# Naïve Realism and the Nature of Hallucination

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# ABSTRACT

The nature of hallucination poses a problem for naïve realism. According to naïve realism, veridical perceptual experiences are constituted, at least partly, by the external world. The same sort of experience could not have occurred if the subject of the experience were not perceptually related to the external world. Hallucinations are experiences that are introspectively indistinguishable from veridical perceptual experiences. However, according to the standard notion of hallucination, these experiences do not involve perception of the external world. How can naïve realists explain the fact that a hallucination is introspectively indistinguishable from a veridical perceptual experience if both mental states are different in nature? The dissertation investigates the different responses that disjunctivist theories of perception offer to this question to support naïve realism.

This thesis offers new and detailed arguments to support a cognitive explanation of the nature of hallucination, according to which, a hallucination is introspectively indistinguishable from a veridical perceptual experience of a certain type due to a cognitive error. Had the cognitive mistake not occurred, the subject would have been able to tell apart by introspection alone the hallucination from a veridical perceptual state. According to this view, the indistinguishability condition of hallucination is relative to a subject and relative to a time.

I argue that a view holding that there could be hallucinations with sensory properties, as well as hallucinations without sensory properties, is compatible with naïve realism so long as it rejects the metaphysical possibility of perfect hallucinations—those hallucinatory episodes that are impersonally introspectively indiscriminable from veridical perceptual experiences. I explain the advantages that such view has over other disjunctivist theories of perception. Thus, in this thesis, I put forward, and argue in detail for, a new account of perceptual and hallucinatory experience.

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# AUTHOR'S DECLARATION

I declare that, except where explicit reference is made to the contribution of others, this dissertation is the result of my own work and has not been submitted for any other degree at the University of Glasgow or any other institution.

Raúl Ros Morales

# INTRODUCTION

When I wake up, just by opening my eyes, I see my bedroom. The visual experience[1] that I have when I see my bedroom seems to be nothing more than the presentation of my bedroom from a certain perspective. This visual state seems to involve parts of my bedroom, which includes certain physical objects, such as books, walls and windows. This visual episode also seems to involve properties that those physical objects seem to have, such as colours and shapes. As I focus my attention to other parts of my bedroom, I have direct visual access to other physical objects that are in my bedroom, or so it seems.

I just described how my visual experience strikes me as being to introspective reflection on it. Introspection is the ability that subjects have to access to their own mental states from the first-person perspective. When I introspect my visual episode, it seems to me (from the first-person point of view) that the ontological structure of my visual state is constituted by the external objects and properties that I am seeing[2].

Advocates of a theory of perception that has been derided as 'naïve realism' claim that my visual state is indeed constituted by those external objects and properties. They hold that introspection gives us direct access to the ontological nature of our veridical perceptual episodes—that is, the sort of experiences that one has while accurately perceiving the external world. According to naïve realism, it introspectively seems to me that my visual state is constituted by the perceived external objects and properties because it is indeed constituted by those external objects and properties.

However, naïve realism has been challenged many times throughout History. Scientific investigation and meticulous observation have proved that, on many occasions, things are not as they seem to be. As an example, people used to

[1] In this thesis 'visual experience', 'visual episode' and 'visual state' are interchangeable terms.
[2] In this thesis, when I state that one sees, hears, smells, touches, or tastes something it means that one is perceptually related to the external world. In other words, one cannot see, hear, smell, touch or taste something that does not belong to the external world. However, one can have sensory experiences that are not perceptual in nature.

think that it was obvious that the sun revolves around the Earth, but science discovered that it is the other way around.

The analysis of illusions and hallucinations—cases of which, philosophers refer to as 'bad cases' where perception goes wrong or fails—have been used for centuries to reject naïve realism. An illusion is typically defined in philosophy of perception as occurring when one perceives an external object, but one perceives it inaccurately (Macpherson, 2013:6). For instance, visual illusions include cases in which a ball is seen to be rectangular, or a red apple is seen to be green. The concept hallucination traditionally refers to cases in which subjects undergo an experience that it is as if they were perceiving something, when the thing they take themselves to perceive is not, in fact, perceived (Fish, 2010:3). For example, we say that Sophie is visually hallucinating my cat Neko when it introspectively seems to Sophie that she is seeing Neko, when in fact, she is not seeing Neko. It is important to note that this does not mean that Sophie cannot know that she is not seeing Neko when she has a visual hallucination of Neko. She might know that she is not seeing Neko because she remembers that Neko died long time ago. However, she cannot know by introspection alone—just by attending to her own mental state from the first-person point of view—that she is not seeing Neko.

As I have said, a veridical perceptual episode is the kind of experience that one has when one is accurately perceiving the external world. Therefore, an illusion is not a veridical perceptual experience, however, it is a perceptual experience after all. Perceptual experiences are those mental states that one has while perceiving the external world—regardless of whether it is perceived accurately or not. In contrast, hallucinations are not perceptual experiences because there are no objects or properties that the subject perceives in virtue of having these episodes (Fish, 2009:32; Macpherson, 2016:268).

It is worth pointing out that I am assuming a realist framework—there is an external world that is mind-independent. The existence of the world does not depend on our mental states. The world could exist even if no one perceives it. In contrast to realism, idealism is the view that the world is mind-dependent (Macpherson, 2010:4). As Berkeley, one of the most prominent defenders of idealism, claims, to be is to be perceived (Muehlmann, 1995).

