributes to shaping the overall phenomenology. In his 1905 'Lectures on the Phenomenology of the Consciousness of Internal Time', Husserl (1966a/1991) argues that we can perceive temporal objects (e.g., events, occurrences) *because* our experience encompasses not only a punctual now phase of the perceived event but also the phases of the event that has just been and the phases that are yet to happen. Had our experience of events been restricted to being conscious of a mere succession of punctual now moments ('now-now-now'), it would be impossible to perceive entities with temporal extension and duration. According to Husserl, it is in virtue of the temporal-horizonal structure of experience that these different phases of the perceived event can be experienced together as a unified whole (i.e., as a temporally extended event).

Husserl uses three technical terms to describe the so-called structure of inner time-consciousness. According to him, every conscious temporal experience has an essential 'tripartite' (i.e., temporal-horizonal) structure which encompasses (1) an awareness of the narrow now phase of an event (primal impression), (2) an awareness of the just-past phase of the event that is retained (by virtue of retention), and (3) an awareness of the upcoming phase of the event that is anticipated (by virtue of protention). The basic idea is that whatever is immediately present in my current experience (with 'intuitive fullness') by virtue of primal impression must be accompanied by a past-directed retentional awareness and a future-directed protentional awareness of those phases of the given event that are merely 'co-given'. These retentional and protentional aspects of experience are constitutive of the temporal-horizonal structure that is necessary for any conscious temporal experience to occur.[50] In hearing a C-D-E melody, (1) my direct awareness of the D-note does not occur in isolation but must be accompanied and contextualized by (2) my co-awareness of the 'previous' primal impression of the C-note that is retained and thereby modified as 'having been' and (3) my co-awareness of the 'anticipated' primal impression of something like the E-note as 'about to happen' that may or may not be fulfilled in the immediate future.

Importantly, neither retention nor protention is to be understood as individual conscious experiences (or, 'acts') like perception, imagination or memory. Rather, they are *constitutive* parts of the very structure of conscious experiences as lived by us. The temporal (retentional and protentional) horizons are to be understood as intrinsic *structural* features of experience that serve as a necessary condition

---

[50] Merleau-Ponty (1945/2012) echoes Husserl in delineating the temporal character of experience by appealing to an essential *field of presence* with a backward-facing 'past horizon' (in virtue of which one can be aware of the just past phase of the event and the experience one has had) and a forward-facing 'future horizon' (in virtue of which one can be aware of the upcoming phase of an experience one could have). Like Husserl, he stresses that the field of presence encompasses not only a punctual 'now' but also that which is immediately retained and that which is immediately anticipated.

for the possibility of experiencing mind-independent events. The point is that it is the synthesis of these three temporal modes of experiencing now (primal impression), no-longer-now (retention), and not-yet-now (protention) which makes possible an experience of an event *as an event*.

Part of the motivation behind the appeal to the 'tripartite' (retention-primal impression-protention) structure of temporal experience is to resist the so-called 'snapshot' or 'static' conception of experience, the view that our experiences lack any temporal extension and we can only perceive a series of unconnected, now-slices of the given object or event.[51] For, on the Husserlian view, every conscious experience of an event must have temporal extension and duration and this is possible by virtue of the temporal-horizonal structure of experience.[52]

Having provided this summary of what the temporal-horizonal structure of experience amounts to, I now proceed to offer my positive account of temporal phenomenology which incorporates the relationalist element of temporal externalism and the phenomenological notion of temporal horizon. The combination yields a particularly compelling account of temporal experience that is phenomenologically apt and fully embraces the direct realist ontology.

4.2. The Horizonal View

The 'horizonal' view comprises two core claims about how our experience of events is *structured*:

(1) Acquaintance: the phenomenal character of temporal experience is determined by and thus to be accounted for, at least in part, in terms of the now phase of the event with which the subject is acquainted.

(2) Temporal horizon: the phenomenal character of temporal experience is determined by and thus to be accounted for, at least in part, in terms of the just-elapsed phase and about-to-come phase of the event in virtue of the temporal-horizonal structure of the experience itself.

First, the horizonal view accommodates the relationalist element of temporal externalism, the idea that the phenomenal character of our experience of events is to be accounted for, at least in part, in terms of the obtaining of a *sui generis* non-representational relation of acquaintance between a subject and some parts of mind-independent events. On this account, the obtaining of a relation of

---

[51] Reid (1785/2002) is perhaps the most prominent proponent of this sort of view, the so-called 'cinematic' model of temporal awareness, which essentially denies that our experience can span even a brief temporal interval. Contemporary variants of the cinematic model are defended by Plumer (1985) and Chuard (2017).
[52] See also Gallagher (1998, Ch. 2) for a detailed discussion of how Husserl's appeal to the retentional-protentional structure of inner time-consciousness (i.e., the temporal-horizonal structure of experience) is meant to solve problems allegedly faced by more Jamesian conceptions of the specious present.

'acquaintance' is to be understood as a necessary condition for the 'primal impression' of the ongoing now phase of the perceived event (i.e., that which is directly presented to the subject as happening right now). One might contend that it is by no means obvious that the Husserlian view ought to be conceived of as incorporating a direct realist ontology. To be clear, I am simply suggesting here that the notion of acquaintance can be construed in this way.[53]

Second, the horizonal view recognizes the phenomenal relevance and significance of the temporal-horizonal structure of experience that is distinct from, and not simply a matter of, the temporal properties of the object of experience (*contra* STT). As illustrated above, the notion of temporal horizon refers to the idea that it is in virtue of the temporal-horizonal structure of the experience itself that the same events can be encountered from different spatiotemporal perspectives despite our perspectival limitations. This means that one's awareness of the now phase of an event is necessarily embedded against a temporal horizon which encompasses the just-past phase of the event that is retained and the about-to-come phase of the event that is anticipated. The temporal-horizonal structure in this sense amounts to a necessary (constitutive) condition for any conscious temporal experience to occur. That is to say, were there no such temporal horizons, there would not occur any conscious experience of an event at all, not just some mere succession of punctual now moments (to which the subject is acquainted). For acquaintance alone does not suffice to give rise to a conscious temporal experience; the temporal-horizonal structure is also required.

My suggestion here is that the phenomenology of temporal experience is to be accounted for in terms of the combination of an awareness of what is immediately present (by virtue of acquaintance) and a co-awareness of what has just been and what is yet coming (by virtue of temporal horizons). In hearing the C-D-E melody, as the D-note sounds, my direct awareness of the D-note that occupies the now phase of the melody to which I am *acquainted* is necessarily accompanied by my implicit co-awareness of the 'no-longer-now' phase of the melody (in virtue of my past-directed retentional horizon) and that of the 'not-yet-now' phase (in virtue of the future-directed protentional horizon). For, otherwise, there would not obtain any perceptual experience of the melody (as a melody) at all.

---

[53] This way of assigning the direct realist commitment to the broadly Husserlian view of temporal experience aligns with Merleau-Ponty's view about "the impossibility of a complete reduction" (Merleau-Ponty, 1945/2012, p. lxxvii). Briefly, the thought is that the Husserlian method of the epoché or the phenomenological reduction is not free from our natural ('naïve') attitude towards the world around us, for we are most fundamentally beings-in-the-world. In other words, adopting the phenomenological attitude in delineating what is essential to the nature of (temporal) experience needn't be seen as endorsing a form of idealism and thus incompatible with direct realism. See Smith (2005) for a discussion of Merleau-Ponty's attitude towards the phenomenological reduction. See also Allen (2019) for the compatibility between naïve realism and Merleau-Ponty's theory of perception.

The specific way in which the two core claims of the horizonal view – 'acquaintance' and 'temporal horizons' – are compatible with each other requires further elucidation and defence. Consideration of the following three claims will suffice for present purposes:

(1) Phenomenal pluralism: neither acquaintance nor temporal horizon exhausts the phenomenology of conscious perceptual experience.

(2) Anti-representationalism: neither acquaintance nor temporal horizon requires the representationalist framework.

(3) Non-priority: neither of them has a metaphysical nor explanatory primacy over the other.

First, neither naive realism (the notion of 'acquaintance') nor the Husserlian account of the structure of temporal experience (the notion of 'temporal horizon') has to be seen as presenting an 'exhaustive' account of the phenomenology of temporal experience. The horizonal view takes this non-exhaustive reading of temporal phenomenology (*contra* Hoerl's strong temporal externalism). This aligns well with both (1) the original Husserlian idea that primal impression is always embedded in a temporal horizon and can only be understood in relation to the horizonal (retentional and protentional) context, and (2) the naïve realist claim that perceptual phenomenology is 'at least in part' constituted by the mind-independent entities to which the subject is acquainted. On this view, both acquaintance (primal impression) and temporal horizons (retention and protention) amount to different aspects of the overall phenomenology but the experience itself is indissoluble, meaning that they are inseparable. This entails 'phenomenal pluralism', the view that the phenomenal character of conscious perceptual (temporal) experience depends, constitutively, on multiple factors.[54]

Second, acquaintance and temporal horizons are compatible insofar as they are both 'non-representational' in some important respects. On the one hand, the relation of acquaintance is *non-representational* in that its obtaining is more primitive and explanatorily basic than the obtaining of a mental state that has some representational content with certain veridicality or accuracy conditions. On the other hand, temporal horizons are *non-representational* insofar as they are what constitute the very (temporal) mode of a conscious experience and in this sense more primitive and explanatorily basic than more explicit, reproductive forms of representational state (e.g., thought, belief). Retention or the retentional horizon, for example, is part of perception which contributes to the very presentation of an event 'as perceived'. It differs from explicit forms of recollection which involve actively reproducing (or representing) an experience of an event from a particular temporal

---

[54] These include the aforementioned *structural* features of experience (e.g., acquaintance, minimal self, temporality). Yet, this is not an exhaustive list of what constitutes the essential structure of experience, leaving open the possibility of other factors or *structural* features that may contribute to shaping the phenomenology of every conscious experience.

perspective from which it is experienced 'as remembered', that is, being 'in the past'. Similarly, protention as an essential feature of perception itself differs from voluntary acts of imagination or expectation 'in the present' which involves postulating (or representing) what will happen 'in the future'.

Third, on the suggested picture, neither acquaintance nor temporal horizons have a metaphysical or explanatory primacy over the other, for they are necessary and reciprocal aspects of experience. This means that acquaintance and temporal horizons have an 'interdependent' status in as far as the nature of the former is to be specified, at least in part, in terms of the latter and vice versa. That is, when elucidating the phenomenology of temporal experience, the nature of acquaintance is always contextually dependent on and thus to be explained with reference to the temporal-horizonal structure of consciousness itself. For what a subject is acquainted with (as the 'figure') would not become intelligible if it were not taken and understood within the horizonal context of her experience (as the 'background'). Conversely, the nature of temporal horizons of the 'not-now' is to be specified in part in terms of the 'now' phase of the event to which the subject is acquainted. For neither the 'no-longer-now' (on the retentional horizon) nor the 'not-yet-now' (on the protentional horizon) would make any sense without reference to the acquainted 'now'.

One might worry that the horizonal view could collapse into an 'atomistic' view of temporal experience as it appeals to the idea that experience has a temporal structure with distinct elements (i.e., acquaintance, temporal horizon) when, phenomenologically speaking, we only seem to perceive things in the present. However, the suggestion here is not that temporal horizons are something that we become aware of in some explicit manner (e.g., some mind-independent events); rather, the appeal to the temporal-horizonal structure of experience is meant to better describe the way in temporal experiences are manifest to us. They are essential structural features of experience that makes possible our experiences of events *as such*. The phenomenologically informed analysis of the temporal-horizonal structure of experience complements the naïve realist's emphasis on the role of mind-independent occurrences in characterizing the phenomenology of conscious temporal experiences.

The 'non-priority' claim may also be resisted in two ways. On the one hand, the relationalist might insist that the phenomenology of temporal experience is exhausted by the 'entirely generic' relation of acquaintance to some mind-independent events, thus one can dispense with the notion of temporal horizons together. On the other hand, the phenomenologist might contend that the horizonal view can do without naïve realism, relying solely on the broadly Husserlian analysis of the structure of time-consciousness. However, the point of the non-priority claim is to show that the two key notions

('acquaintance' and 'temporal horizon') can be construed in a mutually supportive way (i.e., more plausible together than either alone). The horizonal view goes beyond mere phenomenological analyses or descriptions of temporal experience as it secures the 'direct realist' ontology to avoid any obvious charges of idealism (by appeal to the obtaining of a relation of acquaintance to the external world). But, at the same time, it provides the resources to substantiate the character shaping role of the subject in determining the phenomenology of temporal experience (by appeal to the temporal-horizonal structure of the subject's experience itself).

4.3. Implications

This section illustrates how the horizonal view fares with the explanatory challenges raised against Hoerl's externalist view about temporal phenomenology. The basic idea is that the horizonal view is better equipped (than the externalist view) to accommodate the 'non-object-dependent' (i.e., 'subject-dependent') aspects of the phenomenology of temporal experience.

4.3.1. Relationalist Commitment

The first objection was that Hoerl's externalist view fails to do justice to the relationalist commitment of extensionalism due to its austerely object-oriented characterization of temporal phenomenology. I argued that the externalist leaves unaddressed the contribution made by the *subject relatum* to the overall phenomenology of temporal experience.

The horizonal view, by contrast, has the resources to specify the role of the subject in shaping the phenomenology of temporal experience by reference to the temporal-horizonal structure of the subject's experience. It resists total objectification of time and favours phenomenal pluralism. In particular, the combination of acquaintance and temporal horizons helps to delineate the sense that the phenomenology of temporal experience is constituted *partly* by the 'object relatum' (i.e., some mind-independent occurrences to which the subject is acquainted) and *partly* by the 'subject relatum' (i.e., the temporal-horizonal structure of the subject's experience). On this account, what is happening now (to which the subject is acquainted) never appears in isolation but is always experienced against the horizonal background of those phases just past and yet to happen that are not simply a matter of 'what' is experienced (i.e., some mind-independent events and their properties) but 'how' (i.e., the very way or manner in which the experience is given to the subject).

One potential worry with the suggested alliance concerns whether the appeal to the broadly Husserlian notion of temporal horizons means that the horizonal view collapses into a version of the so-called 'retentional' model of temporal awareness, according to which we can experience succession and duration but our experiences do not themselves possess any temporal extension. In contemporary scholarship, the retentional model is often taken to be in competition with the extensional model (Dainton, 2000). Part of the motivation behind this divide is the thought the former is liable to the general framework of representationalism or intentionalism that seems to conflict with and may thus threaten to undermine the naïve realist or relationalist framework of the latter (Hoerl, 2013b; 2017).

Hoerl (2013a), for instance, argues that Husserl's account of temporal experience is best understood as advocating a form of representationalism (and retentionalism), claiming that Husserl construes the tripartite (retention-primal impression-protention) structure of inner time-consciousness as an 'intentional' structure that is *metaphysically and explanatorily prior* to the perceived worldly occurrences and their temporal properties. On Husserl's account, claims Hoerl, the structure of temporal experience involves a multiplicity of representational contents that correspond to individual 'phases' of experience (i.e., retentions, primal impressions, protentions) and the intentional relationship between those different phases of experience have metaphysical and explanatory priority over our experience of temporal entities. Given his relationalist commitment, it is hardly surprising that Hoerl goes on to take issue with the representationalist picture he ascribes to Husserl, criticizing him for advocating a form of 'idealism about time'.[55]

It is worth stressing here that the combination of the relationalist commitment of extensionalism and the phenomenological notion of temporal horizons yield a form of naïve realism that is fully committed to the core tenet of naïve realism. This is the idea that the obtaining of a non-representational relation of acquaintance is a necessary condition for the occurrence of a perceptual experience that is more primitive and explanatorily basic than some intentional attitudes one may adopt towards the world and things in it. As Soteriou, for instance, remarks:

> the claim that the relevant psychological relation is non-representational should be
> understood in terms of the idea that the obtaining of the relation is not simply determined by

---

[55] There is a legitimate interpretative issue about whether Husserl's original analysis of the structure of inner time-consciousness ought to be read as a form of representationalism. See Zahavi (2005; 2007) for an alternative interpretation that avoids ascribing such a strong representationalist stance to him. Regarding the 'idealist' outlook, whilst some argue that Husserl's version of transcendental idealism is a species of metaphysical idealism in the traditional sense (e.g., Berkeley's idealism) (Philipse, 1995; Smith, 2003), others suggest that it amounts to an epistemological or methodological doctrine that is not in principle in competition with metaphysical realism (e.g., naïve realism) (Carr, 1999).

the obtaining of a mental state that has an intentional content with veridicality conditions –
irrespective of whether the mental state in question is a factive one, and irrespective of
whether the content of the state is object-involving (Soteriou, 2013, p. 107).

The horizonal view is fully compatible with the relationalist claim that perception essentially involves a relation of acquaintance that is more primitive and more explanatorily basic than the intentional content of experience (e.g., thought, belief). Nonetheless, in this view, the obtaining of a relation of acquaintance is not of itself sufficient to give rise to a conscious perceptual (temporal) experience. An experience of something in particular (e.g., hearing a melody *as a melody*) also requires some basic capacity for recognition or a (perceptual) way of taking things to be a certain way – by virtue of the presence of temporal horizons. In this light, the horizonal view may be viewed as being 'minimally' committed to the intentionalist framework, albeit to a form of intentionalism that is not in principle in competition with the form of naïve realism I have just described (that is committed to phenomenal pluralism).[56]

The point here is that the horizonal view purports to complement the naïve realist's emphasis on the 'object-dependent' nature of experience, by providing additional resources to spell out the contribution made by the conscious subject to the phenomenology of temporal experience in terms of the temporal-horizonal structure of the subject's experience. The key motivation behind the horizonal view is to pinpoint that there is a plausible way of adhering to or doing justice to what is implied by the apparent relationality of perception. This is to suggest that the phenomenology of temporal experience is not simply a matter of some mind-independent events but also of how experiences are themselves manifest to the subject in virtue of the temporal-horizonal structure of the experience itself. On this construal, the temporal horizons are not to be thought of as individual 'phases' of experience each of which possesses different representational 'content' but as what constitutes the very 'mode' of temporal experience in virtue of which some object or event can *appear* to the subject as enduring over time at all.

4.3.2. Temporal Illusions

The second objection was that the externalist view is undermined by certain cases of temporal illusion which involve a mismatch between the objective time of the perceived event and the apparent or

---

[56] One may think that the appeal to the relationalist commitment of naïve realism on its own does not suffice to distinguish naïve realism from *all* forms of representationalism. Some intentionalists, for instance, insist that there is a sense in which perceptual experiences are both contentful and relational (McDowell, 1994) or that they have some 'object-involving' contents (Schellenberg, 2011).

subjective time as it *seems* to the subject. The key issue was that the externalist leaves no room for there being any 'non-object-dependent' factors that may contribute to variations in the phenomenology of temporal experience (without the variation in the objective time).

The horizonal view offers a neat explanation of cases of temporal illusion where variations in the apparent or subjective duration without the variation in the object duration are accounted for in terms of variations in the temporal-horizonal structure. In the case of life-threatening danger, for example, the sense in which the relevant event seemed to last much longer than it in fact did can be accounted for in terms of alterations in the future-directed, protentional horizon of experience where the subject's anticipation of how long the relevant event should last is modified or has gone awry (e.g., due to fear).

Similarly, on the horizonal view, distortions of the passage of time judgment can be accounted for by appeal to variations in the protentional horizon of experience. In other words, changes in the feelings of how quickly or slowly time seems to be passing by can be accounted for in terms of different anticipations about the speed of time passing at play at different times. This aligns well with the suggestion that distortions of the passage of time judgment arises as a result of a discrepancy between the subject's online anticipation of how quickly or slowly the relevant experience is likely to unfold and how it actually unfolds. In both cases of temporal illusion, the objective time remains *constant* but the phenomenology *varies* due to the contribution made by the subject's anticipation. This sort of explanation is not available to the proponent of strong temporal externalism who endorses STT. The horizonal view has additional resources to better capture the phenomenology of temporal illusion within the domain of perception.

4.3.3. Phenomenal Unity

The third objection was that the form of extensionalism defended by Hoerl lacks resources to provide a plausible explanation of the distinctive kind of phenomenal unity that is characteristic of our experience of events and succession (that is absent from a mere succession of experiences).

The issue was that Hoerl's appeal to a limited span of duration under which 'individual experiences' fall leaves unspecified why such individual experiences are *experienced together* rather than separately. For our experience of succession requires not only that we experience some temporal entities as unified but also that the 'individual experiences' or their successive parts corresponding to the successive phases of the perceived event are themselves experienced as unified. Recall that, according to Hoerl, we can experience temporal entities as unified because we stand in a relation of

acquaintance to some parts or phases of individual experiences 'in turn' and these individual experiences fall under a limited span of duration. However, this way of accounting for the relevant kind of experiential unity already presupposes an extensionalist conception of temporal awareness (i.e., the limited span of temporal awareness under which individual experiences fall).

On the horizonal view, it is the presence of the temporal-horizonal structure in virtue of which we can experience temporal entities as unified and also the (diachronic) unity of our experiences themselves. That is, instead of taking the duration of our experience of events for granted, the broadly Husserlian view can offer a detailed phenomenological analysis of the 'dynamic constitution' of consciousness itself through an interplay of acquaintance (primal impression) and temporal (retentional and protentional) horizons. The appeal to the temporal-horizonal structure of experience purports to delineate 'how it is possible' that our experiences of events *appear* temporally extended at all.[57]

The appeal to the temporal-horizonal *structure* of experience itself also aligns well with the view associated with phenomenological psychopathology that certain 'localized' symptoms of psychosis (e.g., verbal hallucinations and thought insertions in schizophrenia) presuppose more 'global' and fundamental disturbances in the very *structure* of the subject's conscious life as a whole. In pathological cases of schizophrenia, the relevant kind of cohesive unity that is taken for granted in ordinary healthy life is no longer available for subjects whose ability to experience time is significantly impaired, thereby resulting in such anomalous temporal experiences as time fragmentation and time immobility. In these cases, there seem to be genuine alterations in the very *way* or *manner* in which relevant experiences are manifest to the afflicted individuals. Given the object-oriented characterization of temporal phenomenology, it is unclear how the externalist can accommodate the fact that the relevant kind of experiential unity is phenomenologically salient insofar as its absence or disruption is noticeable and shows up on the 'personal' level. The phenomenologically motivated, horizonal view has additional resources to better capture the phenomenology of schizophrenic temporal experiences by reference to alterations in the *structure* of the subject's experience (as a 'non-object-dependent' constituent of temporal phenomenology).

---

[57] From the phenomenologist's perspective, one way of understanding the relevant kind of unity is to appeal to the presence of a single persistent subject (i.e., the minimal self). That is, *I* am aware of individual experiences together *as mine*. It is the fact that *I* am having such experiences in a first-personal manner that 'unifies' them to form a single stream of consciousness. Husserl's analysis purports to explain not only how we can experience objects with temporal extension but also how we can be self-aware of our own stream of experiences. See Zahavi (2010) for discussion of the relation between Husserl's notion of inner time-consciousness and his understanding of pre-reflective self-consciousness.

5. Conclusion

The objective of this chapter has been to show that the integration of naïve realism and the notion of temporal horizons yields a highly compelling, phenomenologically informed account of temporal experience.

I have argued that there are reasons to think that the 'horizonal' view is better equipped (than the externalist view) to accommodate to (1) the relationalist commitment (particularly the character shaping role of the subject relatum in determining the phenomenology of temporal experience), (2) cases of temporal illusion (where phenomenal variations without the variation in the object are accounted for by appeal to variations in the temporal-horizonal structure of subject's experience), and (3) the distinctive kind of phenomenal unity that is disrupted in certain psychopathological cases (in terms of the presence and alterations in the temporal structure of the subject's experience itself). The above considerations provide reasons to resist strong temporal externalism and STT.

How is the horizonal view related to the 'inheritance' thesis (in favour of WTT)? Briefly, the claim that the temporal structure of experience inherits (and thus matches) the temporal structure of the object of experience is pitched at the level of reflection. The inheritance thesis articulates how experience seems to us on reflection. That is, when I introspectively reflect on my experience of an event, it appears 'temporally extended'. In contrast, the appeal to the temporal-horizonal structure of experience purports to describe how our experiences of events may appear temporally extended at all. According to the horizonal view, this is because our experiences of events are given or manifest to us by virtue of the essential field-like structure that encompasses (1) acquaintance and (2) temporal horizons.