The concept of perceptual experience and hallucination are, therefore, characterised under this realist framework. However, there might still be some discrepancies among advocates of realism when it comes to defining these concepts. For example, one could argue that perceiving the external world is not a necessary condition to have a perceptual experience and a hallucination is, after all, a perceptual experience. Other might claim that hallucinations are perceptual experiences because, when one hallucinates, one is perceiving the external world in a non-standard way. The first discrepancy is nothing more than a terminological issue that does not affect the dialectic of this thesis. If the reader wishes to characterise hallucination as a perceptual experience, then so be it, as long as they accept the traditional characterisation of hallucination—hallucination does not involve perception of the external world. But note that in this thesis I will stick to the statement that hallucinatory episodes are not perceptual experiences because, according to my characterisation of perceptual experience, this sort of mental state involves perception of the external world. The second discrepancy could give rise to a long philosophical debate. There is a way to defend naïve realism from those philosophical problems that I will not address in this thesis that consists in rejecting the traditional definition of hallucination. Some naïve realists (Weir, 2004; Raleigh, 2014; Macgregor, 2015; Manzotti, 2016; Power, 2018) hold that when one hallucinates, one is perceiving the external world in a non-standard way. However, even though this view could offer an appealing strategy to defend naïve realism from the philosophical problems that the nature of hallucination might pose to this theory of perception, I will not deal with this view in this thesis. I will stick to the traditional conception of hallucination—the conception that hallucinations do not involve perceptual contact with the external world.

Another crucial concept that I will deal with throughout this thesis is the concept of sensory state. The ontological nature of a sensory episode is also subject to discussion. It is widely accepted that sensory states are, in one way or another, related to the senses: seeing, touching, smelling, tasting or hearing. However, the necessary conditions to have a sensory experience is an open question. I will distinguish two different ways of rendering the notion of sensory episode: a broad definition of sensory episode and a narrow definition of sensory experience. On the one hand, according to the narrow definition of sensory state, these are experiences that we have while perceiving the external world. This

means that sensory experiences and perceptual experiences are the same thing, they are interchangeable terms. According to this narrow notion of sensory state, dreams, imaginary and hallucinatory episodes are not sensory experiences.

On the other hand, according to the broad definition of sensory state, these are experiences that one could have even if one is not perceptually related to the external world. According to this definition, a perceptual episode is a sort of sensory experience, however, there are sensory states that are not perceptual in nature. There is a philosophical debate about the nature of sensory experience in a broad sense. For example, Martin (2004, 2006) holds that sensory experiences are those that are impossible to tell apart by introspection alone from veridical perceptual episodes. A veridical perceptual state is a sensory experience because it is introspectively indistinguishable from itself. Sophie cannot tell apart by introspection alone a veridical perceptual experience of Neko that she has at $t_1$ that is qualitatively identical (of the same type) as a veridical perceptual experience of Neko that she has at $t_2$. According to this view, a non-perceptual experience would be also qualified as a sensory state if it is impossible to tell apart by introspection alone from a veridical perceptual episode of a certain kind. This characterisation of the nature of sensory experience has been challenged (Smith, 2002; Siegel, 2004). Detractors of Martin's conception of sensory experience claim that there are sensory states that are not introspectively indistinguishable from veridical perceptual experiences. These sorts of mental states could be dreams experiences or sensory imagery episodes. However, the question of what makes those sorts of mental states to be sensory episodes remains open. I will stick to the broad definition of sensory state that includes perceptual experiences, hallucinations, sensory imagery episodes and dream experiences. In chapter 4, I will address Martin's conception of sensory state.

In spite of these conceptual discrepancies in the literature of philosophy of perception, scholars work hard to offer a plausible account of the nature of such mental states. In this thesis, I will focus on the nature of hallucination and the problems that this sort of mental state poses to naïve realism. As I said, some detractors of naïve realism also appeal to illusions to reject this theory, however, I will set illusions aside and I will focus only on hallucinations due to two reasons. The first reason concerns the scope of the project. I think that exploring the

nature of hallucination in detail will provide better dialectic results than analysing both mental states. The second reason is that I hold that the philosophical problems that the nature of hallucination poses to naïve realism are more worrisome than the philosophical problems that the nature of illusion poses to this theory of perception. When one has an illusion, one is perceptually related to the external world, and hence, one could appeal to one's perceptual relation to the external world to explain the nature of illusion. However, when one has a hallucination, one is not perceptually related to the external world, then one cannot appeal to one's perceptual relation to explain the nature of hallucination.

The study of the nature of hallucination plays a significant role in shaping philosophical theories of perception. Such experiences are of interest because they impact upon our understanding of the nature of the mind, what it is to be conscious of our environment and how our perceptual systems work. In addition, reflection on this kind of mental state will be of value for the treatment of people who hallucinate (Macpherson, 2013). In this thesis, I will focus on the impact that the study of hallucination has on shaping philosophical theories of perception, more specifically, how it is used to detract naïve realism and how naïve realists can resist the argument from hallucination to preserve this view.