In the context of the overall thesis, the appeal to the temporal-horizonal structure of experience offers additional materials to account for the phenomenology of hallucination in positive terms. Temporal horizons as necessary *structural* features that are constitutive of the phenomenology of every conscious experience may serve as a common substrate that is shared by both perception and hallucination (as well as other conscious experiences such as dreaming, imagining, and remembering). This accounts for the 'partially overlapping' psychological nature of perception and hallucination. Nevertheless, perception and hallucination differ fundamentally (structurally) insofar as only the former involves the obtaining of a relation of acquaintance (to some part of an event) that is missing from the latter.

In the next chapter, the future-directed, protentional aspects of the temporal-horizonal structure of experience will be further investigated. To anticipate, the horizonal structure involves a dynamic pattern of 'anticipation' and 'fulfilment' where some anticipations of how the relevant experience will unfold are fulfilled by virtue of obtaining 'acquaintance' (in the case of expected events) or not (in the case of unexpected events). That is to say, my bodily grip on some given object (or event) is capable of becoming more precise through the process of fulfilment of anticipations whilst at the same time being liable to suffer mistakes and failures.

Chapter 4: Perceptual Presence

1. Introduction

Naïve realism holds that perceptual experience involves a relation of acquaintance that obtains between a subject and some mind-independent 'objects'. This chapter investigates the question of how we can be directly aware of ordinary physical objects (e.g., tables, chairs, people) when we can only perceive them from a particular viewpoint. The very same issue about the perspectival nature of perception was discussed extensively by early phenomenologists (Husserl, 1900/2001; 1913/2012; Merleau-Ponty, 1945/2012). In more contemporary discussions, this is sometimes dubbed as the 'problem of perceptual presence' (Noë, 2004).

This chapter develops and defends a novel solution to the problem of perceptual presence by integrating two contemporary theories of perception: naïve realism and sensorimotor theory. The suggestion is that perceptual presence is best accounted for in terms of the combination of (1) a direct 'acquaintance' to some parts of perceived objects and (2) sensorimotor 'anticipations' of how the objects would look different depending on the movements of the subject or the objects.

Section 2 sets out the problem of perceptual presence and considers some of the strategies that are available for the naïve realist in accounting for perceptual presence. None of them offers a satisfactory solution to the problem that is fully compatible with naïve realism. Section 3 outlines the basics of the sensorimotor theory of perception and Noë's solution to the problem. I then discuss some challenges raised against sensorimotor theory. Section 4 shows how the combination of naïve realism and sensorimotor theory can yield a novel solution to the problem of perceptual presence. My favoured combination sheds light on the role of 'fulfilment' in perception that has not yet been fully appreciated within the sensorimotor framework. Section 5 critically examines Nanay's (2010) 'imagery-based' account of perceptual presence, giving reasons to prefer my proposed combination.

2. The Problem of Perceptual Presence

The problem of perceptual presence concerns how we can have a sense of the presence of ordinary three-dimensional objects (e.g., tables, chairs) when we are only presented with some *parts* of objects or a scene perceived from a particular egocentric viewpoint. Consider the following two cases of perceptual presence (focusing on vision for simplicity):

(1) Apple: in seeing an apple on my desk, I have a sense of the presence of one voluminous apple despite that I am only presented with its facing side from where I stand.

(2) Cat: in seeing a partially occluded cat behind the picket fence, I have a sense of the presence of one whole cat when I am only presented with some unoccluded parts of the cat.

In the apple case, I have a sense of perceptual (visual) presence of a full three-dimensional apple despite that other 'unseen' sides of the apple (e.g., its backside, underside, etc.) are hidden from my current spatiotemporal viewpoint (*here* and *now*). In the cat case, I am aware of one whole cat (e.g., with its occluded tail) not just some cat parts, despite that some occluded parts of the cat are not currently in view. Notwithstanding some notable phenomenological differences between the two cases (e.g., that I seem to have uninterrupted perceptual access to the apple but not to the partially occluded cat), both are genuine cases of perceptual presence where the relevant objects of awareness are *perceptually present* to the subject as spatially extended 'wholes' when some parts of them are, strictly speaking, 'unseen' (hidden or occluded).

The problem of perceptual presence is a philosophical puzzle concerning the dual nature of perceptual phenomenology. The task is to accommodate the *dual* sense in which I perceptually experience the relevant object (e.g., an apple, a cat) both in its 'partiality' and in its 'entirety'. When elucidating perceptual presence, part of the difficulty lies in accounting for the sense in which we are *perceptually* related to some 'unseen' parts of perceived objects (e.g., the apple's hidden backside, the occluded tail of the cat) in the absence of appropriate sensory inputs.

In what follows, I consider some of the strategies available for the naïve realist when accounting for perceptual presence. Two basic options are (1) the 'whole object' view (according to which the subject is acquainted with the 'entire' objects perceived despite the perspectival limitations of her perceptual field) and (2) the 'perspectival part's view (according to which the subject is acquainted with some 'perspectivally given' parts of perceived objects given such limitations). I argue that neither of the basic options provides a plausible explanation of the duality of perceptual presence.

2.1. The 'Whole Object' View

The 'whole object' view holds that perceptual presence is to be accounted for by appeal to the obtaining of a relation of acquaintance between the subject and some mind-independent 'objects' in

their entirety (henceforth, 'o-acquaintance'). This is perhaps the most straightforward, 'naïve' (realist) answer to the problem.[58] In the apple case, for example, I am o-acquainted with the whole apple as a full three-dimensional object, not to its facing side. Likewise, in the cat case, I am o-acquainted with the whole cat, not just some unoccluded parts of the cat. For, if otherwise, I would not recognize them *as such*, that is, as one whole apple and as one whole cat.

One obvious worry is that while the 'whole object' view successfully captures the sense in which I become aware of the entire object (e.g., one whole cat, one whole cat), it leaves unaccounted for the sense in which I embody a particular – and thus limited – perspective from which I can only see some parts of the object perceived. In his way, the 'whole object' view underspecifies our experience of some 'parts' of perceived objects.

To illustrate this point, suppose the thing on my desk is not a real apple but in fact an apple depiction that merely *appears* voluminous. If I were to move towards or around it, I would eventually figure this out. Once realized, however, the object no longer appears the same way. It no longer appears to be a full three-dimensional apple, even when looked at from the same vantage point. The suggestive point is that there is a genuine phenomenological difference between (1) seeing the object *before* finding out that it is not a real apple but a mere depiction, and (2) seeing it *after*. For, in the latter case, my visual experience no longer involves the same sense of the presence of one whole voluminous apple.

The 'whole object' view doesn't seem well-placed to accommodate such a case of 'phenomenal contrast' (Siegel, 2010; Kelly, 2005). The thought is that, if the perceived ('o-acquainted') object is the same in both cases (i.e., *before* and *after* learning that it is just a drawing), it is unclear what is supposed to play the relevant explanatory role in accounting for the phenomenal variation in the two experiences. On this view, it is difficult to explain why the apple depiction no longer appears to be voluminous once realized. If the relevant object (to which I am 'o-acquainted') is not the same in the two cases, the phenomenology of one of the two experiences will be left unexplained.

In response, the proponent of the 'whole object' view may be attracted to the idea of a 'third relatum' (Brewer, 2011; Campbell, 2002; 2009). This would allow them to conceive of perception as involving a three-place relation between (1) a subject relatum, (2) an object relatum, and (3) a 'standpoint' relatum (which encompasses various environmental and situational factors such as lighting conditions and a relative spatial point of view). The idea is that the underspecified aspects of the phenomenology in the case of perceptual presence are to be explained in terms of the fact that we only have 'partial awareness' of the objects from a finite perspective (given some objective background conditions for perception). One may think that the appeal to the third relatum could in principle help the naive realist,

---

[58] Proponents of this 'pure' form of naïve realism may include Travis (2004) and Brewer (2006; 2011).

for instance, in accounting for the phenomenological contrast between seeing an apple depiction as a full three-dimensional apple (*before* figuring out that it is not a real one) and seeing it merely as a flat depiction (*after* figuring out). What accounts for the relevant phenomenological difference is the variation in the standpoint as I move my body or head. This would change the way in which the subject is perceptually related to her surrounding environment (and hence perceptual phenomenology) without the change in the perceived (o-acquainted) object (the apple depiction).

However, one may argue that the explanatory potential of the third relatum strategy is limited because the appeal to a third relatum does not help us delineate the sense in which the subject is perceptually related to some 'parts' of perceived objects. For example, it seems intuitive to think that both the facing side of the apple (i.e., its 'perspectival' parts) and its unseen sides (i.e., its 'non-perspectival' parts) figure in experience (albeit differently), thereby contributing to the overall phenomenology of my visual experience of the apple as one whole apple. The issue at stake is to clarify the nature of the relation between the perceiving subject and the relevant perceived 'object'. For, if the naïve realist were to endorse the 'whole object' view, she would have to provide an explanation of the sense in which the relevant (o-acquainted) object includes something that is not strictly speaking 'unseen', that is, not in front of one's eyes (e.g., the apple's rear side, the occluded tail of the cat). This seems to cut off the naive realist's project at its starting point, and appealing to a third-relatum doesn't seem to help in *specifying* the relation between the subject and the 'non-perspectival' parts of the objects that are not currently in view.

2.2. The 'Perspectival Parts' View

We now turn to the second option for the naïve realist in addressing the problem of perceptual presence. According to the 'perspectival parts' view, perceptual presence is to be accounted for in terms of the obtaining of a relation of acquaintance between the subject and some perspectival 'parts' of the objects perceived (henceforth 'p-acquaintance'). On this view, in the apple case, I am seeing (or 'p-acquainted' with) the apple's facing side from a particular spatiotemporal viewpoint (*here* and *now*). In the cat case, I am p-acquainted with the unoccluded parts of the cat.

One remaining question concerns 'how it is possible' that I have a sense of the presence of the relevant objects in their 'entirety' (i.e., as one whole apple, as one whole cat), not just in their 'partiality' (e.g., as an apple façade, as some bits and pieces of a cat). This would require an explanation of how I am perceptually related to those 'non-perspectival' parts of the objects that are not currently in view but nevertheless contribute to shaping the overall phenomenology. This means that in delineating the sense in which the non-perspectival aspects of the environment figure in experience, the proponent

of the 'perspectival parts' view will have to go beyond her appeal to the relation of 'p-acquaintance' (which obtains between the subject and the 'perspectival' aspects of the environment).

In what follows, I consider two ways in which the proponent of the 'perspectival parts' might try to elucidate the role and place of the non-perspectival parts of perceived objects: (1) the 'belief' view (according to which I come to believe or infer the non-perspectival parts of perceived objects), and (2) the 'imagery' view (according to which I experience the non-perspectival parts of perceived objects using mental imagery).

2.2.1. The 'Belief' View

The 'belief' view holds that I experience the non-perspectival parts of objects not *perceptually* but rather *inferentially*, meaning that I infer or come to believe that the non-perspectival parts of the relevant object exist and that they are such and such. In cases of perceptual presence, for example, I infer, post-perceptually, how the apple's backside or the cat's occluded tail might look, based on what I am currently seeing (i.e., the apple's facing side, the cat's unoccluded parts). The basic idea is that assuming our familiarity with such ordinary entities as apples and cats, we can normally infer or form beliefs about their currently unseen parts (e.g., that the apple's backside is red and round, that the cat has a tail, etc.).

The idea of making an inference or forming a belief about what is not immediately present in perception can be traced back to Helmholtz's (1867/2005) influential theory about the role of 'unconscious inference' in perception. He argues that perception fundamentally involves involuntary, nonconscious brain processes by virtue of which we construct a coherent picture of our experience of objects and the environment. In vision, for example, the brain is capable of rendering a single cohesive image of an object from different visual inputs from each eye through a cognition-based, interpretative process of unconscious inference. On this account, the fact that I have a sense of the presence of the entire perceived object in spite of the perspectival limitations of vision (e.g., its scope, acuteness) is explained in terms of the sort of spontaneous and automatic neural processes and mechanisms that are involved in generating visual impressions or representations.[59]

---

[59] Helmholtz's view is often regarded as the ancestral precedent of the increasingly influential 'predictive processing' framework which has gained much prominence in recent years as a way to understand perception, action, and cognition (Bubic, et al., 2010; Friston, 2010; Clark, 2013; Hohwy, 2013). The core idea is that perception is fundamentally a matter of some neural mechanisms and processes by virtue of which the brain generates models (predictions) about the environment and updates those predictions to minimize errors. On a brief construal, predictive processing accounts may come under the general heading of the 'belief' view. However, whether combining the 'perspectival parts' view with the predictive processing account could offer a

The 'belief' view may be challenged on phenomenological grounds. One crucial issue concerns whether the appeal to the notion of 'non-perceptual' belief or inference could play any legitimate explanatory role in accounting for 'perceptual' presence. That is, the sense in which the apple's backside or the cat's occluded parts figure in experience is perceptual rather than non-perceptual or post-perceptual. Phenomenologically speaking, it doesn't *feel* that we make an inference or form a belief about those non-perspectival aspects of perceived objects on the basis of perceiving some of their perspectival parts. Appealing to the notion of 'unconscious inference' or some *subpersonal* (i.e., pre-conscious) neural underpinnings doesn't seem to help either, for the sense of perceptual presence occurs whenever we are 'consciously' aware of something on the *personal* level.

The proponent of the 'belief' view might insist that the relevant kind of belief or inference involves some distinctive 'cognitive' (rather than 'sensory') phenomenology (Strawson, 1994; Horgan & Tienson, 2002; Bayne & Montague, 2011; Siewert, 2011).[60] Roughly, the idea is that there is something it is like for me to think, believe, or infer the non-perspectival parts of objects (e.g., the apple's backside, the cat's occluded parts). Advocates of cognitive phenomenology often present contrast cases where two contrasting experiences differ in phenomenal character and this difference is best explained in cognitive phenomenology. For example, it seems at least *prima facie* plausible to think that there is some phenomenological difference between an expert ornithologist's perceptual experience of a type of bird and that of a novice and this phenomenological difference can be understood in terms of the contribution the expert's knowledge of birds makes to the phenomenology. In cases of perceptual presence, there is an intuitive sense in which my prior knowledge or familiarity with such mundane things as apples and cats can influence the degree of specificity of the content of my perceptual experience.

However, the very possibility of a non-perceptual phenomenology possessed by cognitive states (e.g., thought, belief, inference) is a highly contested matter. One worry is that it is unclear how one can be justified in claiming that cognitive states can themselves have some distinct phenomenology that is independent of the phenomenology of conscious sensory experiences. Non-sensory cognitive 'quale' seems ineffable. Furthermore, appealing to the phenomenology of some cognitive states (e.g., belief, inference) in accounting for the presence of non-perspectival parts of perceived objects doesn't seem to give us the 'whole object' phenomenology (e.g., the sense in which one whole apple is perceptually present to me).

---

plausible explanation of perceptual presence is a live option that is worthy of exploration. Although interesting and relevant, I set this aside here.

[60] Alternatively, one might deny that the non-perspectival parts of objects are consciously experienced at all and are not part of 'what it is like to perceive'. However, this leaves unaddressed the important question of why I seem to experience one whole apple or one whole cat, not an apple façade or some bits and pieces of a cat.

In short, if the naïve realist were to appeal to some non-perceptual belief or unconscious inference in explaining the presence of some non-perspectival aspects of the perceived scene, she would have to accept that appealing to such notions cannot help to solve the problem of 'perceptual' presence *or* she would need to justify her claim that there is such a thing as non-perceptual phenomenology of some cognitive states. My point here is simply that appealing to non-perceptual cognitive phenomenology should be seen as a last resort when there is no other viable way to elucidate the phenomenological datum at issue (i.e., the duality of perceptual presence) in terms of what is intrinsic to perception itself. Before I go on to illustrate my positive account, let me draw attention to another option available to the proponent of the 'perspectival parts' view.

2.2.2. The 'Imagery' View

In expounding the sense in which the non-perspectival parts of objects are experienced, the proponent of the 'perspectival parts' view may instead appeal to our capacity to imagine things that are not currently in view (Kind, 2018; Nanay, 2010).[61] That is, the presence of those unseen parts of objects is a matter of *filling in* the relevant details by some imagistic imagining or mental imagery.[62] In this way, what it is like to perceive one whole apple and one whole cat can be plausibly explained in terms of (1) the perceptual presence of their 'perspectival' parts and (2) the "imaginative presence" (Kind, 2018, p. 165) of their 'non-perspectival' parts (by exercising our imaginative capacities or having some mental imagery of them). Importantly, what is imaginatively present is not concerned with 'what is before one's eyes', something one is 'p-acquainted' with; rather, it refers to the presence of 'what is before one's *mind's eye*', something one projects onto one's egocentric space using mental imagery.

Note that the 'imagery' view differs from the 'belief' view at least in one crucial sense. On the latter, the experience of the unseen parts of objects lacks perceptual phenomenology entirely. At best, it holds that there is something it is like to believe or infer, say, that the apple before me has a red and round backside (that is *distinct* from what it is like to 'perceive' a red and round apple). On the former, by contrast, the phenomenology of our experiences is taken more seriously in that it provides an explanation of what it is like to be aware of the non-perspectival parts of perceived objects at least in some 'quasi-perceptual' sense – in terms of their imaginative presence or what it is like to have some visual imagery of them. In this respect, the 'imagery' view may be taken as a more serious contender

---

[61] The general view that imagination plays a crucial role in perceptual experience has its roots in Kant (1781/1998), Strawson (1970), and Sellars (1978).
[62] I take imagination to be a broader concept than imagery that encompasses both 'imagistic' and 'non-imagistic' imaginative episodes (Walton, 1990; Langland-Hassan, 2015; Gregory, 2016). My target here is the 'imagery-based' account of perceptual presence (Nanay, 2010; 2022).

when deciding on the best solution to the problem of perceptual presence, offering a more charitable, phenomenologically apt account of the sense in which the non-perspectival aspects of the environment figure in experience (than the 'belief' view).[63]

The worry with the 'imagery' view is that, like a belief and an inference, mental imagery is generally understood as a 'representational' state, and appealing to such representational states as belief, inference, and imagery "weakens the relationalist position to an extent that it would be difficult to keep it apart from representationalism" (Nanay, 2022, p. 7). In other words, neither the 'belief' view nor the 'imagery' view seems to be a fitting option for the naïve realist, insofar as they both operate within a broadly representationalist framework which threatens to undermine the anti-representationalist framework of naïve realism.[64]

The central issue with the 'perspectival parts' view is that, while the view successfully accommodates the sense in which I can only perceive things from a particular viewpoint (by virtue of obtaining a relation of 'p-acquaintance'), it seems to lack relevant resources to capture the presence of the non-perspectival parts of perceived objects (e.g., the apple's unseen sides, the cat's occluded parts) without invoking a broadly representationalist framework. This is because, in this view, such non-perspectival parts of objects are "not part of either relata of this [p-acquaintance] relation" (Nanay, 2022, p. 6).

Summing up, the problem of perceptual presence raises an important challenge to naïve realism as it demands the naïve realist to clarify what the relevant 'object' of awareness is and how the relation of 'acquaintance' ought to be understood in accounting for perceptual presence. As it currently stands, naïve realism doesn't seem well-equipped to do full justice to the *dual* sense in which we perceive objects both in their entirety and in their partiality. The 'whole object' view fails as it leaves unexplained the sense in which we are perceptually related to some (perspectival and non-perspectival) 'parts' of perceived objects. The 'belief' variant of the 'perspectival part's view doesn't seem to help spell out the contribution made to the 'perceptual' phenomenology by the non-perspectival aspects of the environment in a non-question-begging way (i.e., without invoking the possibility of non-perceptual cognitive phenomenology). The 'imagery' view seems to be a more serious contender since it takes the sensed presence of the non-perspectival parts of objects more seriously (than the 'belief' view). Nevertheless, the appeal to the phenomenology of mental imagery

---

[63] One might think that the 'imagery' view also appeals to non-perceptual 'cognitive' phenomenology. On such a reading, the 'imagery' view may be viewed as collapsing into a form of the 'belief' view.
[64] I shall return to further examine the tenability of the 'imagery-based' account of perceptual presence in Section 5.

still seems problematic as this invokes a broadly representationalist framework which may weaken the naïve realist framework.

3. Sensorimotor Account of Perceptual Presence

This section outlines the basics of the sensorimotor theory of perception (Hurley, 1998; O'Regan & Noë, 2001; Noë, 2004; 2012; O'Regan, 2011) and Noë's (2004) solution to the problem of perceptual presence within the sensorimotor framework. After setting out the main virtues of the theory, I raise and discuss some challenges which concern (1) its compatibility with direct realism, (2) the particularity of perception, and (3) perceptual indeterminacy. I argue that although it has its own merits, sensorimotor theory by itself cannot establish a satisfactory account of perceptual presence.

3.1. The 'Sensorimotor' View

The sensorimotor theory of perception holds that perception necessarily involves patterns of dependence of sensory changes on movements ('sensorimotor contingencies') and our implicit practical grasp of such patterns of dependence ('sensorimotor understanding'). On this view, to be a perceiver is to possess and exercise an implicit practical understanding of some predictable, law-like ways in which sensory appearances vary depending on how the perceiver moves (in relation to the perceived object) or how things move (in relation to the perceiver). This implicit practical understanding amounts to a *bodily* form of 'expectation' or 'anticipation'.

According to sensorimotor theory, the phenomenology of experiencing the apple on my desk is to be explained in part in terms of the fact that I *know* that the apple would look bigger if I were to take a step forward, smaller if moved backwards, and so on. Note that sensorimotor accounts require that perception involves not just the mere existence of sensorimotor contingencies that makes our 'coupling' with the environment possible, but also that such patterns of dependence must be 'known' or 'understood' by the active, embodied perceiver for there to be a genuine perception of objects. Sensorimotor theorists maintain that it is this *implicit* (rather than *explicit*) *practical* (rather than *propositional*) understanding or 'know-how' that explains how we can experience aspects of the environment that are not presently in view (i.e., the non-perspectival parts of perceived objects).

Noë (2004) argues that appreciation of sensorimotor knowledge is key to resolving the problem of perceptual presence. According to him, we have a sense of the presence of some objects in the

environment (e.g., an apple as a full three-dimensional entity) because in perceiving we have *virtual access* to our environment which encompasses those non-perspectival properties of perceived objects.[65] In the apple case, my sensorimotor knowledge of the ways in which the apple's perspectival look would change with movements (of my entire body or head) is what makes other unseen sides of the apple virtually accessible to me. Likewise, the partially occluded cat is perceptually present (or virtually accessible) to me in as far as I *know* that the occluded parts of the cat would be revealed to me if either the cat or I were to move.

On this account, perceptual presence is explained in terms of (1) patterns of sensorimotor 'coupling' between the perceiving subject and how things *appear* and (2) the subject's implicit practical 'understanding' of the ways in which sensory appearance varies as a result of some movements or actions. The former accommodates the apparent sensory presence of the perspectival aspects of perceived objects (e.g., the 'actual' redness of the apple's facing side that I am consciously and sensorily aware of) whereas the latter explains the virtual presence of the 'non-perspectival' parts of objects (e.g., the 'possible' redness of the apple's rear side that I am consciously, albeit *virtually*, aware of). For the sensorimotor theorist, the latter is what enables us to 'achieve' our access to a world that is beyond our reach at a moment in time. That is, had we lacked such a virtual mode of access to those 'non-perspectival' aspects of the environment, there would not be the same sensed presence of one whole apple or one whole cat.

Noë further clarifies his position in terms of the duality of perceptual content. He argues that the content of perception has two dimensions, a 'perspectival' and a 'factual' dimension, where our implicit practical understanding of the dependence of changes in 'perspectival' content (that is determined by 'how things *appear*') on movements is a necessary condition for experience to acquire 'factual' content (that is associated with 'how things *are*'). When faced with the apple's front *look* seen from where I stand (a perspectival content), I can still experience one whole voluminous apple (a factual content) by virtue of my sensorimotor knowledge of how the apple's *look* would vary depending on movements. For Noë, perceiving is thus to make contact with 'how things *appear* from a particular viewpoint', learn to understand some law-like patterns of dependence of these appearances on movements, and thereby discover 'how things *are*'. The appeal to the duality of perceptual content fits well with the dual sense of perceptual presence, giving reasons to prefer his 'sensorimotor' account of perceptual presence over other alternatives.