As Searle (2015:10) states, authors from modern philosophy, such as Descartes, Leibniz, Spinoza, Locke, Berkeley, Hume and Kant deny the idea that we have direct perceptual access to the external world. They also deny the claim that veridical perceptual experiences are constituted by the external objects and properties that the subject is perceiving. In short, they reject naïve realism. The argument that they offer to reject this view is known as the argument from hallucination (Crane & French, 2021). I will analyse this argument in more detail in chapter 1. A short version of the argument is as follows:

1. Hallucinations are not constituted by the external world.
2. Hallucinations are introspectively indiscriminable from veridical perceptual experiences.
3. Introspectively indistinguishable experiences have the same ontological nature.

C. Therefore, veridical perceptual episodes are not constituted by the external world.

The truth of premises 1 and 2 are guaranteed if one accepts the traditional conception of hallucination. According to this conception, hallucinations are mental states that do not involve perceptual contact with the external world. These are introspectively indistinguishable from veridical perceptual experiences. The truth of premise 3 is, however, highly debatable.

Advocates of the truth of premise 3 are known as common-kind theorists. They hold that veridical perceptual states and hallucinations are identical in nature (Macpherson, 2013). According to the common-kind theory, veridical perceptual episodes and hallucinations are experiences that are not constituted by the external world. Common-kind theorists move from an epistemological assertion to an ontological claim: if one cannot distinguish by introspection alone a mental state from another it is because both states are identical qua mental states. As Fish asserts, common-kind theorists support the common factor principle: "phenomenologically indiscriminable perceptions, hallucinations, and illusions have an underlying mental state in common" (Fish, 2010:13).

In contrast to common-kind theorists, disjunctivists reject the common factor principle. They hold that introspectively indistinguishable experiences can nonetheless be mental states of different nature. According to disjunctivism, a veridical perceptual episode and a hallucination do not have the same ontological structure. As Martin states: "the prime reason for endorsing disjunctivism is to block the rejection of naïve realism" (2004:38).

There has recently been a resurgence of interest in naïve realism. Naïve realists argue that this theory of perception can be defended from the difficulties that stem from the study of the nature of hallucination. The initial key to this defense lies in the endorsement of disjunctivism (Fish, 2009:33). The resurgence of interest in naïve realism is motivated by phenomenological and epistemological reasons. The phenomenological motivation is that naïve realism is the most suitable theory of doing justice to the phenomenology of veridical perceptual experiences (Fish, 2010:106). On Naïve realism, the phenomenal character of a

veridical perceptual state is what it is in virtue of perceiving the external world (Martin, 2004, 2016; Brewer, 2011).

It is widely accepted that the notion of phenomenal character is used to provide an account of the conscious aspects of a mental state that are subjectively accessible. As it has been traditionally expressed, the phenomenal character is referred to explain *what it is like* for the subject to have a mental state (Nagel, 1974; Chalmers, 2002). As Fish claims, the phenomenal character of a sensory episode is "the property of the experience that types the experience by what it is like to undergo it" (2010:79). Two mental states have the same phenomenal character if they are introspectively indistinguishable from each other.

As we will see in chapter 1, naïve realists offer an account to explain the phenomenological particularity and phenomenological generality of an experience by making a distinction between phenomenal character and phenomenal nature. On the one hand, the phenomenal character of an experience is a general attribute of the mental state that is repeatable or shareable. On the other hand, the phenomenal nature of an experience is an unrepeatable feature of the experience that is constituted by the perception of external objects and properties. On naïve realism, a veridical perceptual episode has the phenomenal character it has in virtue of its phenomenal nature—that is, in virtue of perceiving external objects and properties (French & Gomes, 2019). Thus, for example, my veridical perceptual experience of my dog Lucky is partly constituted by Lucky himself and his properties. The phenomenal character of this experience—what it is like to perceive Lucky—metaphysically depends on my perceptual relation with Lucky himself—the phenomenal nature of the veridical perceptual experience.

Common-kind theories deny this phenomenological claim. As we will see in more detail in chapter 1, there are different common-kind theories of perception. On a sense-data theory (e.g., Jackson, 1977), the phenomenal character of a veridical perceptual state is what it is in virtue of perceiving sense data—mind-dependent objects. According to internationalism, the phenomenal character of a veridical perceptual episode is what it is in virtue of having certain representational contents as constituents (e.g., Tye, 2000; Crane, 2001). On naïve realism, the phenomenal character of a veridical perceptual episode is what it is

in virtue of being perceptually related to external objects and properties (e.g., Martin, 2004, 2006; Fish, 2008, 2009). Thus, for example, when Sophie sees my dog Lucky in front of her, it introspectively seems to Sophie that Lucky has such and such qualities—e.g., white hair, round eyes, four legs—because she has direct introspective access to the dog and his qualities in virtue of being perceptually related to Lucky. Of course, she does not have direct introspective access to all Lucky's qualities, only those qualities that are perceived.

Thus, naïve realism offers a simple explanation of the phenomenal character of veridical perceptual experience. It does not appeal to extra worldly objects and properties to explain it—e.g., sense data. When one introspects one's veridical perceptual experience, one does not find anything else other than the presentation of some external objects and properties in one's environment. According to naïve realism, the perceiver is, so to speak, open to some aspects of the external world from a certain perspective.

In spite of this phenomenological advantage, namely, simplicity, naïve realism faces some phenomenological issues. For instance, cases of blurry vision. Two veridical perceptual experiences could instantiate different phenomenal character despite the fact that they are constituted by the same external objects and properties. However, naïve realists have theoretical resources to explain this difference in phenomenal character. On naïve realism, veridical perceptual states do not have to be *fully* constituted by the perceived external objects and properties. on naïve realism, veridical perceptual episodes are, *at least*, *partly* constituted by the perceived external objects and properties (Locatelli, 2016:51). Naïve realists could appeal to other elements that are involved in the perception to explain the difference in phenomenal character, for instance, the subject's perceptual system or the environmental conditions (e.g., lighting conditions). As Soteriou claims "[the phenomenal character of the veridical visual state] is also determined, in part, by the way in which one's visual awareness of those objects and events seem to be structured" (2013:218). Whether one could offer a plausible response to uphold naïve realism from this phenomenological problem is a question that goes beyond the goal of this project. Despite these difficulties, naïve realists hold that this view offers an attractive account of the phenomenology of veridical perceptual states, and it is then a motivation to support it.

The epistemological motivation to endorse naïve realism is that this theory of perception places us in a better epistemological position than common-kind theories. According to the common-kind view, veridical perceptual experiences and hallucinations are the same sort of mental state. When one has a hallucination of *F*, one is not perceptually related to *F*. This sort of experience does not give us perceptual knowledge of *F*. According to Fish, if veridical perceptual experiences are the same sort of mental state as hallucinations, then prima facie veridical perceptual episodes cannot place us in a better epistemological position than hallucinations (2010:109).

Naïve realism takes a different path. According to this view, veridical perceptual experiences and hallucinations are different in nature. Veridical perceptual experiences give us direct perceptual access to the external world, the phenomenal character of this mental state metaphysically depends on our perceptual relation to the external world. Hallucinations do not give us perceptual access to the external world, the phenomenal character of this mental state does not metaphysically depend on our perceptual relation to the external world. Thus, according to naïve realists, they offer a plausible account to explain that veridical perceptual states place us in a better epistemological position than hallucinations.

As we can see, phenomenological and epistemological questions are in some way related to each other. In this thesis, I will focus only on the ontological and phenomenological problems that the nature of hallucination poses to naïve realism. In short, I will deal with questions concerning the constituents of those experiences and how they introspectively seem to be to the subject, but I will not address questions regarding the nature of perceptual knowledge and justification.

The aim of this project is to offer a comprehensive analysis of the ontological and phenomenological problems that different disjunctivist theories have to deal with when addressing the nature of hallucinations. I will argue that the best way to defend naïve realism from the argument from hallucination is to explain the indiscriminability condition of hallucination in terms of a cognitive mistake. According to this view, the subject mistakes a mental state of a certain kind—hallucination—for a veridical perceptual experience due to a cognitive error.

Here is a brief overview of the chapters that comprise this thesis:

In chapter 1, I will explore the ontological and phenomenological commitments of naïve realism, as well as the argument from hallucination. I will analyse two rivals of naïve realism: a sense data theory of perception and direct intentionalism. I will also present the types of hallucinatory experiences that are, at least, conceivable. The rest of chapters are dedicated to examining different disjunctivist theories which aim is to support naïve realism.

In chapter 2, I will sketch different types of disjunctivism that one could endorse to support naïve realism. I will explore sensory disjunctivism—the view that veridical perceptual experiences and hallucinations do not have the same sort of sensory phenomenal character. I will show that this view is threatened by the screening-off problem. As I will explain in detail, a solution of the screening-off worry is required for a satisfactory development of naïve realism. This problem threatens the explanatory role that the external world plays in explaining the phenomenal character of veridical perceptual episodes.

In chapter 3 and 4, I will analyse reflective disjunctivism. According to this view hallucinations do not have sensory properties. This theory rises as a response to the screening-off problem. However, I will argue that, despite its efforts, this account does not avoid the screening-off worry.

In chapter 5 and 6 I will analyse cognitive disjunctivism. Like reflective disjunctivism, cognitive disjunctivism also holds that hallucinations lack sensory properties. However, unlike reflective disjunctivism, this view explains the indiscriminability condition of hallucination in a personal sense—the hallucination is introspectively indistinguishable from a veridical perceptual experience due to a subjective failure. I will argue that this account of hallucination avoids the screening-off problem. I will conclude this project by offering a view—pluralist cognitive disjunctivism—that avoids the screening-off worry without giving up the idea that there could be hallucinations with sensory properties.

# CHAPTER 1: NAÏVE REALISM AND COMMON-KIND THEORIES

This chapter is divided in five sections. In the first section, I will clarify the differences between direct realism and naïve realism. In the second section, I will classify different types of hallucinations and I will explore the argument from hallucination against naïve realism. In the third section, I will analyse two theories that reject naïve realism—a sense-data theory and direct intentionalism. In the fourth section, I will present a phenomenological problem for naïve realism, namely, how naïve realists can explain that two different veridical perceptual experiences are introspectively indistinguishable from each other if their ontological nature is constituted by different external objects. Although this problem is not related to the nature of hallucination, the response to this issue will help us to fully understand some key concepts of naïve realism, such as the difference between phenomenal nature and phenomenal character. The understanding of these concepts will be useful to appreciate the difficulties that naïve realists must face when addressing the ontological and phenomenological nature of hallucinations. In the last section I will sum up the key points that has been addressed in this chapter.