---

[65] Noë claims that our access to environmental detail in vision is analogous to reading a news article online that is available to us (virtually).

The central claim of sensorimotor theory is that perception involves the perceiver's practical grasp of patterns of sensorimotor dependence (i.e., sensorimotor understanding). On Noë's account, perceptual presence is thus to be explained in terms of the fact that the perceiver has 'virtual access' to both perspectival and non-perspectival aspects of the environment by virtue of such a practical grasp.

3.2. Challenges to the Sensorimotor Theory

The sensorimotor account of perceptual presence faces a number of challenges: (1) compatibility with direct realism, (2) the particularity of perception, and (3) perceptual indeterminacy. I argue that these lines of objections give reasons to think that sensorimotor theory on its own cannot give us a satisfactory solution to the problem of perceptual presence.

3.2.1. Compatibility with Direct Realism

According to the sensorimotor theorist, our coming into contact with appearances *is* our way of coming into perceptual contact with objects. This might be taken to suggest that appearances are *metaphysically* and *explanatorily prior to* objects themselves. The worry is that this may mean that the sensorimotor theory could easily collapse into a form of phenomenalism (the view that we are only aware of mind-dependent appearances) or idealism (the view that there is no mind-independent world) (Berkeley, 1710/2009).[66] In other words, there is a tension between the claim that we are aware of some patterns of appearances rather than objects themselves and the direct realist view that there exists a mind-independent world and we are directly aware of mind-independent objects.

The sensorimotor theorist responds that appearances *are* genuine properties of mind-independent objects in the sense that we gain access to how things are by coming into contact with their 'surface-like' looks or appearances. As Noë puts it,

> Looks are not mental entities. Looks are objective, environmental properties. They are relational, to be sure. But they are not relations between objects and interior, sensational effects in us. Rather, they are relations among objects, the location of the perceiver's body and illumination (Noë, 2004, p. 85).

---

[66] Allen (2009) raises a similar worry about the explanatory priority given to things '*looking* coloured' over things '*being* coloured' in Noë's theory of colour.

According to him, looks "belong to our environment; they are aspects of what there is, of the way things are" (Noë, 2008, p. 692). I see things themselves *by* seeing how they look from a particular viewpoint (i.e., the perspectival parts of perceived objects).

On Noë's account, the perceiver's sensorimotor understanding plays an important 'mediating' role, bridging the gap between appearances and reality. It is our implicit practical understanding of the ways looks or appearances co-vary with movements that explains the sense in which we can experience what is not currently in view (i.e., 'possible' *looks* of the objects). For Noë, those possible 'non-perspectival' *looks* of objects (e.g., the apple's backside) are genuine properties of the mind-independent world in as far as they are genuinely (albeit virtually) 'accessible' to me *here* and *now*.

However, a sceptic may contend that it is unclear in what sense those appearances are genuine properties of mind-independent objects, rather than some mind-dependent 'intermediaries' that act as *a veil of perception*. In other words, the claim that our perceptual contact with real objects in the environment is mediated by patterns of appearances and our practical grasp of them may be viewed (at best) as collapsing into a form of indirect realism (the view our awareness of the mind-independent reality is 'mediated' by some mind-dependent intermediaries) (Locke, 1689/1975). Furthermore, even if we grant that appearances are mind-independent properties, there is a worry that they will get in the way of 'real' properties and objects.

To this extent, there is a legitimate concern about whether the sensorimotor theory can be truly reconciled with 'direct realism' because it doesn't seem well-placed to accommodate the intuitive sense that we are directly and immediately presented with some mind-independent objects. The danger is that, on this view, perceptual experience could easily collapse into "a set of counterfactual implications for sensorimotor activity" (Campbell, 2009, p. 667) without making an *actual*, direct 'touch-like' contact with the world around us.[67]

3.2.2. Particularity of Perception

The second objection concerns whether the sensorimotor theory can provide a plausible account of the 'particularity' of perceptual phenomenology (Leddington, 2009; Ward, 2023). For it is difficult to see how coming into contact with some 'general' looks or appearances can be a way of coming into contact with some 'particular' aspects (objects or properties) of the environment. The thought is that

---

[67] Leddington (2009) also opposes Noë's suggestion that our contact with appearances is to be conceived on the model of touching. He argues that 'appearances' are identical neither with objects themselves nor with any of their parts, for they are not touchable whereas parts (of perceived objects) are. According to him, the metaphor of 'touch-like' contact is best captured by the naïve realist's notion of acquaintance. This is what the combination with naïve realism bring to table for the sensorimotor theory.

mere virtual access to some aspects of the environment does not suffice to pick out or individuate the particular phenomenal (sensory) properties that each perceptual experience instantiates.

Appearances are 'general' properties in the sense that different things can share more or less the same looks or appearances from a particular viewpoint (e.g., a real red apple and an apple façade seen from *here* and *now*) or in some specific circumstances (e.g., seeing a red apple in normal daylight and a bleached apple in red lighting). In this way, there arises a tension between the generality of appearances (as properties of mind-independent objects) and the particularity of the directly sensible properties of objects that we perceive (e.g., *that* redness, *that* roundness, *that* apple).

On the one hand, when elucidating perceptual presence, sensorimotor theory seems well-positioned to account for the presence of some non-perspectival aspects of the environment (e.g., the apple's unseen sides) in terms of our virtual access to them via sensorimotor knowledge. On the other hand, the theory seems ill-equipped to explain the presence of some particular perspectival aspects of the environment (e.g., the redness and round-shapedness of the apple seen from my current standpoint). My practical grasp of some *general* patterns of sensorimotor dependence (e.g., between the apple's appearance and movements) by itself doesn't seem able to account for why I experience some *particular* phenomenal properties (e.g., those of seeing a red, round apple rather than, say, those of seeing a pile of brown leather belts). In short, mere virtual accessibility to aspects of the environment alone cannot explain the particularity of perception.

Part of the concern is that sensorimotor theory is essentially 'subject-oriented' and thus lacks relevant resources to specify what the 'object' of perception is or amounts to. When describing the phenomenal character, sensorimotor theorists appeal to the relations, or 'general' patterns of dependence, between possible movements and the ways some aspects of the environment are presented (accessible) to a perceiver's 'particular' perspective. In this sense, the sensorimotor theorist places particularity on the subject's side, not on the object's side.

3.2.3. Perceptual Indeterminacy

The third objection is that sensorimotor theory fails to do justice to the inherent indeterminacy of perception, as it leaves unexplained how the indeterminate, non-perspectival aspects of the environment receive determination.

There is an important sense in which my sensorimotor anticipations of those currently unseen aspects of the environment may or may not be fulfilled depending on how the relevant experience unfolds over time. That is, those non-perspectival parts of objects can gain determination gradually (or

suddenly) as a result of movements that are involved in the unfolding of an experience. For the sensorimotor theorist, the indeterminateness of my experience is accounted for in terms of my virtual access to those hidden aspects (e.g., the apple's unseen sides) by virtue of my practical grasp of how they would be revealed to me as a result of some movements or actions.

The point is that the theory is not well-equipped to capture the sense that my sensorimotor anticipations (by virtue of which I gain access to such non-present aspects of the environment) may reach at least some partial 'fulfilment' or 'disappointment'. That is, sensorimotor theory by itself doesn't seem well-suited to do justice to the very *way* or *manner* in which the non-perspectival parts of objects (that are perceptually present to me *here* and *now*, albeit indeterminately) can gain determination over time. The dynamic (temporally extended) ways in which non-perspectival parts of objects could gain determination over time are phenomenally significant in the sense that they concern 'how' (rather than 'what') we perceive.

To summarize, I have argued that sensorimotor theory, on its own, cannot fully accommodate (1) the intuitive sense that we have a direct and immediate, 'touch-like' contact with mind-independent reality, (2) the particular phenomenal properties that we are consciously aware of, and (3) the ways in which non-present aspects of the environment can receive determination over time.

4. Naïve Realism and Sensorimotor Theory

This section offers a novel solution to the problem of perceptual presence by integrating two contemporary theories of perception, naïve realism (i.e., the 'perspectival parts' view) and sensorimotor theory. I argue that they are *mutually supportive* (i.e., more plausible than either is alone). The combination offers a viable way to accommodate the duality of perceptual presence within a broadly naïve realist framework, whilst providing the materials to come to terms with the above three objections raised against the sensorimotor theory.

4.1. Combination

My alternative account of perceptual presence appeals to the combination of the notions of 'p-acquaintance' and 'sensorimotor anticipations'. The central claim is that perceptual presence is best accounted for in terms of the combination of (1) a direct 'p-acquaintance' with some perspectival aspects of the environment that are currently in view (e.g., the apple's facing side, the cat's

unoccluded parts) and (2) sensorimotor 'anticipations' of how some non-perspectival aspects of the environment (e.g., the apple's unseen sides, the occluded parts of the cat) would be revealed (or not) through explorative movements and actions.[68]

In seeing the apple, when I am p-acquainted with the apple's facing side, I still have a sense of the presence of a full three-dimensional apple by virtue of my practical grasp of the ways in which the currently hidden sides of the apple would be revealed if I were to move my body or head. My sensorimotor anticipations of possible covariance between movements and sensory changes may or may not be fulfilled depending on actual movements or actions and correspondingly on the obtaining of my p-acquaintance with the backside of the apple as the experience unfolds. As I walk around it, for example, I may gradually realize that the apple is half-eaten and thus its backside is not as anticipated. Or, there may never obtain any p-acquaintance between me and the apple's backside and hence my anticipations remain unfulfilled. Similarly, in the cat case, when I am p-acquainted with the cat's unoccluded parts, I still have a sense of the presence of one whole cat by virtue of my sensorimotor anticipations of how the appearance of the cat with currently occluded parts would change depending on my (or the cat's) movements. These anticipations of how the relevant experience would unfold over time may or may not be fulfilled depending on movements.

Here the notion of 'fulfilment' plays a crucial role in understanding the relation between acquaintance and sensorimotor anticipations. From a historical perspective, the appeal to the interplay of anticipation and fulfilment in perception is not entirely unprecedented. The idea that perception is dynamically constituted by patterns of anticipation and fulfilment has its roots in the Phenomenological tradition (Husserl, 1900/2001; 1907/2010; 1913/2012; 1931/1960; 1966b/2001; Merleau-Ponty, 1945/2012). Yet, the 'fulfilment' aspect of perceptual experience has been largely overlooked in contemporary discussions about perception.

The central idea is that perceptual experience involves an implicit sense of the possibilities for further exploration (i.e., sensorimotor anticipations) that *unfolds* over time. Further engagement with the environment yields fulfilment (or disappointment) of my current anticipations. My anticipation about there being a dimple on the apple's currently unseen backside may or may not be fulfilled as I move around it. There will also be more detail coming into view as I move closer to it. Given this, one way of cashing out the role of p-acquaintance (with perspectival aspects of the environment) within the

---

[68] A parallel story could be told about cases of perceptual (e.g., colour, shape, size) constancy. Roughly, the idea is that in seeing a tilted coin, I am p-acquainted with the perspectival parts of perceived objects whilst anticipating how their non-perspectival parts would appear depending on movements. The combination explains how I can experience the properties of perceived objects as both varying (e.g., the redness of a white wall in red lighting, the ellipticity of a coin viewed from a tilted angle) and constant (e.g., the whiteness of the white wall, the circularity of the coin.

sensorimotor framework would be to conceive of it as a necessary condition for the dynamic process of fulfilment *in* perception. That is to say, anticipations are fulfilled in perception by virtue of being (p-)acquainted with some aspects of the mind-independent world in the manner of 'becoming'.

As we saw in the previous discussion on the horizonal structure of experience, on Husserl's account, we perceptually experience an object as a whole when the front side of the object perceived is given 'fully' and its currently unseen sides (e.g., backside, underside) 'emptily'. The relevant experience is dynamically constituted by a process of fulfilment through which what is initially 'emptily given' can gradually come to (at least partial) fulfilment as the subject's vantage point on the object varies (e.g., as she moves around, towards, or away from it) and vice versa. At least some aspects of every perceived object are experienced 'emptily', and this transition from empty givenness to full givenness is a necessary condition for an experience of an object as a whole. What is 'perceptually present' is what is 'bodily' present (i.e., by virtue of patterns of sensorimotor anticipation and fulfilment by acquaintance). The phenomenological significance of fulfilment is not properly appreciated or articulated within the sensorimotor theory of perception.

4.2. Compatibility

The idea of combining naïve realism and sensorimotor theory might seem surprising to some, given the emphasis naïve realists often place on the constitutive and explanatory role of the mind-independent entities to which the subject is acquainted. Sensorimotor theorists by contrast highlight the role of the embodied subject's possession and exercise of implicit practical understanding of patterns of sensorimotor dependence (i.e., their 'sensorimotor profiles') when explaining the character and content of perception. The question is: in what sense can a perceiver be both 'naïve' (with respect to the role of the mind-independent world) and 'knowledgeable' (with respect to patterns of sensorimotor dependence)?

A proper answer to this question requires careful examination of the compatibility of the theoretical commitments of naïve realism and sensorimotor theory. Three key assumptions need to be placed to ensure the compatibility between the notions of 'acquaintance' and 'sensorimotor anticipation':

(1) Phenomenal pluralism: neither acquaintance nor sensorimotor anticipation exhausts perceptual phenomenology.

(2) Anti-representationalism: neither acquaintance nor sensorimotor anticipation requires the representationalist framework.

(3) Non-priority: neither of them has a metaphysical or explanatory primacy over the other.

First, neither naïve realism nor sensorimotor theory has to be seen as presenting an exhaustive account of the phenomenal nature of perception, and in this sense, they are compatible with each other. Naïve realism (i.e., the 'perspectival parts' view) holds that the phenomenal character of perceptual experience is 'at least in part' constituted by the obtaining of a relation of acquaintance to some aspects of the mind-independent reality. Similarly, sensorimotor theory *can* be viewed as suggesting that the phenomenal character of perceptual experience is 'at least in part' constituted by the perceiver's practical mastery of the covariance between sensory changes and movements (i.e., sensorimotor anticipations). The combined claim would be that the phenomenal character of a perceptual experience is constituted by *both* (1) an acquaintance relation to aspects of the mind-independent world, *and* (2) the perceiver's sensorimotor anticipations of how some aspects of the environment that are currently out of view would be revealed and sensed depending on some possible movements. This modest, non-exhaustive reading of perceptual phenomenology entails a form of phenomenal pluralism (according to which what an experience is like can be determined by multiple factors) that is consistent with both naïve realism and sensorimotor theory.

Second, both naïve realism and sensorimotor theory are generally construed as 'anti-representationalist' theories of perception, and in this respect, it may seem plausible to think of them as natural allies. However, it is important to recognize that the anti-representationalist commitment of the two positions differ.

First, sensorimotor theory resists a specific kind of representationalism that is discussed primarily in the fields of neuroscience and cognitive psychology. This is the view that perception is fundamentally a matter of generating detailed internal representations or world-models of the environment by virtue of some neural processes and mechanisms. On sensorimotor theory, our practical grasp of patterns of sensorimotor dependence is meant to take over the explanatory role that had previously been ascribed to neural computations and inner mental representations in the traditional accounts of perception in cognitive science (Marr, 1982).

In contrast, naïve realism opposes a much broader representationalist position that is discussed in contemporary analytic philosophy of mind and perception. This is the view that perception is fundamentally a matter of obtaining a mental (representational) state with certain veridicality or accuracy conditions (Armstrong, 1968; Tye, 1992; 1995; Dretske, 1995; Siegel, 2010). One of the central tenets of naïve realism is that perception is fundamentally a matter of obtaining a *sui generis* relation of acquaintance that is more primitive and explanatorily basic than (and thus is inexplicable in terms of) the obtaining of a mental state with some intentional content that represents the world being in a certain way (e.g., belief, thought).

The anti-representationalist commitment of sensorimotor theory can be traced back to the Phenomenological tradition (Husserl, 1913/2012; Merleau-Ponty, 1945/2012).[69] Merleau-Ponty, for instance, emphasized a distinct kind of 'operative' or 'motor' intentionality that is more primitive than 'intellectual' kinds of intentionality (e.g., thought, judgment, belief). This 'pre-predicative' form of intentionality does not posit objects or attribute properties to objects but involves being 'directed' to the world and worldly things by virtue of bodily movements and actions. The notion of sensorimotor understanding stems from this primitive type of bodily intentionality (as a bodily form of anticipation) concerning how sensory experiences covary with bodily movements. The point is that sensorimotor understanding is 'non-representational' insofar as it "involves an intention that is mediated not by representation, but by the anticipations involved in bodily movement and action" (Matherne, 2017, p. 714). To this extent, sensorimotor theory may be viewed as being committed to a 'minimal' form of intentionalism.[70]

However, the sensorimotor theorist's 'minimal' commitment to intentionalism should not be taken to *weaken* the naïve realist framework in any significant sense, insofar as the privileged explanatory role of acquaintance is secured. On my proposed account, the notion of acquaintance plays a crucial explanatory role in delineating the phenomenological significance of the fulfilment of anticipations. The alliance can thus remain anti-representationalist in the sense that it resists all 'scientific' theories of perception that appeal to internal mental representations to explain phenomenal consciousness in some reductive sense and may still be compatible with some modest forms of intentionalism.

It is worth emphasizing that the notion of 'p-acquaintance' is a much less demanding notion than the notion of 'o-acquaintance' which is meant to exhaust and fully explain perceptual phenomenology. For, on my 'perspectival parts' view, mere p-acquaintance does not suffice for the occurrence of a genuine perceptual experience of an object. For it must be accompanied by my practical grasp of some patterns of sensorimotor dependence. Importantly, this way of integrating naïve realism (the 'perspectival parts' view) and sensorimotor theory does *not* compromise (but fully embraces) the core naïve realist tenet that perceptual phenomenology is determined by, and thus to be explained 'at least in part' in terms of, the obtaining of a *sui generis* non-representational relation of acquaintance between a subject and some aspects of the mind-independent reality.[71]

---

[69] It also has roots in the 'anti-cognitivist' emphasis in the tradition of ecological psychology (Gibson, 1979).

[70] The sensorimotor theorist's 'minimal' commitment to intentionalism is also to be distinguished from some representationalist views that appeal to *non-conceptual* content (Evans, 1982; Dretske, 1981; Peacocke, 1992). For opposition, see Brewer (2000) and McDowell (1994). Noë (2004) claims that our capacity to keep track of the dependence of perception and action is firmly integrated with personal-level *conceptual* and inferential skills (that come in degree).

[71] This is essentially an application of the same argument used for the relationalist commitment of the 'horizontal' view in the previous chapter.

Third, acquaintance and sensorimotor anticipation are both necessary and phenomenologically basic, but neither of them has a metaphysical or explanatory primacy over the other. They have an 'interdependence' status and the experience itself is indissoluble. The key thought is that when accounting for our experience of 'objects' in spite of the inherent perspectival nature of perception, the notion of 'acquaintance' ought to be analyzed, at least in part, in terms of 'sensorimotor anticipation' and vice versa.

This 'non-priority' claim may bring some discomfort to some theorists (at both ends). However, it is important to note that this claim is meant to ease the apparent tension between the naïve realist's emphasis on the role of mind-independent objects to which the subject is acquainted and the sensorimotor theorist's emphasis on the mediating role of the subject's sensorimotor knowledge. If one were to give primacy to acquaintance over sensorimotor anticipation (in favour of naïve realism), it would be difficult to accommodate the sense in which sensorimotor anticipations are genuinely perceptual, rather than non- or post-perceptual (e.g., inferential, imaginative). If sensorimotor knowledge were prioritized over the acquaintance relation (in favour of sensorimotor theory), the combined view would not have any advantages over the sensorimotor theory by itself. For, on this interpretation, the obtaining of a relation of acquaintance to the mind-independent reality would be necessarily *mediated* by the subject's sensorimotor knowledge. Like sensorimotor theory, this would then be susceptible to the same charges of phenomenalism and indirect realism.

4.3. Reciprocity

The combination of naïve realism and sensorimotor theory is explanatorily virtuous. There are reasons to think that naïve realism and sensorimotor theory are not only compatible with each other but are mutually supportive. I lay out some of the key benefits of the combination that are worth highlighting.

The combination can help naïve realism in a number of ways. First, it equips the naïve realist to develop a highly plausible solution to the problem of perceptual presence within a broadly naïve realist framework. The appeal to the notion of sensorimotor anticipations provides the much-needed resources to account for the presence of the 'non-perspectival' aspects of perceived objects in the environment (e.g., the apple's backside, the cat's occluded parts) – in terms of my non-inferential 'access' to them by virtue of sensorimotor anticipations. This captures the sense in which the objects are experienced as 'perceptually present' (e.g., as one whole apple, as one whole cat).

Second, the suggested alliance can help the naïve realist better delineate the contribution made by the 'subject relatum' in determining perceptual phenomenology, enabling them to explain phenomenal variations without the variation in the object relatum. On this account, the

phenomenological difference between seeing an apple drawing as a voluminous apple (before realizing that it is merely a depiction) and seeing it as a flat depiction (after realizing it) can be accounted for in terms of the difference in the relevant sets of sensorimotor skills to be deployed when interacting with a real three-dimensional apple and those involved in interacting with a flat-surfaced, apple façade.

Third, although naïve realism is well-placed to explain particular phenomenal properties of perceptual experience in terms of the perceptible aspects of the surrounding environment to which the subject is acquainted, it is not so obvious whether it has the resources to explain why some perceptual or sensory states become 'conscious' at all whilst others remain 'unconscious' (in a way that is consistent with the sciences of consciousness). Combination with the sensorimotor framework could be of help as it has additional resources to account for the 'conscious' aspects of perceptual phenomenology without appealing to representationalist theories of consciousness. O'Regan (2011) for instance, argues that conscious perceptual states are to be distinguished from other kinds of conscious and non-conscious processes insofar as they involve (1) 'bodiliness' (the fact that sensory inputs change as a result of bodily movement), (2) 'insubordinateness (the fact that those sensory changes are partly determined by the surroundings environment), (3) 'grabbiness' (the fact that sudden changes in sensory input 'grab' one's attention), and (4) 'richness' (the fact that the environmental details are much richer than what our thought or language can contain or express).

Fourth, the combination of naïve realism and sensorimotor theory offers a phenomenologically informed way of spelling out the phenomenal similarities and differences between veridical perception and non-veridical hallucination by appealing to their 'sensorimotor profiles'. That is, their phenomenal similarities can be explained at least in part in terms of their sensorimotor (structural) similarities. The appeal to the commonality in sensorimotor profiles in accounting for phenomenal similarity may be then taken to explain the 'partially overlapping' psychological nature (i.e., the overlapping ways in which subjects implicitly take themselves to be poised to act on their environment in each type of experience). In Chapters 5 and 6, I further pursue the question of how the appeal to the structural similarities and differences between perception and hallucination can help the naïve realist develop a highly plausible solution to the problem of hallucination.

The combination of acquaintance and sensorimotor anticipation can also help sensorimotor theory in various ways. First, it allows the sensorimotor theorist to come to terms with 'direct realism'. To recall, the issue was that the sensorimotor theorist's emphasis on the explanatory priority of appearances over objects themselves is susceptible to the charges of phenomenalism and indirect realism. Combination with naïve realism (especially, the 'non-priority' claim) offers her the much-needed resources to adequately accommodate (1) the sense in which we seem to have a 'touch-like' contact

with some aspects of the mind-independent reality, not just some mind-dependent appearances and (2) the sense of the presence of the world and things in it by virtue of a direct, non-inferential relation of acquaintance to aspects of the environment.

Second, combination with naïve realism enables the sensorimotor theorist to do justice to the contribution made by the 'object-relatum' to perceptual phenomenology, better spelling out the sense in which sensorimotor anticipations are, at least in part, "object-active" (Cavedon-Taylor, 2011, p. 383). What it is like to see the cat behind the picket fence is determined partly by my anticipations of how the cat's (not just my own) movements would reveal some of its currently occluded parts. On my proposed view, the distinctive sensory aspects of perceptual phenomenology are accounted for in terms of those perceptible aspects of the cat to which I am p-acquainted. Combination with naïve realism better accommodates the 'object-dependent' nature of perception.

Third, the combined view is better equipped to explain the 'particularity' of perceptual experience. Sensorimotor anticipations concern how things 'generally' look or appear, and appearances are general properties which can be shared by different objects. P-acquaintance, by contrast, picks out particular aspects of the environment, enabling us to explain why the experience has the particular phenomenal properties it has. That is, the particular sensory aspects of perceptual phenomenology are identified with the particular sensible aspects of the environment with which the subject is acquainted. On naïve realism (and on my proposed view), sensation is genuinely 'relational' in as far as it involves a relation of (p-)acquaintance that obtains between a subject and some sensible aspects of the mind-independent reality.

Fourth, combination with naïve realism places the sensorimotor theorist in a better position to account for the inherent indeterminacy of perception. My suggestion was that the relation of acquaintance can be plausibly understood as a necessary condition for the dynamic process of fulfilment of sensorimotor anticipations in cases of veridical perception.

Although sensorimotor theory provides a way of understanding the sense in which the non-perspectival parts of perceived objects are present to me (i.e., in terms of my virtual access to them via my sensorimotor knowledge), it doesn't seem well-placed to account for the ways in which those non-perspectival, indeterminate aspects of the environment can gain determination over time. Mere virtual accessibility does not capture the sense in which some non-perspectival, indeterminate aspects of the environment gain determination over time. This is because mere virtual accessibility doesn't seem to capture the sense that some aspects of perceived objects can become more determinate as the relevant experience progresses in the process of unfolding.

4.4. Still Naïve?

There may be some residual worries about the 'naivety' of the proposed view. A sceptic might, for instance, contend that there is nothing 'naïve' about a realist view that takes us to be directly acquainted with some 'perspectival parts' of objects and not objects themselves. Since part of the phenomenological motivation behind naïve realism is that things are as they *seem* to be (that we *seem* to be in direct contact with some ordinary objects, not just some parts of them), one may argue that the proposed view amounts not to a 'naïve' realism but to a more limited form of realism about certain aspects of perceptual content that is compatible with some weak form of intentionalism. If this is the case, it is unclear how the 'naïvety' frame is of any help.

One might also take issue with the fact that the proposed view is at least 'minimally' committed to the general representationalist or intentionalist framework.[72] The point is that if the sensorimotor theory is still liable to the representationalist framework, this will make it sound like naïve realism is theoretically dispensable when giving an account of perceptual presence. In this way, the proposed view could collapse into a sensorimotor theory that is committed to the general representationalist framework. What underlies the representationalist charge against the combined view is the thought that once we introduce something other than what one is acquainted with, there is a worry that this may undermine or 'screen off' the explanatory role of acquaintance.

However, it is important to stress that the combination of naïve realism and sensorimotor theory is meant to be reciprocal. On the combined view, the special explanatory role of the relation of acquaintance that obtains in veridical perception is not compromised or screened off by the explanatory role of sensorimotor anticipations. They play distinct roles in constituting and explaining 'what an experience is like' in as far as sensorimotor 'anticipations' are distinct from their 'fulfilment' that requires the obtaining of a relation of acquaintance. The thought is that our sensorimotor anticipations are always liable to be either fulfilled or unfulfilled (i.e., have some fulfilment conditions), but the appeal to the sensorimotor anticipations alone cannot account for the phenomenological significance of the fulfilment conditions.

---

[72] When faced with the representationalist charge against sensorimotor theory (and my proposed view), one might be attracted to the idea that naïve realism should be combined with a more 'radical' (than 'sensorimotor') variant of enactivism. Proponents of 'radical' enactivism, for instance, suggest that the emphasis on the mediating role of sensorimotor expectations needs to be brushed off as it invites 'cognitive' analysis of perceptual consciousness in terms of internal rules and representations of sensorimotor contingencies (Hutto & Myin, 2013). However, there are reasons to be cautious about the radicalist account, for it is not clear whether radical enactivists can actually provide a plausible alternative to the sensorimotor talk. For example, on the radicalist account, it is difficult to demarcate what an organism does (in some agential, 'personal' sense) and how the organism's brain and non-brain body function (in some 'subpersonal' sense).

There may be particular instances of phenomenal variation depending on the fulfilment or unfulfillment of the previous anticipations. For example, if my anticipation of the colour of the apple's back surface (e.g., being red) were fulfilled or unfulfilled, 'what it is like' to undergo the relevant experience would be very different – either involving satisfaction or disappointment. My suggestion is that the obtaining of 'p-acquaintance' is what explains this phenomenal contrast for it only obtains in cases of fulfilment (i.e., veridical perception). In this way, the explanatory role of the notion of p-acquaintance stays intact because, on this account, the phenomenology of veridical perception is to be explained at least in part in terms of p-acquaintance (and in part in terms of sensorimotor expectations that may or may not be fulfilled).

The proposed combination is fully compatible with and committed to the core naïve realist claim that perception is most fundamentally a matter of obtaining an acquaintance with some mind-independent entities and the acquaintance relation is more primitive and explanatorily basic than the obtaining of a mental state with some representational state. The obtaining of a relation of acquaintance plays a crucial explanatory role in accounting for the phenomenological significance of the fulfilment in perceptual experience. On the proposed view, perceptual presence (and perceptual phenomenology more generally) is to be accounted for in terms of a dynamically structured pattern of anticipation (of the non-perspectival aspects of the environment; in the absence of acquaintance) and fulfilment (by virtue of obtaining an acquaintance to the perspectival aspects).

5. The 'Imagery' View Revisited

My proposed combination of naïve realism (i.e., the 'perspectival parts' view) and sensorimotor theory comes with a 'minimal' commitment to some modest form of intentionalism (i.e., the existence of a 'bodily' or 'motor' type of intentionality that is more primitive and explanatorily basic than the obtaining of a representational state with veridicality or accuracy conditions). This may give rise to important questions about whether there are grounds for thinking that this particular combination is explanatorily superior to other 'hybrid' accounts of perceptual presence that appeal to some representational state (e.g., belief, inference, imagery) (Section 2).

In this section I return to discuss and examine the plausibility of the 'imagery-based' account of perceptual presence, arguing that there are reasons to prefer the combination of naïve realism and sensorimotor theory over Nanay's (2010; 2022) version of the 'imagery' view which recommends a *non-relationalist* representationalist framework.

5.1. Unconscious Mental Imagery

Nanay (2010) characterizes perceptual presence in terms of a closely related phenomenon called 'amodal completion' which concerns the way in which the brain 'fills in' the missing parts of the perceived object or scene without direct sensory stimulation by generating a mental representation of the entire object. On this account, the backside of the apple and the occluded parts of the cat are 'amodally completed' (by the brain), giving rise to the sense in which the apple and the cat are present to me as wholes in spite of the perspectival limitations of my visual field. As Nanay puts it,

> The cat's tail is perceptually present to me if what it is like to be aware of the cat's occluded tail is similar to what it is like to perceive those parts of the cat that are in view (Nanay, 2010, p. 241).

When accounting for perceptual presence, Nanay appeals to the similarity between the phenomenology of perception and the phenomenology of amodal completion which he equates with the phenomenology of mental imagery.[73] But what exactly is meant by the 'phenomenology' of mental imagery (that is *similar* but importantly *different* from the phenomenology of perception)?

Nanay routinely depicts mental imagery as 'early perceptual processing not triggered by corresponding sensory stimulation' (Kosslyn, et al., 1995; Nanay, 2010; 2016; 2022). On his view, mental imagery is representational in the sense that it attributes (represents) certain properties to the perceived objects that we do not perceive them as having (e.g., representing the colours of the occluded parts of the cat). Nanay attempts to extend the explanatory scope of the notion of mental imagery to account for the phenomenology of perceptual experience within a purely representationalist framework.

One point of tension within Nanay's imagery view is that, while he often quotes Richardson's (1969) characterization of mental imagery as 'quasi-perceptual experiences of which we are *consciously* aware', he nonetheless maintains that mental imagery can be *unconscious*. As he writes, "the mental imagery by virtue of which we represent occluded parts of perceived objects is normally unconscious" (Nanay, 2016, p. 125). According to Nanay's 'imagery' view, seeing the cat behind the picket fence involves (1) perceptually (and consciously) representing the unoccluded parts of the cat in a 'bottom-up' way by virtue of being triggered by external sensory stimulation, whilst (2) representing the

---

[73] In support of his claim about the phenomenal similarity between perception and mental imagery, Nanay often appeals to the Perky experiment where the participants mistakenly believed they were visualizing images when in fact they were perceiving projected images on a white wall (Perky, 1910; Segal & Nathan, 1964; Segal, 1972).

occluded parts of the cat in a 'top-down' way by virtue of *unconscious* mental imagery without being triggered directly by sensory stimulation.

On his construal, closing one's eyes and visualizing an apple is clearly a conscious instance of mental imagery. Nevertheless, mental imagery can also occur *unconsciously* and it is by virtue of the unconscious mental imagery we represent occluded parts of perceived objects (e.g., the apple's unseen backside, the cat's occluded parts). This way of accounting for perceptual presence gives rise to the following questions: what makes a representation *conscious*, and why some particular representations are *conscious* whilst others remain *unconscious*?

In response, Nanay (2022) argues that what makes a representation of the occluded parts of perceived objects *conscious* (and thus no longer *unconscious*) is the subject's deliberate 'attention' to some of the occluded features. To illustrate this, he writes:

> When I see fifty cats behind the picket fence, I do not form a conscious representation of all occluded parts of all the fifty cats. But amodal completion can be conscious if, for example, we are really interested in some of the occluded features. If for some reason I need to attend to the left eye of one of these fifty cats and it is occluded by the fence, I am likely to represent this left eye consciously (Nanay, 2022, p. 2539).

The idea is that the reason why only some representations become conscious while other representations (e.g., those of the other fifty cats and their occluded parts) remain unconscious is because the subject is consciously attending to some particular aspects of the environment that are not currently in view (e.g., that cat's occluded left eye).

This may be taken to mean that in order for mental imagery to play a character shaping role (i.e., to make any contribution to the phenomenology of an experience), it is necessary for the subject to consciously attend to and thereby actively 'visualize' some hidden features of the objects perceived. To be clear, this is not to say that Nanay is committed to saying that all mental imagery is unconscious, but to indicate that in his view, it is the unconscious type of mental imagery that is meant to serve the explanatory role in accounting for (most cases of) amodal completion and perceptual presence. Note that Nanay's aim is "not to replace conscious mental imagery with unconscious one", but "to expand the category of mental imagery so that it would include both conscious and unconscious mental imagery" (Nanay, 2018, p. 128). This explains why he often stresses that unconscious (not conscious) mental imagery (as the explanans) contributes to delineating amodal completion and perceptual presence (as the explananda).

However, the worry is that it seems that the proponent of the imagery view is only allowed to appeal to the active, attentive type of mental imagery, namely visualization, when it comes to accounting for

perceptual presence. This is because the *unconscious*, involuntary type of mental imagery is not something that we can be *consciously* aware of and thus cannot be phenomenally manifest. This would make Nanay's notion of mental imagery more *demanding* than he wishes it to be. For when elucidating perceptual presence, he cannot appeal to his loosely defined, malleable notion of mental imagery (as something that can be conscious or unconscious), but only to the active, intended visualization which is necessarily conscious and thus has a phenomenal significance. This might be taken to mean that, if Nanay were to appeal to unconscious mental imagery (which lacks phenomenology) when addressing the 'phenomenological' problem of perceptual presence, his imagery account would simply collapse into the 'belief' view.[74]

Nanay concedes that it is not a straightforward matter to differentiate between unconscious mental imagery and no mental imagery, arguing that "we are not in a position to do so introspectively" and that the difference is a "functional one" (Nanay, 2018, p. 128). The thought is that even though there is no introspective or 'first-personal' evidence about whether we have unconscious mental imagery or no mental imagery, we do have some empirical or 'third-personal' reasons to assume the existence of unconscious mental imagery. As Nanay writes,

> if I have early cortical visual processing but no visual input, I do have mental imagery, even if I have no idea that I do. And we can only figure this out for sure if we put the subject in a scanner (Nanay, 2018, p. 128).

Yet, it is hard to see why one should think that this unconscious type of mental imagery has anything to do with 'what it is like' or 'how it *feels* like' for a subject to have an experience of something. Why should one follow this route and take for granted such a functionalist conception of phenomenal consciousness? This is far from obvious and question-begging. Indeed, whether the phenomenal nature of consciousness can be captured in purely functional terms has long been a matter of dispute (Chalmers, 1995; 1996; Block, 1980; Searle, 1980). The driving intuition is that no amount of behavioural or neural evidence would suffice to explain the phenomenality of experiences (i.e., what it feels like to have them). Consider the case of having a pain or an itch, for example. We know that they exist 'from the inside' (from a first-person perspective), not by inspecting other people's pain- or itch-behaviours or through scanning our brains (from a third-person perspective).

There are reasons to be cautious about the appeal to the loosely defined, malleable notion of mental imagery (as an explanans) in addressing the phenomenological problem of perceptual presence (as an

---

[74] Paivio (1971; 1986), amongst others, holds that imagery can be at work in our cognitive processes without our being consciously aware of it. It is questionable, however, whether such unconscious representations deserve to be called 'mental *images*'.

explanandum). For when accounting for perceptual presence, either (1) the notion of mental imagery ought to be understood narrowly as active visualization involving 'conscious' attention, or (2) the appeal to the 'unconscious' type of mental imagery is simply irrelevant or unhelpful in spelling out 'what it is like' for a subject to undergo a conscious perceptual experience). My alternative suggestion has been to appeal to what is intrinsic and fundamental to the nature or *structure* of perception itself.

In consideration of the above discussion, one might think that it would be safe to assume that mental imagery is just equivalent to active, attentive visualizing. However, this gives rise to further issues about the inherent indeterminacy of perceptual phenomenology.

5.2. Perceptual Indeterminacy

Another reason why my proposed view is to be preferred over the imagery-based view is that there are reasons to doubt that imagery can accommodate the indeterminateness of perception, for one cannot have a genuinely indeterminate image, that is, not just missing some details. This has to do with the different ways in which perception and mental imagery gain determination.

Nanay (2022) holds that the phenomenological difference between perception and mental imagery can be explained in terms of the different ways in which our conscious attention changes the determinacy of their phenomenology. In this view, attention plays an important role in both cases, making the attended property more determinate. However, it is important to see that how attention is exercised in the two cases also differ.

In perceiving, it is the direct sensory stimulation which provides the source of determinacy. If I attend to the colour of the white spot on the grey wall in front of me, this colour will be more determinate than it was when I was not attending to it. In the case of mental imagery, there is no relevant sensory stimulation that would correspond to what I visualize, and for this reason, the difference in determinacy is not provided by the sensory stimulation but by some projected (attributed) images or properties. Nanay argues that perceptually attributed properties are determined in a bottom-up way and imaginatively attributed properties are determined in a top-down way. In looking at the apple on my desk and attending to its exact colour and shape, the high determinacy of these attributed colour and shape properties comes in a bottom-up manner from 'what I see'. In visualizing an apple with my eyes closed, I still seem to be able to attribute these very determinate properties to the visualized apple. But, in this case, the determinacy comes in a top-down manner, say, from my memory or belief.

The imagery-based view seems ill-placed to do full justice to the indeterminacy of perception for it (mistakenly) assumes that the unseen, non-perspectival parts of perceived objects (e.g., the perceived

apple's backside, underside) are given in some 'determinate' way. On this view, the *felt* presence of such aspects of the environment is characterized in terms of mental imagery with certain fixed, determinate content by virtue of projecting some particular representations onto one's visual field in a top-down manner. My contention is that the phenomenology of those hidden parts of perceived objects is not a matter of attributing some determinate properties to objects (Burge, 2010; Peacocke, 1983; Nanay, 2010); but rather something genuinely 'indeterminate'. The presence of the unseen sides of the apple is different from the presence of something imagined or visualized by means of mental imagery that is given determinately.

5.3. Sensorimotor Theory and Mental Imagery

It is important to stress that mental imagery is to be distinguished from the relevant 'anticipatory' aspect of perceptual consciousness itself (i.e., sensorimotor expectation). Sensorimotor theory (and my proposed view) differs from the imagery view in that it does not conjecture or superimpose anything beyond or above perception (e.g., 'mental imagery') to explain its phenomenal character. To anticipate something that is absent in the observed scene is non-committal to how things are in one's egocentric space. On the contrary, if you project some mental imagery, you are committed to the existence of what you are visualizing in your egocentric space. In my suggested picture, anticipation (as an essential *structural* feature of perception) links together the presence of the apple's front side (or the cat's unoccluded parts) that is given determinately, and the presence of its backside (or the cat's occluded parts) that is given in a genuinely indeterminate manner. Matherne writes,

> my anticipation of the lamp's back side is not just an anticipation of a back side in general: it is an intention directed toward the back side of "this lamp," that is, toward the back side of the lamp that is included in the horizon delineated by its unique style (Matherne, 2017, p. 718).

My bodily anticipation directed toward the lamp's unseen backside is genuinely 'perceptual' in the sense that it is *tethered to* my direct awareness of the facing side of *this* very lamp before me (not just any lamp or object). The imagery view seems ill-equipped to explain this apparent phenomenal unity of our experiences since Nanay holds that (phenomenologically speaking) perception and mental imagery differ in kind, not in degree. The point is that phenomenologically speaking, it doesn't seem that I have a sensory awareness of what stands 'before my eyes' (by virtue of perceptual acquaintance) and simultaneously a separate awareness of what stands 'before my mind's eyes' (by virtue of mental imagery). In this respect, it seems more natural to appeal to the very 'structure' of perceptual consciousness itself rather than something beyond it. On my proposed view, both acquaintance and

sensorimotor anticipations are taken to be necessary 'structural' features of perceptual experience itself insofar as veridical perception necessarily involves patterns of sensorimotor anticipation (in the absence of p-acquaintance) and fulfilment (by virtue of obtaining p-acquaintance).

One way of making sense of how anticipation relates to, and differs from, mental imagery would be to say that the formation of mental imagery (like any other representational state) is grounded in the anticipatory structure of consciousness that is more primitive and explanatorily basic than the obtaining of a representational state). To put it differently, (sensorimotor) anticipations may play a key enabling condition not only for perception but also for mental imagery. What underlies Nanay's 'imagery-based' view is a strong 'representationalist' conception of mental imagery (some inner picture-like representation). An alternative 'sensorimotor' or 'embodied' conception of imagery could be adopted (Foglia & O'Regan, 2016). Instead of breaking down our experiences into some local (perceptual and imagistic) representations, the sensorimotor approach starts from the subject's entire body and her possession and exercise of the sensorimotor skills that are required to access information from the environment. In this way, perception and mental imagery may share the same sensorimotor profiles as the common substrate.

To summarize, the suggestion has been that my proposed account of perceptual presence is to be preferred over Nanay's imagery-based view for a number of reasons. First, Nanay's appeal to his loosely defined and malleable notion of mental imagery is *either* (1) question-begging about the functionalist conception of phenomenal consciousness it relies on *or* (2) unhelpful in elucidating what it feels like for one to have a conscious perceptual experience. Second, there are reasons to doubt that the imagery view can do full justice to the indeterminateness of perceptual phenomenology.

6. Conclusion

I have argued that a highly attractive solution to the problem of perceptual presence can be provided within a naïve realist framework, by supplementing naïve realism with sensorimotor theory. I have shown that the combination is 'mutually beneficial' as it enables both naïve realists and sensorimotor theorists to better account for perceptual phenomenology. The combined view is preferable over other alternative accounts of perceptual presence as it best explains the dual 'perceptual' sense in which we experience objects both partially and entirely. In Chapter 5, I return to the issue of hallucination showing that the proposed combination of naïve realism and sensorimotor theory places us in a better position to give a phenomenologically informed account of hallucination.

Chapter 5: Hallucination

1. Introduction

This chapter outlines a 'fulfilment-based' model of hallucination that complements the combination of naïve realism and sensorimotor theory proposed in the previous chapter. The core idea is that hallucination involves an unanchored form of anticipation in the absence of an 'acquaintance-based' form of fulfilment which provides an anchor to the mind-independent reality in the veridical case.

The structure of this chapter goes as follows: I first examine 'sensorimotor disjunctivism' as a candidate solution to the problem of hallucination (Noë, 2005; Beaton, 2016; Ward, 2023). When accounting for the phenomenal similarity or indistinguishability of perception and hallucination, the sensorimotor disjunctivist appeals to their shared sensorimotor profiles, whilst embracing the disjunctivist claim that they nevertheless differ fundamentally and do not share the same phenomenal nature. I consider a pressing challenge to sensorimotor disjunctivism (Section 2). I then illustrate an alternative model of hallucination that highlights the contribution made by the fulfilment of anticipations in shaping the phenomenology of hallucinatory experiences. The combination of the general appeal to the structural properties of perceptual experience and the 'fulfilment-based' model of hallucination yields a form of disjunctivism: 'structural disjunctivism' (Section 3). I then go on to sketch what the proponent of structural disjunctivism *can* say about some actual forms of hallucination (Section 4).

In the final chapter, I show how the structural disjunctivist can provide a novel solution to the initial problem posed by the causal argument against naïve realism and how it deals with the objections raised against Martin's version of negative epistemic disjunctivism.

2. Sensorimotor Disjunctivism

This section examines sensorimotor disjunctivism as a candidate solution to the problem of hallucination. According to this view, perception and hallucination may involve the deployment of the

same sensorimotor skills and expectations which account for their phenomenal similarity or indistinguishability; this does not, however, establish their phenomenal sameness. Having outlined the basics of sensorimotor disjunctivism, I consider one important explanatory challenge for the sensorimotor disjunctivist. What I take to be the key issue is that the role and place of the relation of acquaintance has not yet been fully appreciated and articulated within the sensorimotor framework.

2.1. Sensorimotor Theory of Hallucination

According to the sensorimotor theory of perception, the nature of perception is best construed in terms of the sort of sensorimotor skills and anticipations that are associated with the relevant experience. On this view, to perceive is to possess and exercise a special kind of sensorimotor understanding or expectations concerning possible patterns of dependence between sensory stimuli and movements. Noë (2005) presents a 'naïve-realist-friendly' formulation of the theory, suggesting that the phenomenal character of perceptual experience is to be characterized in terms of the way our sensorimotor understanding *enables* us to secure our 'contact' with situations and things around us. This means that our implicit practical understanding of sensorimotor contingencies plays a necessary 'enabling' condition for our direct 'acquaintance' with the mind-independent world.[75]

How does the sensorimotor theory fare with the problem of hallucination? Recall that the problem concerns the possibility of a perfect (e.g., causally matching) hallucination that is subjectively indistinguishable from a corresponding veridical perception. When faced with the problem of hallucination, Noë endorses a form of disjunctivism, maintaining that perception and hallucination are fundamentally different in kind and hence separate explanations are required for each. For only the former is genuinely 'relational' and 'world-involving'. He argues that the phenomenal similarity or indistinguishability is to be explained in terms of "the exercise of the same bodily, sensorimotor skills" (Noë, 2005, p. 252), claiming that the fact that a subject is unable to know whether she is genuinely perceiving or hallucinating (i.e., the indistinguishability condition) does *not* establish that they are of the same fundamental kind, let alone the sameness of phenomenal character. As Noë writes,

---

[75] There is an important issue about whether the notion of sensorimotor understanding or anticipation is to be understood as a genuine 'constitutive' aspect of perceptual experience or as a mere 'enabling' condition for the occurrence of an experience. For example, my parents are a necessary enabling condition for my coming into existence but they are not a constitutive part of me. Although sensorimotor theorists typically characterize sensorimotor understanding as an 'enabler', it is not always sufficiently clearly expressed whether this interpretation *excludes* the constitution claim. To be clear, my construal of (sensorimotor) anticipation as an essential *structural* feature (as suggested in the previous chapter) takes it to be a genuine 'constitutive' feature of experience that contributes to shaping the overall phenomenology of conscious perceptual experience.

when we hallucinate, the very same skills are *triggered* or *called into play*; the idea is that it is this fact that explains why we think of ourselves as in touch with things when we are not in touch with them. The calling into play of these skills and expectations does not explain how one can be in a state of the same kind of that of genuinely perceiving when one is not; it is not meant to do that. What it is meant to explain is the occurrence of a distinct kind of state of consciousness – hallucinatory consciousness – which is such that we can be unable to tell it apart from the genuinely perceptual state (Noë, 2005, p. 254).