## 1.1 Direct realism and naïve realism

Searle, an expert on the philosophy of perception, uses the concept ‘naïve realism’ and ‘direct realism’ as interchangeable terms. As Searle claims: “[the chapter] considers arguments for the rejection of ‘Direct Realism’, sometimes called ‘Naïve Realism’—the view that we directly perceive objects and state of affairs” (2015:10). However, I think that this characterisation of naïve realism is misleading. In order to clarify philosophical terms, I will distinguish between direct realism and naïve realism as follows. As Fish (2017) states, direct realism endorses two claims. The first claim is that external objects, such as red apples, have mind-independent existence (the ‘realism’ part). The second claim is that

our perceptual experiences of those external objects are not mediated by the perception of other entities, such as sense-data[3] (the 'direct' part).

Naïve realism endorses four claims, the two claims that direct realism supports and two additional claims:

1. The naïve ontological claim: veridical perceptual episodes are constituted by the external objects and properties that the subject is perceiving (Campbell, 2002).

2. The naïve phenomenological claim: the phenomenal character of a veridical perceptual experience—that is, what it is like to perceive from the first-person point of view—metaphysically depends on the existence of a certain perceptual relation between the subject and the external world (French & Gomes, 2019)[4].

Thus, while direct realists accept the two first claims, but not necessarily the naïve ontological and phenomenological claims, naïve realists endorse these four claims. Therefore, naïve realism is a specific form of direct realism. All naïve realists support direct realism, but not all direct realists endorse naïve realism.

Consider the following example to illustrate how naïve realism differs from direct realism in their phenomenological commitments. On direct realism, Sophie could have a visual hallucination of my cat Neko that would have the same phenomenal character as the phenomenal character of a veridical visual experience of my cat Neko. However, on naïve realism, Sophie could not have a visual hallucination of Neko that would have the same phenomenal character as the phenomenal character of a veridical visual episode of Neko. On naïve realism, the phenomenal character of the veridical visual state of Neko metaphysically depends on the fact that Sophie is perceptually related to Neko.

[3] Sense-data are mind-dependent objects that, according to sense-data theorists, are the direct objects of perception (Huemer, 2019). I will explore sense-data theories later in this chapter.
[4] An experience has perceptual phenomenal character insofar the subject and the external world are in an appropriate perceptual relation. This entails that if the subject and the external world are not in that appropriate perceptual relation, then an experience cannot have perceptual phenomenal character (see Tahko, 2015; Tahko & Lowe, 2020).

The naïve phenomenological claim is prima facie a counterintuitive claim. It gives rise to the following problem: how can naïve realists accommodate the claim that a hallucination is introspectively indiscriminable from a veridical perceptual experience if they do not have the same phenomenal character? Let us imagine that James has a visual hallucination of a spider. James reacts as if he were perceiving a spider because it introspectively seems to James that he is perceiving a spider. Martin puts forward this example as follows:

> Why did James shriek like that? He was in a situation indiscriminable from the veridical perception of a spider. Given James's fear of spiders, when confronted with one he is liable so to react; and with no detectable difference between this situation and such a perception, it must seem to him as if a spider is there, so he reacts in the same way (Martin, 2004:68).

As we will see in the next chapters, disjunctivists aim to offer a plausible response to this phenomenological issue: veridical perceptual experiences and hallucinations do not share phenomenal character despite the fact that the latter is introspectively indistinguishable from the former. If disjunctivists fail to solve this problem, then naïve realism is untenable, since disjunctivists will have to deny the naïve phenomenological claim—the phenomenal character of a veridical perceptual experience metaphysically depends on the existence of a certain perceptual relation between the subject and the external world. This statement would be false because one could have a mental state with the same phenomenal character as the phenomenal character of a veridical perceptual experience without being perceptually related to the external world. Hence, the phenomenal character of veridical perceptual episodes would not metaphysically depend on a certain perceptual relation between the subject and the external world.

Naïve realism is usually contrasted with a version of modern representationalism[5], namely, direct intentionalism[6], the view that we directly

[5] Modern representationalism is contrasted with sense-data theory. The latter is also a form of representationalism. According to sense-data theories, we perceive representations of the external world, namely, sense data.

[6] There are different versions of modern representationalism (also known as intentionalism) that explain the ontological nature of sensory experiences in terms of intentional contents. One version rejects the claim that we directly perceive the external world (McGinn, 1982; Davies, 1992). Another version endorses the claim that we directly perceive the external world (Tye, 1992, 1995; Shoemaker, 1994; Byrne, 2001; Crane, 2001; Levine, 2003; Chalmers, 2004; Nanay, 2010). To avoid a possible misunderstanding when addressing these two versions, I will call the former version simply 'intentionalism' and the later version 'direct intentionalism'.

perceive the external world in a certain way (Martin, 2004:39). According to this view, the phenomenal character of a veridical perceptual experience does not metaphysically depend on the existence of a certain perceptual relation between the subject and the external world. Rather, according to direct intentionalism, the phenomenal character of a veridical perceptual state metaphysically depends on the intentional content that constitutes the veridical perceptual experience[7].

As Crane and French declare: "the main theories of experience which uphold our ordinary conception of perceptual experience—intentionalism and naive realism—are both usually regarded as versions of *direct realism*" (Crane & French, 2021). Thus, direct intentionalism is a form of direct realism that denies the naïve phenomenological claim.

Following the characterisation of direct realism and naïve realism that I have provided above, we should agree with the idea that Searle (2015, 2018) supports direct realism, but not a naïve realism. Searle denies the claim that we are perceptually related to mind-dependent objects—sense-data—in the veridical perceptual case. Instead, he states that we directly perceive external objects and properties in the veridical perceptual case. However, Searle holds that veridical perceptual experiences and hallucinations have the same ontological nature—he denies the naïve ontological claim. Searle supports a common-kind theory of perception that explain the ontological nature of veridical perceptual experiences and hallucinations in terms of intentional contents. On Searle's view (2015), a veridical perceptual experience is a biological phenomenon that fully takes place in the brain. As he claims: "there is an object out there. There is a subjective experience going on in my head (Searle, 2015:175)". The ontological nature of a veridical perceptual experience is fully accounted by the intentional content that emerges from our brain state. The same sort of intentional content could occur even when the subject is not perceptually related to the external world. According to Searle, the intentional content determines the phenomenal character of the experience. Therefore, Searle also rejects the naïve phenomenological claim. On Searle's view, the phenomenal character of veridical perceptual experiences does not metaphysically depend on our perceptual relation to external objects and

[7] The notion of intentional content is subject to debate. We will see more about the notion of intentional content in the subsection 1.3.2, when addressing direct intentionalism in more detail.

properties. According to Searle, what it is like to perceive could be the same as what it is like to hallucinate—claim that naïve realists deny. In a nutshell, Searle endorses direct intentionalism and the common-factor principle—veridical perceptual experiences and hallucinations have the same ontological nature. Therefore, he rejects naïve realism.

Although Searles holds that veridical perceptual experiences and hallucinations have the same ontological nature, he points out that there is a difference between veridical perceptual episodes and hallucinations that go beyond the ontological nature of such mental states. To explain this difference, he distinguishes between intentional object and intentional content. He argues that the intentional object is what is perceived while the intentional content is never perceived, because it is itself the perceiving of the intentional object (Searle, 2015:21). Hallucinations lack intentional object, but they have the same intentional content as veridical perceptual experiences. In other words, when one hallucinates one is not perceiving anything, however, hallucinations and veridical perceptual episodes have the same ontological nature, namely, a subjective state that is constituted by an intentional content that fully supervenes on a neural state. As Searle claims: "two perceptual experiences can have exactly the same intentional content with an intentional object in one case and no intentional object in the other case" (Searle, 2015:175).

Consider the following example to illustrate Searle's theory of perception. When Julia sees my dog Lucky, the intentional object of Julia's perception is Lucky himself and his properties, Lucky is what is perceived. The intentional content is the subjective experience that Julia has when she is perceptually related to Lucky. A subjective experience that fully emerges from Julia's brain and represents the world in a certain way. According to Searle, this intentional content determines the phenomenal character of the veridical perceptual state. The same sort of intentional content could occur if Julia is not perceptually related to Lucky, and hence, the same sort of subjective experience takes place. On Searle's view, the difference between veridical perceptual states and hallucinations lies in their conditions of satisfaction—their causal antecedents—and the sort of knowledge that one can acquire by having those mental states. However, there is not any difference in the ontological nature of such mental states.

On naïve realism, a veridical perceptual experience is not a mental state that takes place or emerges from the brain. According to this theory of perception, the stimulation of the neural state is a necessary, but not sufficient condition for there to be a veridical perceptual experience. Naïve realists reject the local supervenience thesis—the view that sensory experiences "supervene solely on factors internal to the subject's body" (Raleigh, 2014:81). They hold that perceptual experiences constitutively involve elements of the external world. Following Searle's terminology, according to naïve realism, if a sensory episode lacks intentional object (as it occurs in the hallucinatory case), this sort of sensory episode has an ontological nature that is different from the ontological nature of a mental state that has an intentional object. Unlike Searle, naïve realists hold that the intentional object partly constitutes the ontological nature of the sensory experience. The same sort of mental state cannot occur if the experience does not have an intentional object. As Martin claims: "no experience like this, no experience of fundamentally the same kind, could have occurred had no appropriate candidate for awareness existed" (2004:39).

Once we understand the ontological and phenomenological commitments of direct realism and naïve realism, I will introduce you to different types of hallucinations as well as the argument from hallucination—an argument that has been traditionally used in many forms to reject direct realism and naïve realism.

### 1.2 Different types of hallucinations

So far, we have been talking about perceptual episodes—experiences that one has while perceiving the external world—and hallucinations—experiences that do not involve perception of the external world and that are introspectively indiscriminable from veridical perceptual experiences. In this subsection, I will present different types of hallucination based on their indiscriminability condition, accuracy, aetiology and metaphysical structure.