The thought here is that the 'triggering' or 'calling into play' of the same sensorimotor skills is *not* meant to establish that perception and hallucination are the same fundamental kind but rather to show how a subjectively indistinguishable hallucination as a *sui generis* kind of state 'could' occur. The point is *not* that appealing to the exercise of the same sensorimotor skills (as the common enabler) establishes that perception and hallucination share the fundamental nature and phenomenal character. Rather, Noë's modest claim is that his sensorimotor account is meant to show that the possibility of a perfect, subjectively indistinguishable hallucination can be explained by appeal to the idea that the same sensorimotor skills and expectations can get triggered by 'the wrong thing' or by 'nothing at all'. In this way, the *mere possibility* of perfect hallucination is explained by reference to the *mere possibility* of the same sensorimotor skills being triggered in the absence of the right kind of cause or enabler.[76]

The sensorimotor theorist's appeal to the exercise of the same sensorimotor skills and expectations in accounting for subjective indistinguishability gives rise to the 'screening off' concern (Martin, 2006). Recall that this is the idea that any attempt to give a more *positive* characterization of the nature of hallucination (than the sheer fact of subjective indistinguishability) runs the risk of undermining the naïve realist claim that veridical perception is necessarily 'object-involving' and 'world-disclosing'. The worry here is that, if the exercise of the very same sensorimotor skills and expectations suffices to account for the phenomenal similarity or indistinguishability, this will then threaten to undermine or 'screen off' the explanatory role the naïve realist assigns to the presence of mind-independent entities and the relation of acquaintance in accounting for the phenomenal character of veridical perception – thereby undermining the naïve realist framework. The challenge for the sensorimotor theorist is then to provide a plausible explanation of how sensorimotor understanding contributes to the

---

[76] Ward similarly notes that the phenomenal similarity between perception and matching hallucination or their subjective indistinguishability can be explained by appeal to the commonalities in their 'sensorimotor profiles', that is, the "overlap in the suites of sensorimotor dispositions actuated for the subject" (Ward, 2023, p. 272).

phenomenology of hallucination that does not entail that the same explanation will suffice to account for the phenomenology of veridical perception.

Noë's response to the screening off worry is to stress that the appeal to the same sensorimotor skills to be deployed in hallucination does not and is not meant to tell us anything about what is fundamental to the nature of hallucination, other than the fact that it involves some deceptive sense of 'seeming to perceive' something when there is no appropriate external object. In the veridical case, the subject is aware of something in the environment with which she is in direct 'contact'; in the hallucinatory case, it merely *seems* to her that she is. The sensorimotor disjunctivist account is meant to explain "how it might come to be that we are unable to *tell* one kind of experience (the hallucination) apart from another (an episode of seeing)" (Noë, 2005, p. 254). It is not meant to show how experiences of the very same fundamental kind could occur in both cases of veridical perception and hallucination. In short, the claim is that the burden of proof lies not on the disjunctivist's side but on the side of the opponent who advocates the 'common kind' assumption (i.e., the claim that the same basic kind of experience occurs in veridical perception and matching hallucination).

2.2. The 'As-If' Sensorimotor Understanding in Hallucination

The sensorimotor disjunctivist seeks to account for the subjective indistinguishability of hallucination in terms of the same sensorimotor skills and expectations that are deployed in both veridical and hallucinatory cases. However, one crucial worry with this is that it is not obvious how the relevant kind of sensorimotor activity should be understood in the case of hallucination where no 'contact' is made with the world. Roberts (2012), for instance, argues that sensorimotor (or enactive) disjunctivism fails as it lacks the resources to explain (1) *what* might be involved in the 'as-if' sensorimotor understanding that is said to be triggered in the non-veridical case and (2) *why* such bodily skills in the absence of relevant external objects (would or should) yield an experience that is subjectively indistinguishable from a certain veridical perceptual experience.

The idea is that, when a hallucinating subject deploys sensorimotor skills to probe her surroundings but fails to make any contact, it should become obvious to her that she is not in fact perceiving. Suppose a blind subject who uses a white cane to detect objects in her path undergoes a hallucinatory experience of some obstacle in front of her (e.g., a wall). As she probes her surroundings but receives no feedback or resistance to the motion of her white cane, it should become clear (not unknowable) to her that she is not genuinely perceiving but hallucinating something that is not in fact there. In cases of veridical perception, she would normally find herself making contact with her surroundings. This

puts pressure on the sensorimotor disjunctivist's suggestion that the hallucinating subject is unable to tell that she is not perceiving in the absence of a physical entity to make contact with. A critic may then argue that since in hallucination there are no relevant stimuli in the environment for contact or coupling, the notion of 'sensorimotor' understanding or expectations *loses* its original meaning in the non-veridical case.

The sensorimotor disjunctivist might respond by saying that the kind of 'as-if' sensorimotor activity in hallucination is not so demanding in that it does not require any actual bodily movements (e.g., eyes, head, arm) (Thomas, 1999), but simply "the priming of expectations concerning the sensory consequences of merely possible activity" (Roberts, 2012, p. 250). However, it is unclear whether the sensorimotor disjunctivist has the resources to explain how the priming of those anticipations can be triggered in the absence of appropriate external stimuli, and why such anticipatory patterns should yield an experience that is subjectively indistinguishable from a veridical perceptual experience at all. There is little reason to suppose that the as-if exercise of sensorimotor understanding in hallucination should yield subjective indistinguishability or any phenomenally conscious state at all.

A related worry concerns whether the sensorimotor disjunctivist can give a plausible account of the veridicality or non-veridicality of experiences. Representationalists, for instance, speak of the veridicality or non-veridicality of experiences in terms of the 'matching' or 'satisfaction' conditions on their representational contents (i.e., whether worldly states 'match' or 'satisfy' them). But, if one were to reject the idea that perception is fundamentally a matter of having some representational content (as both naïve realists and sensorimotor theorists wish to do), what the veridicality or non-veridicality of experience amounts to within the sensorimotor disjunctivist framework would require distinct explanation in some other way (in non-representational terms).

On this note, Noë writes,

> On an actionist, non-representational approach to experience, then, an experience is non-veridical [...] when what you contact is not what you might have thought. Perfect hallucination is only misleadingly described as nonveridical perceptual experience. For in such a case there is no genuine experience of the world at all. There only seems to be (Noë, 2005, p. 262).

He distinguishes the sense in which ordinary misperceptions or illusions (e.g., seeing a spoon looking bent in water) are 'partially' non-veridical (in the sense that the subject *misidentifies* what she is in contact with when she is in contact with something else) and the sense in which perfect hallucination is non-veridical in a 'more radical' sense (in that the subject mistakenly takes herself to be in contact with something when she is not in contact with anything). For Noë, it seems, hallucination is no-

veridical in the sense that there *seems* to be some genuine experience of the world when there is none. This might be taken to suggest that, in the case of hallucination, there is no occurrence of a genuine conscious experience at all, there only *seems* to be. This is not so straightforward, however. It could be argued that this way of delineating the 'non-veridical' character of hallucination (that is fundamental to its nature) is not only at odds with the highly intuitive sense that there is 'something it is like' to have a conscious hallucinatory experience (even in the perfect, hypothetical case), but also with the richness of the phenomenological accounts of various real hallucinatory experiences that are reported and studied in the fields of psychopathology, psychology, and neurology.

Summing up, when faced with the problem of hallucination, the sensorimotor disjunctivist appeals to the 'as-if' sensorimotor skills and expectations to be deployed in hallucination. However, what this 'as-if' sensorimotor activity in the case of hallucination (where no 'contact' is made with the world) should amount to remains unclear. Part of the issue is that the sensorimotor disjunctivist "overestimates the contribution of enactive factors to perception" (Roberts, 2012, p. 252), thereby failing to do full justice to the special explanatory role assigned to the obtaining of a relation of acquaintance (i.e., contact) between the subject and some mind-independent entities that characterizes naïve realism. On my proposed view, the notion of acquaintance plays a crucial explanatory role in accounting for the phenomenological significance of the fulfilment of anticipations. In what follows, I show that the role of fulfilment in experience can help us better characterize the phenomenology of hallucination.

3. A Fulfilment Model of Hallucination

This section outlines an alternative model of hallucination which highlights the contribution made by the 'fulfilment' of anticipations in shaping the phenomenology of conscious hallucinatory experiences. I argue that the emphasis on the 'character shaping' role of the process of fulfilment places the sensorimotor disjunctivist in a better position to deal with the problem of hallucination.

3.1. Anticipation in Hallucination

In Chapter 4, I suggested that the phenomenal character of perceiving three-dimensional entities like an apple or a cat is best accounted for in terms of the combination of (1) a direct 'contact' (p-acquaintance) with some perspectivally given aspects of the object from one's current standpoint, and

(2) having 'access' to the environment including the currently unavailable, non-perspectival aspects of the object or scene via the exercise of relevant sensorimotor skills and anticipations. The central claim was that perception involves not just some patterns of anticipation of possible covariance between the subject and the environment but a dynamic interplay of anticipation and fulfilment by obtaining an acquaintance relation to aspects of the mind-independent reality. In this way, perceptual experiences do *not* simply "collapse into a set of counterfactual implications for sensorimotor activity" (Campbell, 2008, p. 667) because the acquaintance relation provides an 'anchor' to the mind-independent world that is necessary for the fulfilment of anticipations. On this account, the notion of acquaintance plays a crucial explanatory role in accounting for the phenomenological significance of fulfilment in perception.

The emphasis on the dynamically structured pattern of anticipation and fulfilment in characterizing the phenomenology of veridical perception provides a promising way to delineate the phenomenology of hallucination. The central idea is that, whereas veridical perception involves a process of fulfilment that is based on our acquaintance (contact) with the external reality, hallucination involves an *unanchored* form of anticipation in the absence of an acquaintance relation that provides an anchor to the mind-independent world. In this sense, hallucination cannot be the same 'fundamental kind' as veridical perception because the latter involves a perceiving subject who is *tightly tethered to* a segment of mind-independent reality by virtue of a dynamically structured pattern of anticipation and 'acquaintance-based' fulfilment; in the case of hallucination, the subject is not in a position to latch on to those anchorage points that are usually afforded by the environment and are made available to ordinary perceivers.[77]

The idea that hallucinations involve unanchored forms of anticipation echoes Merleau-Ponty's (1945/2012) claim that hallucinations lack the same horizonal structure as ordinary perceptions. In his discussion of hallucination in *Phenomenology of Perception*, Merleau-Ponty is primarily interested in 'real' hallucinations (e.g., schizophrenic voice-hearing, mescaline-induced visual hallucinations, delirium) that are typically distinguishable by the subject from their ordinary perceptions.[78] He writes that, unlike ordinary perceptual experiences, such a hallucination is not 'packed with little perceptions that sustain it in existence' and 'nothing responds to it on the outside' (p. 355). Hallucination lacks something for it to be a 'reality', yet it has 'the value of reality' (p. 358).

---

[77] In this view, 'partial' hallucination (in a way that is analogous to 'partially occluded' vision) might involve latching onto some 'anchorage points' afforded by the environment.

[78] For a detailed account of Merleau-Ponty's theory of hallucination, see Romdenh-Romluc (2009).

On my construal, what is missing in the structure of hallucination is an 'anchor' to the reality that is necessary for genuine interaction between the subject and the environment via dynamic patterns of anticipation and fulfilment. In the case of veridical perception, the dynamically structured pattern of anticipation and fulfilment requires the obtaining of a relation of acquaintance as a necessary condition for fulfilment. In the case of hallucination, by contrast, no such acquaintance relation obtains and hence no genuine interaction between the subject and the environment. The point is that mere patterns of sensorimotor anticipation alone do not suffice for subjective indistinguishability of perception and perfectly matching hallucination, let alone their phenomenal sameness. The fulfilment of anticipations in perception requires the obtaining of a relation of acquaintance as an anchor to the mind-independent reality.

3.2. Fulfilment Without Acquaintance

The claim that hallucination involves an unanchored form of anticipation is meant to pinpoint that in the case of hallucination, there is no 'acquaintance-based' process of fulfilment that is afforded by the perceived mind-independent world. However, this does *not* exclude the possibility of some 'non-acquaintance-based' processes of fulfilment that might be involved in characterizing the phenomenology of hallucination. In fact, there is a pressure to include some form of fulfilment in our account of hallucination as far as there is some diachronic structure at all. For example, subjects of schizophrenic voice-hearing often report that they 'hear' voices that involve some temporal progression (i.e., unfold over time) and the 'heard' sentences (e.g., threats, insults, commands) are partly anticipated. For, if that were not the case, those 'felt' utterances (e.g., 'you are a failure') would not be made intelligible to them, let alone communicable to others. The challenge is to explain why the range of 'unanchored' anticipations in the hallucinatory case should have any such temporal profile or structure at all.

To be clear, to maintain that hallucinations may involve some 'internal' or 'self-generated' forms of fulfilment is not in principle in conflict with the suggestion that the range of anticipations in such cases is not fulfilled in a 'world-involving' (i.e., acquaintance-based) manner. We can thus allow for internal or subjective forms of fulfilment in hallucination, conceding that fulfilment may occur through some kind of internal processes rather than through direct acquaintance with external objects. However, it is important to stress that these internally generated forms of fulfilment are substitutes for acquaintance that are not of the same kind. There are grounds for thinking that the phenomenology of 'acquaintance-based' fulfilment in veridical perception and the phenomenology of 'non-acquaintance-based' fulfilment in hallucination (or in some other conscious experience) are

qualitatively different. This is particularly evident in the diverse ways in which anticipatory patterns could progress in 'non-acquaintance-based' ways.

Consider episodes of sensory imagination (e.g., visualization), for example. Imaginative episodes involve some distinctive temporal profile but typically differ from ordinary perceptual experiences in the way they unfold. As Merleau-Ponty remarks,

> In imagination, I have hardly formed the intention to see before I already believe that I have seen. Imagination is without depth; it does not respond to our attempts to vary our points of view; it does not lend itself to our observation. We are never geared into the imagination. In each perception, however, it is the matter itself that takes on sense and form. […] The real stands out against our fictions because in the real sense surrounds matter and penetrates it deeply. […] The real lends itself to an infinite exploration, it is inexhaustible (Merleau-Ponty, 1945/2012, p. 338).

Notwithstanding some similarities (Kind, 2001; Nanay, 2015; Noordhof, 2002), there are important differences between perception and sensory imagination (or mental imagery). One such difference is the range of possibilities that are available to the subject. Sensory imagination differs phenomenologically from perception insofar as it lacks the various possibilities for exploration and opportunities for action that the perceived world normally affords. The way in which imaginative episodes progress differs from the way in which the range of perceptual and practical possibilities are anticipated and actualized (fulfilled). When I visualize a flying bird, there is a sense that the flight of the bird is already known to me before the relevant experience unfolds. Seeing a bird is very different, phenomenological speaking, in that the movement of the bird would unfold in a less expected or determinate way.[79]

Dreaming (unlike dreamless sleep) also involves a kind of experience with a range of sensations, emotions, and events that unfolds over time (i.e., some 'non-acquaintance-based' process of fulfilment), even though the dream itself is not aligned with or anchored to the external world. In dreams, people can have anticipations that are fulfilled within the dream narrative but these experiences are entirely (self-)generated by the subject's internal processes while sleeping without any direct correspondence to the external reality.[80] There are reasons to doubt that the sort of

---

[79] There is an approach that characterizes hallucination as a kind of imagination by the subject that is mistaken to possess a perceptual experience (Currie, 2000; Currie & Jureidini, 2001; Currie & Ravenscroft, 2002) or lacks the sense of voluntary control (Allen, 2015). These accounts are consistent with the idea that the fulfilment in hallucination is afforded not by the environment, but by the individual to whom the imaginary object is given (i.e., the subject).

[80] This is not to ignore the fact that the course and content of dreams are sometimes influenced and shaped by some external sensory stimuli during sleep.

fulfilment involved in waking perception and the sort of fulfilment involved in dreams are of the same kind. Whereas perceptual experiences are typically characterized by a high degree of consistency and stability (e.g., in seeing solid objects like trees and chairs, and sensible qualities like colours and shapes), dreamings (like sensory imaginings) are highly variable and unstable in the way they unfold over time (e.g., sensory qualities may change rapidly and dream narratives can shift and end suddenly and without explanation).[81]

There are interesting and relevant issues about the nature of the relationship between these different modes of experiencing 'that which is not present' in one's immediate environment (e.g., imagining, dreaming, remembering). Setting aside these important issues for present purposes, it would be fair to say that although hallucinations may also involve dynamically structured patterns of anticipation and some 'non-acquaintance-based' fulfilment that resemble the dynamic structure of veridical perceptual experiences, it does not follow that the forms of fulfilment involved in the veridical and hallucinatory cases must be of the same kind. Only the acquaintance-based fulfilment in cases of veridical perception would furnish a genuine 'feedback loop' between the subject and her environment, whereas the fulfilment in hallucination (like in imagination, dream, and memory) has a lesser degree of structure and coherence (i.e., more variable and unstable). Whatever substitute we might have for that kind of (non-acquaintance-based) fulfilment, it remains phenomenologically distinct from direct acquaintance that characterizes the phenomenology of non-hallucinatory fulfilment in the veridical case.

3.3. Structural Disjunctivism

There are reasons to prefer the fulfilment model of hallucination over Noë's version of sensorimotor disjunctivism. First, the proposed account is better equipped to address the problem of hallucination. The emphasis on the role of fulfilment in perception and hallucination allows for a greater degree of phenomenological similarity than anticipatory patterns alone. The issue with Noë's proposal was that it is unclear how the deployment of the same sensorimotor skills is meant to be understood and applied in the case of hallucination where no 'contact' or 'coupling' is made with the world and why the deployment of such bodily skills should yield subjective indistinguishability or any phenomenally conscious state at all.

---

[81] Remembering also involves a temporal (anticipation-fulfilment) profile but is experienced as more constrained by past experiences than dreaming and imagining. See Ratcliffe (2017, Ch. 6) for discussion of the temporal structures of different experiential states or events.

The emphasis on the role of fulfilment is key here. For it enables us to be more specific about the phenomenology of hallucination, especially its dynamicity. On my proposed picture, the deployment of the same sensorimotor anticipations in perception and hallucination does not suffice for their indistinguishability, let alone a phenomenally conscious experience; some form of fulfilment is also necessary. In this way, the phenomenology of veridical perception can be characterized in terms of a dynamically structured pattern of anticipation and 'acquaintance-based' fulfilment and the phenomenology of hallucination can be construed in terms of a dynamically less structured pattern of anticipation and 'non-acquaintance-based' fulfilment that differs fundamentally from the former. Hence, a form of disjunctivism.

The key point is that, although the appeal to the role of fulfilment allows for a greater degree of phenomenological similarity between perception and hallucination than anticipation alone, it still preserves the fundamental (phenomenal) difference between veridical perception and its hallucinatory counterpart, for only the former involves fulfilment based on a direct acquaintance to the external reality. This also provides a neat explanation of the 'non-veridical' character of hallucination. That is, on my proposed view, hallucination is 'non-veridical' insofar as it involves an unanchored form of anticipation that is not fulfilled by virtue of obtaining a relation of acquaintance.

Second, the emphasis on the role of fulfilment provides a better way to integrate naïve realism and sensorimotor theory, doing full justice to the privileged explanatory value of the notion of acquaintance within the sensorimotor framework. On the proposed account, the notion of acquaintance plays a crucial explanatory role in accounting for the phenomenology of 'acquaintance-based' fulfilment in veridical perception and the phenomenology of 'non-acquaintance-based' fulfilment in hallucination. For the meaning of the latter *derives from* and is *parasitic upon* the meaning of the former, preserving the privileged explanatory status naïve realists assign to the relation of acquaintance in perception. In simple terms, I can only hallucinate (imagine, remember) what I can perceive. That is to say, I can only hallucinate particular things (e.g., objects, events) that I can be acquainted with in veridical perception.

Third, the fulfilment model of hallucination aligns well with the general *structural* approach to consciousness that I have been developing and defending in this thesis (i.e., the appeal to some essential *structural* features of experience; e.g., minimal self, temporality, anticipation). Their combination results in a richer conception of the 'non-acquaintance-based' phenomenology of hallucination that goes beyond sensorimotor disjunctivism. This is what I call *structural disjunctivism*.

Structural disjunctivism claims that perception and hallucination share some, but not all, structural features which account for their phenomenal similarity or subjective indistinguishability without

reaching the phenomenal sameness. Nevertheless, perception and hallucination differ fundamentally since only the former involves the obtaining of a relation of acquaintance as one such structural feature that contributes to the phenomenology of a genuinely 'world-involving' experience. In the latter, there obtains no such acquaintance relation to the external reality, thus it differs fundamentally (structurally) from a veridical perception. In other words, it is the structural differences between perception and hallucination that make them two fundamentally different psychological kinds, and that would just ground the hypothesized indistinguishability without the sameness of phenomenal character. Two structurally different experiences can be subjectively indistinguishable without sharing the same phenomenal character.

One virtue of this approach is that it respects the basic metaphysical fact that hallucinatory experiences, however deceptive or non-veridical, are necessarily constitutive of the stream of consciousness insofar as they share some essential structural features with other conscious experiences. That is, in the case of hallucination, the implicit sense of 'selfhood', 'temporality' and 'anticipation' (however minimal or basic) remains intact, thereby contributing to the phenomenology. To put it differently, the phenomenology of every conscious hallucinatory experience is constitutively dependent, at least in part, on the *way* or *manner* in which it is manifest the subject. Although there may be cases where these structural features are genuinely disrupted and impaired (e.g., schizophrenia), they do not disappear completely as long as there remains *some* cohesive unity of a phenomenally conscious experience.

In the final chapter, I offer a detailed account of how structural disjunctivism can provide a novel solution to the problem posed by the causal argument against naïve realism and overcome the objections raised against Martin's version of negative epistemic disjunctivism.

4. Case Studies

When developing a unifying theory of hallucination, two particular challenges need to be taken seriously. First, there is a linguistic concern regarding the fact that the term 'hallucination' is equivocal. It is understood differently in different contexts (e.g., neurophysiology, cognitive psychology, philosophy of mind and perception). For example, the orthodox definition of hallucination in psychology (as sensory perception in the absence of external stimuli) seems already in competition with the naïve realist view that veridical perception and merely perception-like hallucination are *not* the same fundamental kind. Second, real hallucinations come in different shapes and forms. Some

take place during the course and development of psychosis (e.g., schizophrenia) and some under the influences of psychedelic drugs (e.g., mescaline, ayahuasca, LSD). There are also hallucinatory experiences that occur as a result of the cortical activities and brain mechanisms that are typically associated with ordinary perceptual processing after sensory deprivation (e.g., Charles Bonnet syndrome, the Ganzfeld effect), whilst some may involve the brain processes that are associated with sensory imaginings (e.g., Post-traumatic stress disorder flashbacks).

The fulfilment model of hallucination is meant to serve as a general account of hallucination that is applicable to both actual and hypothetical forms of hallucination, thereby doing justice to the 'heterogenous' nature of hallucination. In this final section, I illustrate how the proposed view can be applied to account for some actual cases of real hallucination. My main focus will be on (1) the kind of 'psychotic' hallucinatory experiences involved in schizophrenia (i.e., auditory verbal hallucination), and (2) the kind of 'non-psychotic' hallucinatory experiences that are associated with Charles Bonnet syndrome.

4.1. Auditory Verbal Hallucination

Schizophrenia is a complex psychiatric condition characterized by a wide range of symptoms (e.g., auditory verbal hallucination, thought insertion, delusion of control). Auditory verbal hallucination (AVH) is one of the most frequently reported positive symptom of schizophrenia which involves 'hearing' voices that are not present in the environment.[82] [83] Two notable subtypes of AVH highlight the heterogeneity of anomalous experiences associated with schizophrenia: (1) inner speech hallucination and (2) hypervigilance hallucination.[84]

Inner speech hallucinations are said to involve the misattribution of self-generated 'inner speech' to external sources (Mechelli, et al., 2007; Fernyhough & Varese, 2013). While healthy, non-schizophrenic subjects can normally tell whether they are genuinely hearing a voice or merely thinking

---

[82] On one characterization, AVHs involve misidentification of a type of mental state (e.g., thinking) with another (e.g., perceiving), whereas 'thought insertions' involve misattribution of one's own mental state to a person other than oneself (Ratcliffe, 2019). For, after all, thought insertion subjects do rightly recognize that they are 'thinking', although they falsely ascribe the content of their own thoughts to external agency.