1. Causally matching hallucinations and non-causally matching hallucinations.

I will characterise a causally matching hallucination as a hallucination that has the same proximate causal conditions as a veridical perceptual experience. Causal conditions of a veridical perceptual experience involve physical events, such as the light reflecting on an external object and impacting on the subject's retina. Proximate causal conditions of a veridical perceptual experience involve the stimulation of certain neural states—a physical event that occurs at the end of the causal chain, after the light hits the subject's retina and the optical nerve transmits information from the eye to the brain. If a hallucination has the same proximate causal condition as a veridical perceptual experience, then both mental states have an underlying neural state in common. In such a case, the hallucination will be characterised as a causally matching hallucination.

To illustrate the possibility of causally matching hallucinations, imagine that I am in perceptual contact with my dog Lucky. When I see Lucky, my neural state $N_1$ is stimulated—$N_1$ has been stimulated in a standard way, that is, the light reflected on Lucky and impacted on my retina, leading to stimulation of $N_1$. However, $N_1$ could be stimulated in a non-standard way when I am not in perceptual contact with Lucky. For example, $N_1$ could be stimulated due to drug intoxication. In such a case, if the neural state leads to an experience that is introspectively indiscriminable from my veridical visual episode of Lucky, then such mental state will be characterised as causally matching hallucination.

In contrast to causally matching hallucinations, non-causally matching hallucinations and veridical perceptual experiences do not have the same proximate causal conditions—both mental states do not have an underlying neural state in common. Sophie would have a non-casually matching visual hallucination of my dog Lucky if Sophie's neural state does not match the neural state of any metaphysically possible veridical perceptual experience.

It is worth noting that there could be non-causally matching hallucinations whose neural states produce the same effects as the neural states underlying a veridical perceptual experience of a certain type. I call this sort of non-causally matching hallucination 'parallel hallucination'. We will see more about this type of hallucination in chapter 3, when exploring reflective disjunctivism.

2. Perfect hallucinations and non-perfect hallucinations.

A perfect hallucination (Raleigh, 2014), sometimes called 'impersonally introspectively indiscriminable hallucination' (Locatelli, 2016), is a hallucination that is metaphysically impossible to tell apart by introspection alone from a veridical perceptual state of a certain kind. If one has a perfect hallucination, then one cannot distinguish by introspection alone such a mental state from a veridical perceptual experience because it is impossible simpliciter to do so, and not just impossible for a certain subject at a certain time. Perfect hallucinations are then *impersonally* introspectively indistinguishable from veridical perceptual experiences—no one could tell apart such a mental state by introspection alone from a veridical perceptual episode (Martin, 2004:38). It is just metaphysically impossible—regardless of the subject's cognitive capacities—to distinguish a perfect hallucination from a veridical perceptual experience of a certain type.

Whether perfect hallucinations are metaphysically possible is an open question. According to common-kind theories and some disjunctivists (e.g., Martin, 2004, 2006) perfect hallucinations are metaphysically possible. However, according to other disjunctivists (e.g., Fish, 2008, 2009), perfect hallucinations are not metaphysically possible. In chapter 2 I will present the causal argument, which aims to support the metaphysical possibility of perfect hallucinations. In chapter 5 I will present Fish's view (2008, 2009), a view that rejects the metaphysical possibility of perfect hallucinations.

In contrast to perfect hallucinations, a non-perfect hallucination is a mental state that could be in principle introspectively discriminable from a veridical perceptual experience, yet the subject mistakes this sort of mental state for a veridical perceptual episode of a certain type. A non-perfect hallucination is not introspectively indiscriminable from a veridical perceptual experience in an impersonal sense. The indistinguishability condition of non-perfect hallucinations is relative to a subject and relative to a time. If Sophie has a non-perfect visual hallucination of Neko, then she cannot know by introspection alone that she is not seeing Neko. However, she cannot know by introspection alone that she is not seeing Neko not because the mental state is metaphysically impossible to tell apart by introspection alone from a veridical visual experience of Neko. Rather,

Sophie cannot know by reflection alone that she is not seeing Neko because the subject—Sophie—is not able to introspectively discriminate two qualitatively different mental states at that *time*.

Those who support the metaphysical possibility of non-perfect hallucination are motivated by the following reasoning: just as there are subjects who are not attentive enough to discriminate different external objects, subjects could also fail to discriminate different mental states—for example, a visual imagery episode of *F* from a veridical perceptual experience of *F*. Some philosophers (Currie, 2000; Currie and Jureidini 2001; Currie and Ravenscroft, 2002) hold that non-perfect hallucinations are misplaced sensory imagery experiences. Subjects take themselves to be in a perceptual state when they are actually in a sensory imagery state (Ratcliffe, 2017:39).

Naïve realism is compatible with this account of the nature of non-perfect hallucinations, namely, non-perfect hallucinations are sensory imagery states. However, we should bear in mind that this is not the only plausible explanation of this sort of mental state. The ontological nature of non-perfect hallucinations is an open question. In fact, there could be non-perfect hallucinations of different ontological nature. For example, some of them might be constituted by sensory imagery states while others might be constituted by, say, sense-data.