[83] There may be cases in which schizophrenic subjects report that their thoughts are 'perceived' as alien or that their thoughts have sensory (audible) qualities. However, interpreting such first-person self-reports (from schizophrenic subjects) is notoriously difficult and how to interpret them is a highly contentious matter (Merleau-Ponty, 1945/2012; Sartre, 1940/2010; Sarbin, 1967).

[84] There are also other subtypes of auditory hallucination that occur in schizophrenia, including verbal hallucinations that are said to occur in association with memory intrusion (Michie, et al., 2005) and 'non-verbal' forms of auditory hallucination (e.g., environmental noise, music). I set these aside to focus on the two subtypes that I have outlined here.

in inner speech, schizophrenic patients who are socially isolated and are alone with their own thoughts often find it difficult to separate their self-generated thought (inner speech) from genuinely audible speech.

On the fulfilment-based model of hallucination, the phenomenology of inner speech hallucination can be accounted for in terms of the subject's anxious anticipations (e.g., hearing a threat or an insult) that are fulfilled not in an 'acquaintance-based' way (e.g., by actually hearing a threat or an insult) but in a 'non-acquaintance-based' way (e.g., by self-generated inner speech). The reason why subjects of inner speech hallucination experience their own linguistic thought as someone else's speech is because that is what they anticipate. Individuals misattribute self-generated inner speech to external speech because they anticipate hearing actual voices from external source rather than producing inner speech (regardless of whether such anticipations are rationally grounded).

The particular content of inner speech hallucination is captured by the particular set of anticipations that is triggered by certain neurophysiological underpinnings. Yet, the fact that there is a *breakdown* in the feedback loop between the subject and her environment gives rise to a discrepancy between what is anticipated (hearing actual voices from external sources) and how it is fulfilled of unfolds (by self-generated inner speech) where the former gains more prominence due to such conditions as stress and anxiety. It seems plausible to think that a healthy, non-schizophrenic subject would be more likely to be able to tell if her anticipations of hearing actual voices were followed by self-generated inner speech, not real voices.[85]

Hypervigilance hallucinations are thought to differ from inner speech hallucinations insofar as they are not based on self-produced stimuli (inner speech, thought) but involve misinterpretation of external stimuli (Dodgson & Gordon, 2009; Wilkinson, 2018). They usually occur in noisy social contexts, due to misinterpreting the presence of certain environmental stimuli (which would not be as salient or significant to healthy individuals). For instance, in a state of social anxiety and hypervigilance, schizophrenic subjects are much more likely to misinterpret ambiguous or neutral sensory stimuli (e.g., murmuring voices of neighbours) as affectively charged (e.g., threatening, frightening). Subjects of hypervigilance hallucinations often 'hear' a voice or voices telling them what they are afraid of hearing (e.g., a mockery, a threat).

---

[85] Gallagher (2005) suggests that the sort of experience involved in inner speech-based hallucination lacks the sense of agency that is integral to our ordinary experience of inner speech and thought. See also Ratcliffe (2017, Ch. 4) for discussion of how the impairment of conscious anticipation is associated with some positive symptoms of schizophrenia including auditory verbal hallucinations and thought insertions.

On my proposed view, subjects of hypervigilance hallucination differ from healthy individuals in the way their anticipations of possibilities unfold. In the state of anxious hypervigilance, the schizophrenic subject's anticipations (of hearing actual voices from an external source) is more likely to gain prominence and more likely to unfold in a deviant, self-actuated way, rather than in a standard 'acquaintance-based' way (e.g., by actually hearing some occurrences). The particular content of hypervigilance hallucination is captured by what the anxious subject anticipates. It could be argued that in the case of hypervigilance hallucinations, the subject's basic capacity for reality testing has gone awry. A non-schizophrenic individual would be more likely to be able to tell if her anticipations of actually hearing someone's utterance in a noisy social context were followed by just some irrelevant external stimuli.

Providing a fully-fledged account of these subtypes of AVH including their causal aetiology and associated neurophysiological mechanisms and processes is well beyond the scope of this chapter, let alone this section. Here I am simply giving a sketch of what one *can* say about these anomalous experiences associated with schizophrenia, given what I have argued for about the dynamic (anticipation-fulfilment) structure of hallucination. One simple suggestive point is that in cases of psychotic hallucination, regardless of the specific neurophysiological or somatosensory processes that underpin certain *localized* symptoms (e.g., AVHs), it is generally thought that there lies a deeper *global* or *structural* disturbance in the subject's conscious life as a whole. There is an alteration in the primordial way in which one can make sense of 'that which is not present or what is possible' (by virtue of anticipation) and 'that which is present or what is actual' (by virtue of acquaintance).[86] This aligns well with the idea that hallucination has a lesser degree of structure and coherence than ordinary veridical perception.

4.2. Charles Bonnet Syndrome

We now turn to the kind of 'non-psychotic' hallucinations that are associated with Charles Bonnet syndrome (CBS). CBS is a clinical condition under which visual hallucinations occur as a result of dysfunctions in the subject's low-level visual processing. It is often linked to age-related macular degeneration and is not generally thought to be related to psychosis such as dementia. CBS-related

---

[86] As Merleau-Ponty puts it, "there is […] a deeper function without which perceived objects would lack the mark of reality, as it is missing for the schizophrenic, and by which the objects begin to count or to have value for us" (Merleau-Ponty, 1945/2012, pp. 258-259). Phenomenologists sometimes speak of a primordial "style" (Merleau-Ponty, 1964, p. 116) or "immediate certainty of reality" (Husserl, 1963, p. 93) that characterizes all our perceiving *and* thinking as a form of habitual confidence. This most primitive, habitual or bodily confidence is thought to be lost or disrupted in psychopathology (e.g., schizophrenia).

hallucinations are often attributed to the brain's adjustment to 'sensory deprivation' as a result of partial or complete vision loss (Siatkowski, et al., 1990) and are studied not solely in relation to eye disease but to the specific cortical areas and brain activities that associated with ordinary visual perception.

CBS hallucinations vary in complexity, frequency, and intensity, depending on the sort of images that they involve and the psychodynamics of the individuals undergoing them. Oliver Sacks' (2012, Ch. 1) account of his own clinical experience of CBS is particularly enlightening as it illuminates the diverse character of this condition. One of his patients (Rosalie) who had been completely blind for several years and had experienced complex visual hallucinations (e.g., 'people in exotic Eastern dress'), recalled that her hallucinations 'seemed to have nothing to do with her'. The images and people 'seemed quite solid and real' but remained in 'uncanny silence'. Another CBS patient (Zelda) had no visual impairment but nevertheless experienced both simple (e.g., a green and pink lattice, blue dots) and complex (e.g., bridges, viaducts, apartments) visual hallucinations, as well as various 'anomalous' visual experiences involving multiplication of objects (polyopia), enlargement, and distortion of figures. Sack attributed reduced blood flow in certain parts of her brain (particularly occipital and parietal lobes) as a possible cause of her CBS hallucinations. Finally, another patient (Marlon) who had been blind for several years (due to progressive glaucoma) and had some mild dementia, 'saw' complex figures (e.g., a mysterious trio of men) that, during the daytime, were easily recognized as mere figments, but, later in the day, appear 'evil', 'threatening' and 'quite real' to him.

The heterogeneity of CBS is apparent in these accounts. CBS experiences can involve simple (e.g., geometrical patterns, shapes, lines) as well as complex (e.g., faces, people, scenes) images or figures. They typically occur in elderly people with partial or complete sight loss but can also occur as a result of dysfunction in a subject's low-level visual processing (e.g., Zelda). For the most part, they tend to be unthreatening and only mildly distracting (e.g., people in exotic dress) but some CBS-related hallucinations involve frightening or unpleasant images (e.g., a sinister trio of intruders, multiplication of figures, deformed faces, etc.).

What can the proponent of the fulfilment model of hallucination say about the heterogeneity of these anomalous experiences that are associated with CBS? When CBS subjects have lost their visual 'contact' with the world, they continue to deploy and exercise a range of anticipations about upcoming external visual input that is not fulfilled and updated in a standard 'world involving' way (i.e., sensory deprivation); rather, they are 'compromised' and 'confabulated' (i.e., fulfilled in a non-standard 'non-acquaintance-based' way). It seems reasonable to think that the fact that CBS hallucinations involve

some particular 'images', 'figures', and 'people' can be explained in terms of some particular set of anticipations to be deployed (caused by certain brain mechanisms and processes).

Nevertheless, CBS subjects (unlike schizophrenics) typically have 'insight' that their hallucinatory experiences are not real (i.e., 'quasi-perceptual') and usually come to know that the things they become aware of appear somewhat different from real, perceived objects and people. That is, unless the presented images are contextually appropriate or there is a coexisting neurological alteration or cognitive dysfunction (e.g., Marlon), the "sense of reality" (Farkas, 2013, p. 399) remains intact.[87] This seems to fit well with the suggestion that hallucination has a lesser degree of *structure* and coherence (than veridical perception) and this is also phenomenologically salient or noticeable to the subjects themselves.[88] To this extent, the phenomenology of CBS can be accounted for in terms of a dynamically structured pattern of anticipation and non-acquaintance-based fulfilment.

4.3. Neurocentrism and Selectionism

The above discussions about real hallucinations have an important bearing on broader issues about the relationship between different *kinds* or *levels* of explanation of mental phenomena. Although my focus has been on the 'phenomenology' of those anomalous experiences associated with AVHs and CBS, there are also neurophysiological explanations that are favoured by more scientifically driven approaches to hallucination. The question is about how these different explanations of mental phenomena should be understood in relation to one another. (e.g., whether the phenomenological and neurophysiological explanations are in conflict with each other).

ffytche (2012) has recently proposed a way to 'taxonomize' hallucinations and other psychological phenomena based on their associated 'neurophysiological' mechanisms and processes. He argues that visual hallucinations are best understood as "generic representations or visual processes underlying normal visual function" (ffytche, 2013, p. 58), suggesting that the content of such hallucination is to be characterized in terms of the relevant underlying "processes and representations that are embodied in different subregions [of the brain]" (ffytche, 2013, p. 59). In effect, CBS hallucinations are thought to occur as a result of the neural activities that are typically associated with ordinary visual

---

[87] CBS subjects often report the similarity of their experiences with afterimages which lack 'depth' and appear 'superimposed'. For example, the 'images' don't move in relation to changes in one's viewpoint.

[88] By contrast, in psychopathological cases (e.g., schizophrenia), there is a genuine prevailing distortion in one's sense of reality as well as other psychological traits. One way to understand the difference between psychotic and non-psychotic hallucinations would be that the former involves even less degree of structure and coherence due to a more profound failure of "reality testing" (Gipps, 2022, p. 78). It could be that the reason why complex CBS hallucinations can occur without altering the subject's sense of reality is because she has not lost her 'contact' with reality entirely. She can still use other sense modalities for reality testing.

processing (rather than, say, those associated with imagination or memory). The question is whether this entails that hallucination and perception are indeed of the same fundamental psychological kind.

Such a 'taxonomic' approach to psychological phenomena in terms of the associated neural activities has both its pros and cons. On the one hand, from a clinical perspective, the neurophysiological classification can be useful as it can help to distinguish CBS subjects from patients with severe mental disorders such as schizophrenia. On the other hand, identifying and classifying mental phenomena solely based on underlying neurophysiological mechanisms and cortical activities is controversial. For one thing, such a *neurocentric* classification of mental phenomena may blur the intuitive common-sense distinction between illusions (as distorted perceptual experiences of external objects) and hallucinations (as quasi-perceptual experiences in the absence of appropriate external objects).

One way of understanding the role of neurophysiological mechanisms and processes in accounting for the nature of perception and hallucination is to consider them as 'subpersonal' underpinnings that amount to necessary *enabling* conditions for the occurrence of such mental phenomena. Naïve realists typically conceive of the role of the subject's brain state in this way. According to the so-called 'selectionist' interpretation, the subject's brain state provides a way of 'selecting' different objects and properties, making it possible for one to experience 'particular' things (Kalderon, 2007; Allen, 2015; 2016; Fish, 2009; Campbell, 2002).

The selectionist strategy allows the naïve realist to say that the selecting role of the subject's neural mechanisms and processes amounts to a necessary enabling condition that is causally responsible for the occurrence of each type of experience, whilst the experience's phenomenal character is constituted *entirely* by, and thus to be accounted for in terms of, what is present or absent in the environment. This means that the same neurophysiological mechanisms and processes can ground different psychological events with different phenomenal characters depending on what is actually *present* or *absent* in the subject's immediate environment. On this account, veridical perception is determined by some relevant neurophysiological processing (which accounts for the causal aetiology of the experience) and the *presence* of some environmental stimuli (which accounts for its phenomenal character), whereas hallucination is determined by the neurophysiological processing (which accounts for the causal aetiology) and the *absence* of appropriate objects in the environment (which accounts for the phenomenal character.

The selectionist strategy has recently been challenged by some naïve realists (Ivanov, 2019; Moran, 2019; Beck, 2019). The critics take issue with the selectionist's externalist tendency, particularly the claim about the externalist condition for the occurrence of a hallucinatory experience (i.e., the *absence* of appropriate items in the environment). Moran (2019), for instance, notes that the absence

of an appropriate external object cannot be a *necessary* condition for hallucination given the possibility of *veridical hallucination* where the subject has a hallucinatory experience of *p* in the presence of *p* (e.g., hallucinating an apple when there is, in fact, an apple before myself). Beck (2019) argues that selectionism fails to accommodate the 'internal dependence' of perception, suggesting that the subject's neuro-computational properties contribute to shaping the phenomenology of perception and hallucination. Similarly, Ivanov (2019) claims that the external constraint on the occurrence of a hallucinatory experience the selectionist invokes needs to be construed in terms of the sort of cognitive processing involved in hallucination which he characterizes as "a secondary, defective mode of functioning of the *perceptual* system" (Ivanov, 2002, p. 2).

The above dialectic shows that the fact that some hallucinations occur as a result of neurophysiological mechanisms and cortical activities that are typically associated with ordinary perceptual experiences (e.g., CBS) does not preclude the selectionist claim that the same neurophysiological underpinnings can causally determine two different kinds of experience (perception and hallucination) whilst requiring two different kinds of explanation about their 'non-causal' (i.e., constitutive) conditions. Yet, according to the critics, accepting selectionism comes with a commitment to strong phenomenal externalism and an unnecessary externalist condition on the occurrence of a hallucination.

Structural disjunctivism offers the selectionist a viable way to avoid the externalist charge while making sense of the role of the brain in determining the nature of perception and hallucination (as an *enabling* condition). For, on this account, the phenomenal character of hallucination is constituted, at least in part, by the *presence* of some essential structural features which account for the very *way* in which the relevant experience is manifest to the subject (e.g., minimal self, temporality, anticipation). The thought is that accepting structural disjunctivism enables the selectionist to say that the subject's brain state amounts to a necessary enabling condition for hallucination, whilst insisting that the phenomenology of hallucination is to be accounted for in terms of the *presence* of the structural features of conscious experience itself (rather than the *absence* of appropriate external stimuli). In this way, the externalist charge against selectionism can be avoided. Once structural disjunctivism is implemented, the selectionist can say that the subject's cognitive processing plays a 'selecting' role which accounts for how we can have some 'particular' perception and hallucination without a commitment to strong phenomenal externalism.

On my suggested view, the structural conditions necessary for the occurrence of a hallucinatory experience do *not* simply amount to the 'non-occurrence' of some additional conditions necessary for perception (i.e., the absence of an appropriate external object). Rather, they amount to the particular ways in which the relevant (hallucinatory) experience is manifest to the subject. The appeal to the

structural features of experience allows us to elucidate the phenomenology of hallucination in a more robust, positive manner without invoking any externalist condition for hallucination.

In sum, the explanatory role of the neurophysiological mechanisms and processes in accounting for hallucination should not be overstated. Although talk of functioning in the brain's neurotransmitter systems (e.g., the low-level visual processing) can be helpful (e.g., delineating the causal aetiology of hallucination), a further independent argument is required to warrant the claim that the experience's phenomenology is entirely irrelevant in identifying and classifying different mental phenomena. My alternative suggestion has been that an appeal to the structural features of experience is (1) consistent with selectionism but is (2) not susceptible to the externalist charge against selectionism.

5. Conclusion

In this chapter, I have illustrated a general account of hallucination where the nature of hallucination is analyzed in 'structural' terms, that is, in terms of the essential structural features that are constitutive of the phenomenology of every conscious experience. The key suggestion has been that hallucination involves a dynamically less tightly structured pattern of anticipation and (non-acquaintance-based) fulfilment, and this in turn places us in a better position to delineate the phenomenological similarities and differences between perception and hallucination. The dynamic anticipation-fulfilment model of hallucination recognizes (1) the phenomenal relevance of the role of sensorimotor understanding in perception (and in hallucination where there is no genuine sensorimotor coupling), whilst embracing (2) the privileged explanatory role naïve realists assign to the relation of acquaintance in accounting for the phenomenological significance of the role of fulfilment in perception.

In the final chapter of this thesis, I return to the initial problem posed by the causal argument against naïve realism, showing how the 'structural disjunctivist' can resolve the problem and can overcome the objections raised against Martin's version of negative epistemic disjunctivism. On structural disjunctivism, hallucination consists of minimal self, temporality and anticipations as necessary structural features but differs from a veridical perception in the way its anticipations are fulfilled in a 'non-object-dependent' way. The appeal to the structural features of experience translates the 'hard' problem of philosophical hallucination into a less dubious problem concerning the relationship between hallucination and other psychological kinds (e.g., imagining, thinking, remembering) and how our conscious experiential life as a whole is structured more generally.

Chapter 6: Structural Disjunctivism

The main objective of this thesis has been to develop and defend a viable form of naïve realism that is supplemented by a phenomenologically grounded account of the essential *structural* features of experience. I aimed to offer (1) a richer, phenomenologically informed account of the nature of veridical perception and (2) a robust, positive account of the nature of hallucination.

1. Phenomenological Richness

The central motivating idea has been that there are fruitful grounds for integrating naïve realism with other phenomenologically motivated approaches and ideas. In consideration of what naïve realists can say about selfhood, temporality, and perceptual presence, I have clarified some of the key commitments of naïve realism (e.g., relationalism, transparency, and extensionalism) and its allies (e.g., the minimal self view, sensorimotor theory).

Over the course of this thesis, I provided tools to better capture the phenomenological richness of our conscious perceptual life. Chapter 2 discussed and defended the integration of naïve realism with the minimal self view (Zahavi, 2014). The claim was that there are grounds for thinking that the phenomenological discussions about the minimal or pre-reflective form of self-consciousness can help clarify the naïve realist's central commitments to relationalism and transparency. I argued that the minimal self can be construed as a structural feature of experience which helps to substantiate the character shaping role of the subject relatum and the contribution made to the phenomenology by the non-diaphanous aspects of experience.

Chapter 3 showed how integrating the relationalist (extensionalist) commitment of naïve realism with the phenomenological notion of a 'temporal horizon' offers a highly attractive, phenomenologically grounded account of the phenomenology of temporal experience that is explanatorily superior to strong temporal externalism (Hoerl, 2018). I argued that temporal phenomenology is to be construed in terms of the combination of (1) the obtaining of a relation of acquaintance between the subject and the present phase of perceived events, and (2) the temporal-horizonal structure of experience in

virtue of which perceived events are experienced as unified wholes (*as events*) and the experiences are themselves manifest as temporally extended phenomena.

Chapter 4 offered a novel solution to the problem of perceptual presence by integrating naïve realism and sensorimotor theory. The claim was that perceptual presence is to be construed in terms of the combination of a direct p-acquaintance to some perspectivally given aspects of the environment and sensorimotor anticipations of how the experience would unfold depending on movements. I argued that the notion of acquaintance plays a crucial explanatory role in delineating the phenomenological significance of the 'fulfilment' condition of perception.

Importantly, the structural approach also clarifies the externalist or relationalist commitment of naïve realism. The idea is that there is no conflict in principle between the suggestion that there are some essential structural features that constitute the phenomenology of every conscious perceptual (or hallucinatory) experience, and the core naïve realist claim that perception is constituted, at least in part, by some mind-independent entities. The 'pluralistic' structural approach to phenomenology does not undermine the relationalist commitment of naïve realism (i.e., the 'pre-theoretical' intuition that perception appears relational – i.e., involving at least two relata, an object of experience and a subject of experience) but rather fully embraces it by spelling out more clearly and explicitly the character shaping role of the 'subject relatum' (i.e., 'to whom things appear'). The character shaping role of the subject in perception has been overlooked in much of the literature on naïve realism. In this thesis, my focus has been on clarifying the subject's contribution to the phenomenology of perceptual experiences in terms of the various structural features of the subject's experience. This complements the emphasis naïve realists place on the 'object-dependent' nature of perception.

One of the main virtues of the appeal to the essential structural features of experience is that it provides the grounds for reconceiving the phenomenological basis of naïve realism. Recall that one of the key motivating thoughts behind naïve realism is that the view "best articulates how sensory experience seems to us to be just through reflection" (Martin, 2006, p. 354). When accounting for the nature of perception, naïve realists typically appeal to the notion of 'acquaintance' or direct 'contact' with the mind-independent world. Throughout this thesis, I have suggested that there are reasons to doubt that perceptual phenomenology is exhausted by our direct 'contact' with reality. The metaphor doesn't do justice to the very phenomenological richness and dynamic nature of our experiential life. The appeal to the structural features of experience is instructive in that it offers the naïve realist additional resources to better delineate our 'pre-theoretical' or "pre-reflective stance" (Martin, 2006, p. 408) on the world.

2. The Causal Argument Revisited

The richer conception of perceptual phenomenology I have developed and defended in this thesis places us in a better position to understand and account for the nature of hallucination.

Recall that the philosophical problem of hallucination concerns some hypothetical cases in which the subject is unable to know by reflection alone whether she is genuinely perceiving or not. The problem proposed by the causal argument was that, if it is possible to produce a causally matching hallucination by replicating the subject's perceptual processing mechanisms (e.g., by synthetically reproducing the neural signals that would come from retinal receptors in vision), then the same fundamental kind of experience would occur whether one is genuinely perceiving something external to one or merely hallucinating it. The central issue was that, if the common cognitive (or behavioural) effects that are supposed to obtain in both veridical perception and causally matching hallucination suffice to account for the phenomenal character of causally matching hallucination, then the same effects will also suffice to account of the phenomenal character of the corresponding veridical perception. This will then threaten to undermine the explanatory role proponents of naïve realism assign to the presence of mind-independent entities and the relation of acquaintance in accounting for the phenomenal character of veridical perception.

Chapter 1 examined Martin's (2004; 2006) version of negative epistemic disjunctivism as a candidate solution to the problem of hallucination. To recall, this is the view that the phenomenal character of causally matching hallucination is exhausted by the fact that the experience is 'introspectively indiscriminable' from a certain veridical perception. On this view, indiscriminability is both necessary and sufficient for the occurrence of a causally matching hallucination that has some phenomenal character of its own. I considered the objections raised by Siegel (2004; 2006) and Sturgeon (2006; 2008) who took issue with the plausibility of the modal, impersonal notion of introspective indiscriminability that Martin invoked in defence of naïve realism against the causal argument. One key issue was that the negative epistemic disjunctivist's appeal to the indiscriminability condition amounts to an *epistemological* claim about the phenomenal character of causally matching hallucination (i.e., what one can or cannot know about what it is like to have a causally matching hallucination), thereby failing to meet the sceptic's demand: to provide a *metaphysical* thesis about the phenomenal character of causally matching hallucination (i.e., what kind of stuff 'constitutes' the phenomenal nature of hallucination as a basic psychological kind as distinct from veridical perception).

As an alternative to Martin's negative epistemic disjunctivism, Chapter 5 developed a highly plausible form of disjunctivism by incorporating the appeal to the structural features of experience and a fulfilment-based model of hallucination: *structural disjunctivism*. This is the view that veridical perception and hallucination differ fundamentally (structurally) and the phenomenological similarities and differences between perception and hallucination are to be accounted for, at least in part, in terms of their structural similarities and differences.

When faced with the problem of causally matching hallucination, the structural disjunctivist can thus maintain that veridical perception and hallucination can be phenomenally similar or even indistinguishable by the subject in as far as they share some (but not all) essential structural features which ground their 'partially overlapping' psychological nature. This means that both veridical perception and hallucination involve (1) the minimal self, (2) some temporal structure and coherence, and (3) the dynamics of anticipation and fulfilment. To this extent, the phenomenal character of hallucination can be construed at least partly in terms of how the relevant experience is manifest to the subject in a first-personal manner (minimal self), as temporally and coherently unified (temporality), and as involving a dynamic pattern of anticipations and their 'non-acquaintance-based' fulfilment. To say otherwise would be to fail to take the very subjective (perspectival) nature of consciousness seriously. Nevertheless, veridical perception and (causally matching) hallucination are fundamentally different in as far as there is in principle some phenomenological difference between the dynamically structured interplay of anticipation and acquaintance-based fulfilment in veridical perception and the dynamically less tightly structured pattern of anticipation and non-acquaintance-based fulfilment.

In this way, the appeal to the essential structures of experience can help us delineate the 'partially overlapping' psychological nature of veridical perception and hallucination without entailing their phenomenal sameness. The thought is that were there no such structural features, there would not obtain any phenomenally conscious experience at all, let alone the indiscriminability condition.

3. Positive Metaphysical Disjunctivism

Structural disjunctivism goes beyond Martin's version of 'negative epistemic' disjunctivism since it offers a *positive metaphysical* thesis about the phenomenal character of hallucination (i.e., what kind of stuff 'constitutes' the phenomenal nature of hallucination as a basic psychological kind as distinct

from veridical perception) by reference to the essential *structural* features that are constitutive of the phenomenology of every conscious hallucinatory experience.

When accounting for the phenomenal character of causally matching hallucination, the negative epistemic disjunctivist appeals to the modal, impersonal condition of indiscriminability that is construed as both necessary and sufficient for the occurrence of a causally matching hallucination. Structural disjunctivism replaces talk of the modal, impersonal notion of indiscriminability that is often considered to be opaque and uninformative (or undertheorized) with talk of the *structural* commonalities and differences between perception and hallucination that is more informative and instructive. The structural analysis allows the naïve realist to clarify the explanatory role of the presence of mind-independent entities in accounting for perceptual phenomenology and provides a promising way to contextualize the notion of acquaintance that is central to naïve realism within a wider nexus of the various psychological kinds (i.e., how it fits within the overall 'stream-like' structure of consciousness as a whole). It also respects the basic fact about the metaphysical nature of hallucination, namely that it is a psychological kind that is necessarily constitutive of a single 'stream-like' unity of consciousness just like other psychological states (e.g., perceiving, thinking, imagining, remembering).

It is also important to note that structural disjunctivism is not subject to the screening off problem because the appeal to the structural features of experience does not undermine or screen off the privileged explanatory role of acquaintance in accounting for perceptual phenomenology. On this account, the 'non-acquaintance-based' process of fulfilment in hallucination is necessarily a substitute for the 'acquaintance-based' process of fulfilment in veridical perception. There are reasons to think that there is a qualitative (phenomenological) difference between the dynamically structured pattern of anticipation and *acquaintance-based* fulfilment in veridical perception and the dynamically less tightly structured pattern of anticipation and *non-acquaintance-based* fulfilment in hallucination. The perceived world is "inexhaustible" and lends itself "to an infinite exploration" (Merleau-Ponty, 1945/2012, p. 338). The meaning of the latter *derives from* and is thus *parasitic upon* the meaning of the former.

How does structural disjunctivism fare with the dog problem? To call, the problem was that the negative epistemic condition of indiscriminability cannot accommodate the phenomenal character of various kinds of hallucinations that could be had by a cognitively unsophisticated creature who lacks relevant conceptual and linguistic capacities to make introspective judgments about her own experiences (Siegel, 2004; 2008). On one level, the indiscriminability condition may require the capacity for reflective judgment and is thus too cognitively demanding for a cognitively

unsophisticated dog. On another level, the concern was that it is unclear how the modal, impersonal notion of indiscriminability could in principle capture 'what it is like' or 'what it *could* be like' for a hallucinating dog to be in a particular experiential situation. That is, we cannot pick out the relevant kind of hallucinatory experience simply by appealing to the impersonal, modalized notion of indiscriminability (i.e., in virtue of the experience's indiscriminability property).

The dog problem gets no grip against structural disjunctivism, however. First, the presence of the structural features of experience is not cognitively demanding and thus does not exclude or undermine the possibility of a subjectively indistinguishable hallucination had by a cognitively unsophisticated dog. The appeal to the structural features of experience is meant to enable us to describe our pre-reflective stance on the worldly and psychological contexts within which our experiences arise, rather than what one can come to know explicitly 'through reflection'. The structural 'conditions' for perceptual experience are less demanding than the cognitive capacity for explicit reflection on one's experiences. Second, structural disjunctivism has additional resources to capture 'what it is like' for a subject to have a conscious experience in the hallucinating dog's situation – by reference to the structural features of consciousness. On this view, a dog would still be able to have a causally matching hallucination with some phenomenal character as far as she possesses some structural features, albeit in a limited form.

There are reasons to think that at least some non-human animals may possess some limited capacity for self-consciousness, temporal coherence, and sensorimotor knowledge. For example, the fact that some animals (e.g., primates, dolphins) can consistently pass the mirror-mark test is often viewed as evidence for self-recognition (Gallup, 1970; Shumaker & Swartz, 2002). Animal behaviours like food caching and nest building are taken to be suggestive of some, albeit limited, capacity for 'episodic-like' memory and situation-specific planning (Clayton, et al., 2003; Crystal, 2009; Soley & Alvarado-Diaz, 2011). There is also evidence that, like humans, some animals (e.g., cats) develop their capacity for depth perception through self-actuated movements (Held & Hein, 1963).

The phenomenologically motivated, *structural* approach to the nature of human consciousness that I have developed and defended in this thesis may have some important implications for the ongoing scientific and philosophical discussions about the nature of non-human (e.g., non-linguistic) animal consciousness. For example, it can provide additional conceptual and descriptive tools to better delineate the commonalities and differences between the structures of human and animal experiences. Reflections on the structures of animal consciousness may also have important ethical implications. These considerations open up interesting avenues for further investigation.

It is worth noting that my proposed account also differs from another prominent disjunctivist response to the problem of hallucination, defended by Fish (2009). To recall, according to his 'eliminativist' account, hallucinations may lack phenomenal character altogether and the sense in which hallucinations are 'non-veridical' is to be explained not by their fundamental (psychological) nature but in terms of their effects, namely some mistaken higher-order belief or thought about them. That is, a psychological state or event that is intrinsically (fundamentally) quite different from a veridical perception will acquire the status of hallucination when it is mistaken for a veridical perception. However, the 'effect-based' account seems at odds with the intuitive sense that some experiences are erroneous or non-veridical by their very fundamental (psychological) nature, not by virtue of some higher-order thoughts about them.[89]

Structural disjunctivism offers an alternative, more straightforward way to home in on the phenomenal character of hallucination in terms of what is intrinsic and fundamental to the experience itself (i.e., its essential *structural* features). In this way, one need not deny the phenomenal nature of hallucination altogether. Nor is it necessary to appeal to some higher-order thought or belief to explain the non-veridical character of hallucination.

4. Concluding Remarks

Overall, structural disjunctivism provides the naïve realist the much-needed resources to develop a plausible response to the causal argument. On this view, the phenomenal similarity and difference between perception and hallucination are accounted for in part in terms of their structural similarity and difference. Importantly, the appeal to the structural similarity between perception and hallucination which grounds their 'partially overlapping' psychological nature gives more credence to the idea that there would occur a phenomenally conscious experience in the case of causally matching hallucination. In this way, the appeal to the structural features of experience places us in a better position to account for the sense in which causally matching hallucination has some phenomenal character of its own – than the mere appeal to the modal impersonal condition of indiscriminability (Martin) or the mere appeal to the cognitive effects of those states or events (Fish).

What I have argued in this thesis may be resisted by some 'austere' naïve realists who would maintain that the nature of perception is essentially and exclusively determined by some mind-independent

---

[89] See Siegel (2008) and Martin (2013) for critical discussions of Fish's view,

entities. For them, the claim that perceptual phenomenology is at least in part constituted by some structural features of experience itself might be taken as neither 'naïve' (as it appeals to something beyond what is 'directly presented' in perceiving) nor 'realist' (as it invokes some necessary, non-object-dependent properties of experience itself).

To maintain that we come in direct contact with a mind-independent reality is to take a crucial first step towards an understanding of how we, as conscious perceivers, are always situated and embedded in the world (i.e., our 'being-in-the-world'). However, to get a grip on the nature of perception and hallucination in their proper 'lived' context, we must go further in our description and analysis of the way our experiences are manifest to us. The appeal to the structural features of experience provides some relevant resources for such a task. If the ultimate goal of naïve realism comes down to offering the best (descriptive) account of perception as it appears to us from our pre-theoretical stance, and a plausible disjunctivist story about the nature of hallucination, then what is perhaps needed is a philosophical theory that goes beyond naiveté. In this thesis, I have argued that the integration of naïve realism and the structural approach to consciousness offers a promising candidate framework that is worthy of further investigation and defence.

Bibliography

Allen, K., 2009. Being Coloured and Looking Coloured. *Canadian Journal of Philosophy,* 39(4), pp. 647-670.

Allen, K., 2015. Hallucination and Imagination. *Australasian Journal of Philosophy,* 93(2), pp. 287-302.

Allen, K., 2016. *A Naive Realist Theory of Colour.* Oxford: Oxford University Press.

Allen, K., 2019. Merleau-Ponty and Naive Realism. *Philosophers' Imprint,* Volume 19, pp. 1-25.

Andy, C., 2013. Whatever Next? Predictive brains, situated agents, and the futureof cognitive science. *Behavioral and Brain Sciences,* Volume 36, pp. 181-253.

Armstrong, D. M., 1968. *A Materialist Theory of the Mind.* London: Routledge.

Bayne, T. & Montague, M. eds., 2011. *Cognitive Phenomenology.* Oxford: Oxford University Press.

Beaton, M., 2016. Sensorimotor Direct Realism: How We Enact Our World. *Constructivist Foundations,* 11(2), pp. 265-276.

Beck, O., 2019. Rethinking Naive Realism. *Philosophical Studies,* 176(3), pp. 607-633.

Belt, J., 2019. Between Minimal Self and Narrative Self: A Husserlian Analysis of Person. *Journal of the British Society for Phenomenology,* 50(4), pp. 325-323.

Berkeley, G., 1710/2009. A Treatise Concerning the Principles of Human Knowledge. In: D. M. Clarke, ed. *George Berkely: Philosophical Writings.* Cambridge: Cambridge University Press, pp. 67-149.

Birngruber, T., Schröter, H. & Ulrich, R., 2015. Introducing a control condition in the classic oddball paradigm: Oddballs are overestimated in duration not only because of their oddness. *Attention, Perception, & Psychophysics,* Volume 77, pp. 1737-1749.

Block, N., 1980. Troubles With Functionalism. In: N. Block, ed. *Readings in the Philosophy of Psychology.* Cambridge, MA: Harvard University Press, pp. 231-254.

Bortolan, A., 2020. Affectivity and the distinction between minimal and narrative self. *Continental Philosophy Review,* 53(1), pp. 67-84.

Brewer, B., 2000. *Perception and Reason.* Oxford: Oxford University Press.

Brewer, B., 2006. Perception and Content. *European Journal of Philosophy,* 14(2), pp. 165-181.

Brewer, B., 2008. How to Account for Illusion. In: F. Macpherson & A. Haddock, eds. *Disjunctivism: Perception, Action, Knowledge.* Oxford: Oxford University Press, pp. 168-180.

Brewer, B., 2011. *Perception and Its Objects.* Oxford : Oxford University Press.

Bubic, A., Cramon, D. Y. v. & Schubotz, R. I., 2010. Prediction, cognition and the brain. *Frontiers in Human Neuroscience,* 4(25), pp. 1-25.

Burge, T., 2010. Origins of Perception. *Disputatio,* 4(29), pp. 1-38.

Byrne, A., 2001. Intentionalism Defended. *Philosophical Review,* Volume 110, pp. 199-240.

Campbell, J., 1997. The Simple View of Colour. In: A. Byrne & D. R. Hilbert, eds. *Readings on Color, Volume 1: The Philosophy of Color.* Cambridge, MA: MIT Press, pp. 177-190.

Campbell, J., 2002. *Reference and Consciousness.* Oxford: Oxford University Press.

Campbell, J., 2009. Consciousness and Reference. In: A. Beckermann & S. Walter, eds. *Oxford Handbook of Philosophy of Mind.* Oxford: Oxford University Press, pp. 648-662.

Carr, D., 1999. *The Paradox of Subjectivity: The Self in the Transcendental Tradition.* Oxford: Oxford University Press.

Carruthers, P., 2000. *Phenomenal Consciousness: A Naturalistic Theory.* New York: Cambridge University Press.

Carson, D. M., 1999. Temporal Distortions and the Ejection Decision. *Flying Safety,* 55(6), pp. 4-7.

Cavedon-Taylor, D., 2011. Perceptual Content and Sensorimotor Expectations. *The Philosophical Quarterly,* 61(243), pp. 383-391.

Chalmers, D., 1995. Facing up to the problem of consciousness. *Journal of Consciousness Studies,* 2(3), pp. 200-219.

Chalmers, D., 1996. *The Conscious Mind: In Search of a Fundamental Theory.* Oxford: Oxford University Press.

Chuard, P., 2011. Temporal Experiences and Their Parts. *Philosophers' Imprint,* 11(11), pp. 1-28.

Chuard, P., 2017. The snapshot conception of temporal experiences. In: I. Phillips, ed. *The Routledge Handbook of Philosophy of Temporal Experience.* London: Routledge, pp. 121-132.

Clark, A., 2008. *Supersizing the Mind: Embodiment, Action, and Cognitive Extension.* Oxford: Oxford University Press.

Clayton, N. S., Bussy, T. & Dickinson, A., 2003. Can Animals Recall the Past and Plan for the Future?. *Nature Reviews: Neuroscience,* Volume 4, pp. 685-691.

Coull, J. T. & Nobre, A. C., 2008. Dissociating explicit timing from temporal expectation with fMRI. *Current Opinion in Neurobiology,* 18(2), pp. 137-144.

Crane, T., 2000. Introspection, Intentionality, and the Transparency of Experience. *Philosophical Topics,* Volume 28, pp. 49-67.

Crane, T., 2003. The Intentional Structure of Consciousness. In: Q. Smith & A. Jokic, eds. *Consciousness: New Philosophical Perspectives.* Oxford: Oxford University Press, pp. 33-56.

Crane, T., 2009. Is Perception a Propositional Attitude?. *Philosophical Quarterly,* 59(236), pp. 452-469.

Crystal, J. D., 2009. Elements of episodic-like memory in animal models. *Behavioural Processes,* 80(3), pp. 269-277.

Currie, G., 2002. Imagination, Delusion and Hallucinations. *Mind & Language,* 15(1), pp. 168-183.

Currie, G. & Jureidini, J., 2001. Delusion, rationality, empathy: Commentary on Davies et al.. *Psychiatry & Psychology,* Volume 8, pp. 159-162.

Currie, G. & Ravenscroft, I., 2002. *Recreative Minds: Imagination in Philosophy and Psychology.* Oxford: Oxford University Press.

Dainton, B., 2000. *Stream of Consciousness: Unity and Continuity in Conscious Experience.* Routledge: Routledge.

Damasio, A. R., 1994. *Descartes' Error: Emotion, Reason, and the Human Brain.* New York: Putnam.

Dennett, D. C., 1991. *Consciousness Explained.* Boston: Little, Brown and Company.

Dretske, F., 1981. *Knowledge and the Flow of Information.* Oxford: Blackwell.

Dretske, F., 1995. *Naturalizing the Mind.* Cambridge, MA: MIT Press.

Dretske, F., 2003. Experience as Representation. *Philosophical Issues,* 13(1), pp. 67-82.

Dreyfus, H. L., 2005. Overcoming the Myth of the Mental: How Philosophers Can Profit from the Phenomenology of Everyday Expertise. *Proceedings and Addresses of the American Philosophical Association,* 79(2), pp. 47-65.

Dreyfus, H. L., 2013. The Myth of the Pervasiveness of the Mental. In: J. K. Schear, ed. *Mind, Reason, and Being-in-the-World: The McDowell-Dreyfus Debate.* London: Routledge, pp. 15-40.

Droit-Volet, S. & Wearden, J., 2016. Passage of time judgments are not duration judgments: Evidence from a study using experience sampling methodology. *Frontiers in Psychology,* 7(176), pp. 1-7.

Duncan, M., 2018. Subjectivity as Self-Acquaintance. *Journal of Consciousness Studies,* 25(3), pp. 88-111.

Farkas, K., 2013. A sense of reality. In: F. Macpherson & D. Platchias, eds. *Hallucinations: Philosophy and Psychology.* Cambridge, MA: MIT Press, pp. 399-417.

ffytche, D. H., 2013. The Hallucinating Brain: Neurobiological Insights into the Nature of Hallucinations. In: F. Macpherson & D. Platchias, eds. *Hallucination: Philosophy and Psychology.* Cambridge, MA: MIT Press, pp. 45-63.

Fish, W., 2009. *Perception, Hallucination, Illusion.* Oxford: Oxford University Press.

Flaherty, M., 1999. *A Watched Pot: How We Experience Time.* London: New York University Press.

Foglia, L. & O'Regan, J. K., 2016. A New Imagery Debate: Enactive and Sensorimotor Accounts. *Review of Philosophy and Psychology,* Volume 7, pp. 181-196.

French, C., 2014. Naive Realist Perspectives on Seeing Blurrily. *Ratio,* 27(4), pp. 393-413.

French, C., 2018. Naive Realism and Diaphaneity. *Proceedings of the Aristotelian Society,* 118(2), pp. 149-175.

French, C., 2018. Naive Realism and Diaphaneity. *Proceedings of the Aristotelian Society,* Volume 118, pp. 149-175.

French, C. & Phillips, I., 2020. Austerity and Illusion. *Philosophers' Imprint,* 20(15), pp. 1-19.

Friston, K., 2010. The free-enery principle: a unified brain theory?. *Nature Reviews: Neuroscience,* Volume 11, pp. 127-138.

Fuchs, T., 2007. The Temporal Structure of Intentionality and Its Disturbance in Schizophrenia. *Psychopathology,* 40(4), pp. 229-235.

Fuchs, T., 2013. Temporality and psychopathology. *Phenomenology and the Cognitive Sciences,* Volume 12, pp. 75-104.

Gallagher, S., 1998. *The Inordinance of Time.* Evanston, IL: Northwestern University Press.

Gallagher, S., 2000. Philosophical conceptions of the self: implications for cognitive science. *Trends in Cognitive Sciences,* 4(1), pp. 14-21.

Gallagher, S., 2005. *How the Body Shapes the Mind.* Oxford: Oxford University Press.

Gallagher, S. & Zahavi, D., 2012. *The Phenomenological Mind.* 2nd ed. London: Routledge.

Gallup, G. G. J., 1970. Chimpanzees: Self-Recognition. *Science,* 167(3914), pp. 86-87.

Garrett, M. & Silva, R., 2003. Auditory hallucinations, source monitoring, and the belief that 'voices' are real.. *Schizophrenia Bulletin.,* Volume 29, p. 445–457.

Geldard, F. A. & Sherrick, C. E., 1972. The Cutaneous 'Rabbit': A Perceptual Illusion. *Science,* 178(4057), pp. 178-179.

Genone, J., 2014. Appearance and Illusion. *Mind,* 123(490), pp. 339-376.

Gibson, J. J., 1979. *The Ecological Approach to Visual Perception.* Boston, MA: Houghton Mifflin.

Gipps, R. G. T., 2022. *On Madness: Understanding the Psychotic Mind.* London: Bloomsbury.

Giustina, A., 2022. Introspective knowledge by acquaintance. *Synthese,* 200(2), pp. 1-23.

Gregory, D., 2016. Imagination and Mental Imagery. In: A. Kind, ed. *Routledge Handbook of Philosophy of Imagination.* London: Routledge, pp. 97-110.

Grush, R., 2005. Internal models and the construction of time: generalizing from state estimation to trajectory estimation to address temporal features of perception, including temporal illusions. *Journal of Neural Engineering,* Volume 2, pp. 209-218.

Grush, R., 2007. Time and Experience. In: T. Müller, ed. *Philosophie der Zeit: Neue Analytische Anätze.* Frankfurt am Main: Klostermann, pp. 27-44.

Hancock, P. A. & Weaver, J. L., 2005. On Time Distortions Under Stress. *Theoretical Issues in Ergonomics Science,* 6(2), pp. 193-211.

Hawthorne, J. & Kovakovich, K., 2006. Disjunctivism. *Proceedings of the Aristotelian Society, Supplementary Volumes,* Volume 80, pp. 145-183.

Held, D. & Hein, A., 1963. Movement-produced stimulation in the development of visually guided behavior. *Journal of Comparative and Physiological Psychology,* 56(5), pp. 872-876.

Hellie, B., 2013. The Multidisjunctive Conception of Hallucination. In: F. Macpherson & D. Platchias, eds. *Hallucination: Philosophy and Psychology.* Cambridge, MA: MIT Press, pp. 149-174.

Helmholtz, H. v., 1867/2005. *Treatise on Physiological Optics: Volume III.* Southall, James P C ed. s.l.:Dover Publications Inc.

Hinton, J. M., 1967. Visual Experiences. *Mind,* Volume 76, pp. 217-227.

Hinton, J. M., 1973. *Experiences: An Inquiry into Some Ambiguities.* Oxford: Clarendon Press.

Hoerl, C., 2013a. Husserl, the Absolute Flow, and Temporal Experience. *Philosophy and Phenomenological Research,* 86(2), pp. 376-411.

Hoerl, C., 2013b. 'A Succession of Feelings, in and of Itself, Is Not a Feeling of Succession'. *Mind,* 122(486), pp. 373-417.

Hoerl, C., 2015. Seeing motion and apparent motion. *European Journal of Philosophy,* 23(3), pp. 676-702.

Hoerl, C., 2017. Temporal Experience and the Philosophy of Perception. In: I. Phillips, ed. *The Routledge Handbook of Philosophy of Temporal Experience: Routled.* London: Routledge, pp. 171-183.

Hoerl, C., 2018. Experience and Time: Transparency and Presence. *Ergo: An Open Access Journal of Philosophy,* Volume 5, pp. 127-151.

Hoerl, C. et al., 2020. Temporal Binding, Causation, and Agency: Developing a New Theoretical Framework. *Cognitive Science,* 44(5).

Hohwy, J., 2013. *The Predictive Mind.* Oxford: Oxford University Press.

Horgan, T. & Tienson, J., 2002. The Intentionality of Phenomenology and the Phenomenology of Intentionality. In: D. Chalmers, ed. *Philosophy of Mind: Classical and Contemporary Readings.* New York: Oxford University Press, pp. 520-533.

Hume, D., 1739/1975. *A Treatise of Human Nature.* Selby L A ed. Oxford: Clarendon Press.

Hurley, S. L., 1998. *Consciousness in Action.* Cambridge, MA: Harvard University Press.

Husserl, E., 1900/2001. *Logical Investigations Vol. 2.* London: Routledge.

Husserl, E., 1907/2010. *Thing and Space: Lectures of 1907.* DOrdrecht: Kluwer.

Husserl, E., 1913/2012. *Ideas: General Introduction to Pure Phenomenology.* New York: Routledge.

Husserl, E., 1931/1960. *Cartesian Meditations: An Introduction to Phenomenology.* The Hague: Martinus Nijhoff Publishers.

Husserl, E., 1952/1989. *Ideas Pertaining to a Pure Phenomenology and to a Phenomenological Philosophy: Second Book.* Dordrecht: Kluwer Academic Publishers.

Husserl, E., 1954/1970. *The Crisis of European Sciences and Transcendental Phenomenology.* Evanston, Illinois: Northweatern University Press.

Husserl, E., 1966a/1991. *On the Phenomenology of the Consciousness of Internal Time (1893-1917).* Bordrecht: Kluwer Academic Publishers.

Husserl, E., 1966b/2001. *Analyses Concerning Passive and Active Synthesis: Lectures on Transcendental Logic (1917-1926).* Dordrecht: Kluwer Academic Publishers.

Husserl, E., 1973. *Experience and Judgment.* London: Routledge.

Hutto, D. D. & Myin, E., 2013. *Radicalizing Enactivism: Basic Minds Without Content.* Cambridge, MA: MIT Press.

Ivanov, I. V., 2022. Bad to the bone: essentially bad perceptual experiences. *Inquiry,* pp. 1-27.

Jackson, F., 1982. Epiphenomenal Qualia. *Philosophical Quarterly,* pp. 127-136.

James, W., 1890. *The Principles of Psychology.* New York: Holt & Co..

Johnston, M., 2004. The Obscure Object of Hallucination. *Philosophical Studies,* Volume 103, pp. 113-183.

Johnston, M., 2006. Better than Mere Knowledge? The Function of Sensory Awareness. In: G. T. S & J. Hawthorne, eds. *Perceptual Experience.* Oxford: Clarendon Press, pp. 260-290.

Kagan, J., 1998. Is there a self in infancy?. In: M. D. Ferrari & R. J. Sternberg, eds. *Self-Awareness: Its Nature and Development.* London: Guilford Press, pp. 137-147.

Kalderon, M. E., 2007. Color Pluralism. *The Philosophical Review,* 116(4), pp. 563-601.

Kalderon, M. E., 2011a. The Multiply Qualitative. *Mind,* 120(478), pp. 239-262.

Kalderon, M. E., 2011b. Colour Illusion. *Noûs,* 45(4), pp. 751-775.

Kant, I., 1781/1998. *Critique of Pure Reason.* Cambridge: Cambridge University Press.

Kelly, S. D., 2005. Seeing Things in Merleau-Ponty. In: T. Carman, ed. *The Cambridge Companion to Merleau-Ponty.* Cambridge: Cambridge University Press, pp. 74-110.

Kim, D. S. H., 2022. Naïve Realism and Minimal Self. *Phenomenology and Mind,* 22(22), pp. 150-159.

Kim, E. & McAuley, J. D., 2013. Effects of pitch distance and likelihood on the perceived duration of deviant auditory events. *Attention, Perception & Psychophysics,* 75(7), pp. 1547-1558.

Korsgaard, C. M., 2009. *Self-Constitution: Agency, Identity, and Integrity.* Oxford: Oxford University Press.

Kosslyn, S. M., Behrmann, M. & Jeannerod, M., 1995. The cognitive neuroscience of mental imagery. *Neuropsychologia,* 33(11), pp. 1335-1344.

Kriegel, U., 2003. Consciousness as intransitive self-consciousness: Two views and an argument. *Canadian Journal of Philosophy,* 33(1), pp. 103-132.

Kriegel, U., 2009. *Subjective Consciousness: A Self-Representational Theory.* Oxford: Oxford University Press.

Krueger, J., 2011. The Who and the How of Experience. In: M. Siderits, E. Thompson & D. Zahavi, eds. *Self, No Self?: Perspectives From Analytical, Phenomenological, and Indian Traditions.* Oxford: Oxford University Press, pp. 27-55.

Langland-Hassan, P., 2015. Imaginative Attitudes. *Philosophy and Phenomenological Research,* 90(3), pp. 664-686.

Larøi, F., de Haan, S., Jones, S. & Raballo, A., 2010. Auditory verbal hallucinations: Dialoguing between the cognitive sciences and phenomenology. *Phenomenology and the Cognitive Sciences,* Volume 9, pp. 225-240.

Leddington, J., 2009. Perceptual Presence. *Pacific Philosophical Quarterly,* 90(4), pp. 482-502.

Locke, J., 1689/1975. *An Essay Concerning Human Understanding.* Oxford: Oxford University Press.

Logue, H., 2012a. What should the naive realist say about total hallucinations?. *Philosophical Perspectives,* 26(1), pp. 173-199.

Logue, H., 2012b. Why Naive Realism?. *Proceedings of the Aristotelian Society,* 112(2), pp. 211-237.

Logue, H., 2013. Good News for the Disjunctivist about (one of) the Bad Cases. *Philosophy and Phenomenological Research,* 86(1), pp. 105-133.

Lycan, W. G., 1987. *Consciousness.* Cambridge, MA: MIT Press.

Lycan, W. G., 1996. *Consciousness and Experience.* Cambridge, MA: MIT Press.

Lycan, W. G., 1999. *Mind and Cognition.* 2nd ed. Oxford: Blackwell.

Marr, D., 1982. *Vision: A Computational Investigation into the Human Representation and Processing of Visual Information.* San Francisco, CA: W.H. Freeman and Company.

Martin, B. et al., 2014. Temporal structure of consciousness and minimal self in schizophrenia. *Frontiers in Psychology,* 5(1175), pp. 1-12.

Martin, M. G. F., 1992. Sight and Touch. In: T. Crane, ed. *The Contents of Experience.* Cambridge: Cambridge University Press, pp. 196-215.

Martin, M. G. F., 2002. The Transparency of Experience. *Mind and Language,* 17(4), pp. 376-425.

Martin, M. G. F., 2004. The Limits of Self-Awareness. *Philosophical Studies,* Volume 120, pp. 37-89.

Martin, M. G. F., 2006. On Being Alienated. In: T. S. Gendler & J. Hawthorne, eds. *Perceptual Experience.* Oxford: Oxford University Press, pp. 354-410.

Martin, M. G. F., 2013. Shiboleth: some comments on William Fish's Perception, Hallucination & Illusion. *Philosophical Studies,* Volume 163, pp. 37-48.

Matherne, S., 2017. Merleau-Ponty on Style as the Key to Perceptual Presence and Constancy. *Journal of the History of Philosophy,* 55(4), pp. 693-727.

McDowell, J., 1982. Criteria, Defeasibility and Knowledge. *Proceedings of the British Academy,* Volume 68, pp. 455-479.

McDowell, J., 1994. *Mind and World.* Cambridge, MA: Harvard University Press.

McDowell, J., 2008. The Disjunctive Conception of Experience as Material for a Transcendental Argument. In: A. Haddock & F. Macpherson, eds. *Disjunctivism: Perception, Action and Knowledge.* Oxford: Oxford University Press, pp. 376-389.

McDowell, J., 2013. Perceptual Experience: Both Relational and Contentful. *European Journal of Philosophy,* 21(1), pp. 144-157.

Mechelli, A. et al., 2007. Misattribution of speech and impaired connectivity in patients with auditory verbal hallucinations. *Human Brain Mapping,* 28(11), pp. 1213-1222.

Merleau-Ponty, M., 1945/2012. *Phenomenology of Perception.* London: Routledge.

Merleau-Ponty, M., 1964. *The Primacy of Perception.* Evanston, IL: Northwestern University Press.

Metzinger, T., 2003. *Being No One: The Self-Model Theory of Subjectivity.* Cambridge, MA: MIT Press.

Metzinger, T., 2011. The No-Self Alternative. In: S. Gallagher, ed. *The Oxford Handbook of the Self.* Oxford: Oxford University Press, pp. 279-296.

Michie, P. T., Badcock, J. C., Waters, F. A. V. & Maybery, M. T., 2005. Auditory hallucinations: Failure to inhibit irrelevant memories. *Cognitive Nueropsychiatry,* Volume 10, pp. 125-136.

Minkowki, E., 1933/2019. *Lived Time: Phenomenological and Psychopathological Studies.* Evanston, Illinois: Northwestern University Press.

Mishara, A. L., Lysaker, P. H. & Schwartz, M. A., 2014. Self-disturbances in Schizophrenia: History, Phenomenology, and Relevant Findings From Research on Metacognition. *Schizophrenia Bulletin,* 40(1), pp. 5-12.

Moore, G. E., 1903. The Refutation of Idealism. *Mind,* XII(4), pp. 433-453.

Moran, A., 2019. Naïve Realism, Hallucination, and Causation: A New Response to the Screening Off Problem. *Australasian Journal of Philosophy,* 97(2), pp. 368-382.

Moran, D., 2000. *Introduction to Phenomenology.* London: Routledge.

Nagel, T., 1974. What Is It Like to Be a Bat?. *The Philosophical Review,* 83(4), pp. 435-450.

Nanay, B., 2010. Attention and Perceptual Content. *Analysis,* Volume 70, pp. 263-270.

Nanay, B., 2010. Perception and imagination: amodal perception as mental imagery. *Philosophical Studies,* 150(2), pp. 239-254.

Nanay, B., 2016. Imagination and Perception. In: A. Kind, ed. *Routledge Handbook of the Philosophy of Imagination.* London: Routledge, pp. 124-134.

Nanay, B., 2018. Multimodal Mental Imagery. *Cortex,* Volume 105, pp. 125-134.

Nanay, B., 2022. Amodal Completion and Relationalism. *Philosophical Studies,* Volume 179, pp. 2537-2551.

Nayani, T. H. & S, D. A., 1996. The auditory hallucination: a phenomenological survey. *Psychological Medicine,* 26(1), pp. 177-189.

Nelson, B., Thompson, A. & Yung, A. R., 2013. Not all first-episode psychosis is the same: preliminary evidence of greater basic self-disturbance in schizophrenia spectrum cases. *Early Intervention in Psychiatry,* 7(2), pp. 200-2004.

Noë, A., 2004. *Action in Perception.* Cambridge, MA: MIT Press.

Noë, A., 2005. Real Presence. *Philosophical Topics,* 33(1), pp. 235-264.

Noë, A., 2008. Reply to Campbell, Martin, and Kelly. *Philosophy and Phenomenological Research,* 76(3), pp. 691-706.

Noë, A., 2012. *Varieties of Presence.* Cambridge, MA: Harvard University Press.

Noordhof, P., 2002. Imagining Objects and Imagining Experiences. *Mind & Language,* 17(4), pp. 426-455.

Noyes, R. J. & Kletti, R., 1977. Depersonalization in response to life-threatening danger. *Comprehensive Psychiatry,* 18(4), pp. 375-384.

O'Regan, J. K., 2011. *Why Red Doesn't Sound Like a Bell: Understanding the Feel of Consciousness.* New York: Oxford University Press.

O'Regan, J. K. & Noë, A., 2001. A sensorimotor account of vision and visual consciousness-Authors' Response-Acting out our sensory experience. *Behavioral and Brain Sciences,* 24(5), pp. 883-917.

Paivio, A., 1971. *Imagery and Verbal Processes.* New York: Holt, Rinehart and Winston.

Paivio, A., 1986. *Mental Representations: A Dual Coding Approach.* Oxford: Oxford University Press.

Pautz, A., 2010. Why Explain Experience in Terms of Content. In: B. Nanay, ed. *Perceiving the World.* New York: Oxford University Press, pp. 254-309.

Pautz, A., 2011. Can Disjunctivists Explain our Access to the Sensible World?. *Philosophical Issues,* Volume 21, pp. 384-433.

Peacocke, C., 1983. *Sense and Content.* Oxford: Oxford University Press.

Peacocke, C., 1992. *A Study of Concepts.* Cambridge, MA: MIT Press.

Perky, C. W., 1910. An Experimental Study of Imagination. *American Journal of Psychology,* Volume 21, pp. 422-452.

Philipse, H., 1995. Trascendental idealism. In: B. Smith & D. W. Smith, eds. *The Cambridge Companion to Husserl.* Cambridge: Cambridge University Press, pp. 239-322.

Phillips, I., 2009. *Experience and Time (Doctoral dissertation).* s.l.:University College London.

Phillips, I., 2013. Perceiving the Passage of Time. *Proceedings of the Aristotelian Society,* 113(3), pp. 225-252.

Phillips, I., 2014a. Breaking the Silence: Motion Silencing and Experience of Change. *Philosophical Studies,* 168(3), pp. 693-707.

Phillips, I., 2014b. Experience of and in Time. *Philosophy Compass,* 9(2), pp. 131-144.

Phillips, I., 2014c. The Temporal Structure of Experience. In: V. Arstila & D. Lloyd, eds. *Subjective Time: The Philosophy, Psychology, and Neuroscience of Temporality.* London: MIT Press, pp. 139-158.

Plumer, G., 1985. The Myth of the Specious Present. *Mind,* 94(373), pp. 19-35.

Pöppel, E., Schill, K. & von Steinbüchel, N., 1990. Sensory integration within temporally neutral systems states: a hypothesis. *Naturwissenschaften,* 77(2), pp. 89-91.

Prinz, J. J., 2012. *The Conscious Brain: How Attention Engenders Experience.* Oxford: Oxford University Press.

Prosser, S., 2016. *Experiencing Time.* Oxford: Oxford University Press.

Ratcliffe, M., 2008. *Feelings of Being: Phenomenology, psychiatry and the sense of reality.* Oxford: Oxford University Press.

Ratcliffe, M., 2014. *Experiences of depression: A study in phenomenology.* Oxford: Oxford University Press.

Ratcliffe, M., 2017. *Real Hallucinations: Psychiatric Illness, Intentionality, and the Interpersonal World.* Cambridge, MA: MIT Press.

Reid, T., 1785/2002. *Essays on the Intellectual Powers of Man.* Edinburgh: Edinburgh University Press.

Richardson, A., 1969. *Mental Imagery.* London: Routledge.

Richardson, L., 2010. Seeing Empty Space. *European Journal of Philosophy,* Volume 18, pp. 227-243.

Roberts, T., 2012. Exploring Enactive Realism. *International Journal of Philosophical Studies,* 20(2), pp. 239-254.

Robinson, H., 1985. The General Form of the Argument for Berkeleian Idealism. In: J. Foster & H. Robinson, eds. *Essays on Berkeley: A Tercentennial Celebration.* Oxford: Clarendon Press, pp. 163-186.

Robinson, H., 1994. *Perception.* London: Routledge.

Romdehn-Romluc, 2009. Merleau-Ponty's Account of Hallucination. *European Journal of Philosophy,* 17(1), pp. 76-90.

Rosenthal, D. M., 1986. Two Concepts of Consciousness. *Philosophical Studies,* Volume 49, pp. 329-359.

Rosenthal, D. M., 2005. *Consciousness and Mind.* New York: Oxford University Press.

Russell, B., 1910. Knowledge by Acquaintance and Knowledge by Description. *Proceedings of the Aristotelian Society,* 11(5), pp. 108-128.

Russell, B., 1912/1967. *The Problems of Philosophy.* Oxford: Oxford University Press.

Russell, B., 1921. *The Analysis of Mind.* London: George Allen and Unwin.

Sacks, O., 2012. *Hallucinations.* New York: Knopf.

Sarbin, T. R., 1967. The concept of hallucination. *Journal of Personality,* 35(3), pp. 359-380.

Sartre, J.-P., 1936/2004. *The Transcendence of the Ego: A Sketch for a Phenomenological Description.* London: Routledge.

Sartre, J.-P., 1940/2010. *The Imaginary: A Phenomenological Psychology of the Imagination.* London: Routledge.

Sartre, J.-P., 1943/1998. *Being and Nothingness: An Essay on Phenomenological Ontology.* London: Routledge.

Sass, L. & Parnas, J., 2003. Schizophrenia, Consciousnesss, and the Self. *Schizophrenia Bulletin,* 29(3), pp. 427-444.

Sass, L. & Parnas, J., 2007. Explaining schizophrenia: The relevance of phenomenology. In: M. C. Chung, B. Fulford & G. Graham, eds. *Reconceiving Schizophrenia.* Oxford: Oxford University Press, pp. 63-96.

Sass, L. & Pienkos, E., 2013. Space, Time, and Atmosphere A Comparative Phenomenology of Melancholia, Mania, and Schizophrenia, Part II. *Journal of Consciousness Studies,* 20(7), pp. 131-152.

Searle, J., 1980. Minds, Brains, and Programs. *The Behavioral and Brain Sciences,* 3(3), pp. 417-424.

Searle, J., 1992. *The Rediscovery of the Mind.* Cambridge, MA: MIT Press.

Searle, J., 2005. The Self as a Problem in Philosophy and Neurobiology. In: T. E. Feinberg & J. P. Keenan, eds. *The Lost Self: Pathologies of the Brain and Identity.* Oxford: Oxford University Press, pp. 7-19.

Segal, S. J., 1972. Assimilation of a stimulus in the construction of an image: The Perky effect revisited. In: P. W. Sheehan, ed. *The function and nature of imagery.* New York: Academic Press, pp. 203-230.

Segal, S. J. & Nathan, S., 1964. The Perky effect: Incorporation of an external stimulus into an imagery experience under placebo and control conditions. *Perceptual and Motor Skills,* Volume 19, pp. 385-395.

Sellars, W., 1978. The Role of Imagination in Kant's Theory of Experience. In: H. W. Johnstone, ed. *Categories: A Colloquium.* s.l.:University of Pittsburgh.

Sethi, U., 2020. Sensible Overdetermination. *Philosophical Quarterly,* 70(280), pp. 588-616.

Shumaker, R. W. & Swartz, B., 2002. When traditional methodologies fail: Cognitive studies of great apes. In: M. Bekoff, C. Allen & G. M. Burghardt, eds. *The Cognitive Animal: Empirical and Theoretical Perspectives on Animal Cognition.* Cambridge, MA: MIT Press, pp. 335-343.

Siegel, S., 2004. Indiscriminability and the Phenomenal. *Philosophical Studies,* Volume 120, pp. 90-112.

Siegel, S., 2008. The Epistemic Conception of Hallucination. In: F. Macpherson & A. Haddock, eds. *Disjunctivism: Perception, Action, Knowledge.* Oxford: Oxford University Press, pp. 205-224.

Siegel, S., 2010. *The Contents of Visual Experience.* New York: Oxford University Press.

Siewert, C., 2011. Phenomenal Thought. In: T. Bayne & M. Montague, eds. *Cognitive Phenomenology.* Oxford: Oxford University Press, pp. 236-267.

Smith, J., 2005. Merleau-Ponty and the Phenomenological Reduction. *Inquiry,* 48(6), pp. 553-571.

Smith, J., 2016. *Experiencing Phenomenology: An Introduction.* London: Routledge.

Snowdon, P. F., 1990. The Objects of Perceptual Experience. *Proceedings of the Aristotelian Society,* Volume 64, pp. 121-150.

Snowdon, P. F., 2008. Hinton and the Origins of Disjunctivism. In: F. Macpherson & A. Haddock, eds. *Disjunctivism: Perception, Action, Knowledge.* Oxford: Oxford University Press, pp. 35-56.

Soley, F. G. & Alvarado-Diaz, I., 2011. Prospective thinking in a mustelid? Eira barbara (Carnivora) cache unripe fruits to consume them once ripened. *Naturwissenschaften,* 98(8), pp. 693-698.

Soteriou, M., 2007. Content and the Stream of Consciousness. *Philosophical Perspectives,* 21(1), pp. 543-568.

Soteriou, M., 2010. Perceiving Events. *Philosophical Explorations,* 13(3), pp. 223-241.

Soteriou, M., 2013. *The Mind's Construction.* Oxford: Oxford University Press.

Speaks, J., 2009. Transparency, Intentionalism, and the Nature of Perceptual Content. *Philosophy and Phenomenological Research,* Volume 79, pp. 539-573.

Spiegelberg, H., 1976. *The Phenomenological Movement: A Historical Introduction.* 2nd ed. The Hague: Martinus Nijhoff.

Stanghellini, G., 2009. Embodiment and schizophrenia. *World Psychiatry,* 8(1), pp. 56-59.

Stanghellini, G. et al., 2016. Psychopathology of Lived Time: Abnormal Time Experience in Persons With Schizophrenia. *Schizophrenia Bulletin,* 42(1), pp. 45-55.

Stanghellini, G. & Rossi, R., 2014. Pheno-phenotypes: a holistic approach to the psychopathology of schizophrenia. *Current Opinion in Psychiatry,* 27(3), pp. 236-241.

Steenhagen, M., 2019. Must naive realists be relationalists?. *European Journal of Philosophy,* 27(4), pp. 1002-1015.

Strawson, G., 1994. *Mental Reality.* Cambridge, MA: MIT Press.

Strawson, G., 2000. The Phenomenology and Ontology of the Self. In: D. Zahavi, ed. *Exploring the Self: Philosophical and Psychopathological Perspectives on Self-Experience.* Amsterdam: John Benjamins Publishing Company, pp. 23-39.

Strawson, P. F., 1970. Imagination and Perception. In: L. Foster & J. W. Swanson, eds. *Experience and Theory.* Amberst, MA: University of Massachusetts Press, pp. 31-54.

Strawson, P. F., 1974. *Freedom and Resentment and Other Essays.* London: Routledge.

Sturgeon, S., 2006. Reflective Disjunctivism. *Aristotelian Society Supplementary Volume,* 80(1), pp. 185-216.

Sturgeon, S., 2008. Disjunctivism About Visual Experience. In: A. Haddock & F. Macpherson, eds. *Disjunctivism: Perception, Action, Knowledge.* Oxford: Oxford University Press, pp. 112-143.

Suchow, J. W. & Alvarez, G. A., 2011. Motion Silences Awareness of Visual Change. *Current BIology,* 21(2), pp. 140-143.

Sul, J. R., 2022. Schizophrenia, Temporality, and Affection. *Phenomenology and the Cognitive Sciences,* 21(4), pp. 927-947.

Tanaka, R. & Yotsumoto, Y., 2017. Passage of time judgments is relative to temporal expectation. *Frontiers in Psychology,* 8(187), pp. 1-11.

Thomas, N. J. T., 1999. Are theories of imagery theories of imagination? An active perception approach to cosncious mental content. *Cognitive Science,* 23(2), pp. 207-245.

Thompson, E., 2007. *Mind in Life: Biology, Phenomenology, and the Sciences of Mind.* Cambridge, MA: Harvard University Press.

Travis, C., 2004. The Silence of the Senses. *Mind,* 113(449), pp. 57-94.

Tse, P. U., Intriligator, J., Rivest, J. & Cavanagh, P., 2004. Attention and the subjective expansion of time. *Perception & Psychophysics,* 66(7), pp. 1171-1189.

Tye, M., 1992. Visual Qualia and Visual Content. In: T. Crane, ed. *The Contents of Experience.* Cambridge: Cambridge University Press, pp. 158-176.

Tye, M., 1995. *Ten Problems of Consciousness.* Cambridge, MA: MIT Press.

Tye, M., 2000. *Consciousness, Colour, and Content.* Cambridge, MA: MIT Press.

Tye, M., 2003. *Consciousness and Persons: Unity and Identity.* Cambridge, MA: MIT Press.

Ulrich, R., Nitschke, J. & Rammsayer, T., 2006. Perceived duration of expected and unexpected stimuli. *Psychological Research,* Volume 70, pp. 77-87.

Ursano, R. J. et al., 1999. Peritraumatic Dissociation and Posttraumatic Stress Disorder Following Motor Vehicle Accidents. *American Journal of Psychiatry,* 156(11), pp. 1808-1810.

Varela, F. J., Thompson, E. & Rosch, E., 1991. *The Embodied Mind: Cognitive Science and Human Experience.* Cambridge, MA: MIT Press.

Vesterager, M., 2019. Towards a Husserlian Integrative Account of Experiential and Narrative Dimensions of the Self. *Journal of Phenomenological Psychology,* 50(2), pp. 162-188.

Walton, K., 1990. *Mimesis as Make-Believe.* Cambridge, MA: Harvard University Press.

Ward, D., 2023. Sensorimotor Relationalism and Conscious Vision. *The Philosophical Quarterly,* 73(1), pp. 258-281.

Watzl, S., 2013. Silencing the experience of change. *Philosophical Studies,* 165(3), pp. 1009-1032.

Wearden, J. H., 2015. Passage of time judgments. *Consciousness and Cognition,* Volume 38, pp. 165-171.

Williamson, T., 1990. *Identity and Discrimination.* Oxford: Blackwell.

Zahavi, D., 1999/2020. *Self-Awareness and Alterity: A Phenomenological Investigation.* 2nd ed. Evanston, Illinois: Northwestern University Press.

Zahavi, D., 2005. *Subjectivity and Selfhood: Investigating the First-Person Perspective.* Cambridge, MA: MIT Press.

Zahavi, D., 2007. Perecption of Duration Presupposes Duration of Perception - or Does it? Husserl and Dainton on time. *International Journal of Philosophical Studies,* 15(3), pp. 453-471.

Zahavi, D., 2010. Inner (Time-)Consciousness. In: D. Lohmar & I. Yamaguchi, eds. *On Time - New Contributions to the Husserlian Phenomenology of Time.* s.l.:Springer, pp. 319-339.

Zahavi, D., 2010. The Experiential Self: Objections and Clarifications. In: M. Siderits, E. Thompson & D. Zahavi, eds. *Self, No Self? Perspectives from Analytical, Phenomenological, and Indian Traditions.* Oxford: Oxford University Press, pp. 56-78.

Zahavi, D., 2014. *Self and Other: Exploring Subjectivity, Empathy, and Shame.* Oxford: Oxford University Press.