3. Accurate and inaccurate hallucinations.

Hallucinations are typically inaccurate, that is, an inaccurate hallucinatory experience does not represent how the external world is. However, there could be accurate hallucinations (also called veridical hallucinations), that is, hallucinatory episodes that accurately represents how the external world is (Lewis, 1980:242; Macpherson, 2013:5). An example of visual veridical hallucination is as follows. It is metaphysically possible that one might undergo a visual hallucination of Lucky in a certain position and location in one's environment, when in fact, Lucky is in that position and location.

It is worth pointing out that the fact that a hallucination accurately represents the scene before the hallucinator's eyes does not put additional

pressure on naïve realism. It does not really matter whether a hallucination is accurate or inaccurate, the phenomenological problem arises when naïve realists address the phenomenological nature of hallucination.

4. Total and partial hallucinations.

Hallucinations can be either total or partial hallucinations. A total hallucination occurs when the hallucinating subject does not perceive any external element at the time that she has such a hallucination. An example of total hallucination is one in which Sophie ha an experience that is introspectively indiscriminable from a veridical perceptual episode, and Sophie has her eyes closed—she is not receiving any visual external input from the external world.

In contrast to total hallucination, a partial hallucination occurs when the subject hallucinates certain elements—objects or properties—of their experience while other elements are actually perceived. For instance, Sophie might have a visual hallucination of Lucky in her bedroom, while she accurately sees certain elements of her bedroom, say, the wall.

As I have said, common-kind theorists appeal to hallucinations to argue against naïve realism. It does not matter whether the mental state is a partial or a total hallucination, either way, according to common-kind theorists, they put the same pressure on naïve realism. Advocates of the common-kind theory hold that so long as the non-perceptual experience is introspectively indiscriminable from a veridical perceptual episode of certain type, then both mental states share phenomenal character and have the same ontological nature. To bolster this view, common-kind theorists support the well-known argument from hallucination.

## 1.3 The argument from hallucination

The argument from hallucination comes in different forms. One version is used to argue against direct realism, while another version is used to argue against naïve realism. The argument from hallucination has been traditionally used by sense-data theorists to argues against direct realism (Byrne & Logue, 2008:62;

Thompson, 2008:386; Fish, 2010:12; István, 2013:255). I will present a version of the argument from hallucination against direct realism in the next section, when examining a sense-data theory of perception. Now I will present a version of the argument from hallucination against naïve realism. It goes as follows:

1. Hallucinations are not constituted by the external world.
2. For every veridical perceptual state there could be a hallucination that is introspectively indiscriminable from such veridical perceptual state.
3. Introspectively indistinguishable experiences have the same nature.

C. Therefore, veridical perceptual experiences are not constituted by the external world.

Premise 1 is true if one follows the traditional definition of hallucination. The ontological nature of hallucinations is not constituted (even partly) by the external objects and properties that the subject seems to perceive.

Premise 2 derives from the metaphysical possibility of causally matching hallucinations. There is empirical evidence that subjects can undergo states that are introspectively indistinguishable from veridical perceptual experiences, for example, by direct stimulation of the retina (Fish, 2009; 2010).

The proponent of the argument from hallucination holds that stimulation of the neural states underlaying a certain veridical perceptual experience, when the subject is not actually perceiving anything at all, will produce a total causally matching hallucination. To illustrate this metaphysical possibility, imagine that Sophie is in a pitch-black room. A crazy neuroscientist stimulates Sophie's neural state underlying a veridical perceptual state of St Paul's Cathedral. According to this view, Sophie will have an experience that is introspectively indiscriminable from a veridical perceptual experience of St Paul's Cathedral. In other words, Sophie will have a total causally matching hallucination of St Paul Cathedral.

Martin claims that the strategy of rejecting the metaphysical possibility of causally matching hallucinations leave the proponents of naïve realism in weak position: "for it would commit them to determinate empirical consequences which they have insufficient evidence to predict" (2004:55). He states that rejecting this

metaphysical possibility demands accepting a view that contrast with the predictions of current neuroscience. According to these predictions, a subject *S* could be in the same neural state as when *S* perceives, say, a kangaroo, even if *S* is not perceiving a kangaroo, and such neural state will produce an episode that is introspectively indiscriminable from a veridical perceptual state of a kangaroo.

Premise 3 is highly controversial. Most disjunctivists reject premise 3 to defend naïve realism from the argument from hallucination. They deny the claim that hallucinations have the same ontological constituents as veridical perceptual experiences. Supporters of premise 3 move from the epistemological assertion that hallucinations are introspectively indistinguishable from veridical perceptual experiences to the phenomenological claim that both mental states share phenomenal character—that is, what it is like to have a hallucination is the same as what it is like to have a veridical perceptual experience because both mental states are introspectively indiscriminable from each other.

Proponents of the argument from hallucination are assuming that the indiscriminability condition of hallucination is symmetrical. If a hallucination *h* is introspectively indistinguishable from a veridical perceptual state of a certain kind *p,* then *p* is also introspectively indistinguishable from *h*. As Williamson states:

Indiscriminability is generally agreed to be a reflexive, symmetric and non-transitive relation. One cannot discriminate between *a* and itself, nor can one discriminate between *a* and *b* without thereby discriminating between *b* and *a*; however, one can sometimes discriminate between *a* and *c* when one can discriminate between neither *a* and *b* nor *b* and *c* (1990:10).

However, as Martin states: “that hallucinating is not discriminable through reflection from perceiving does not entail that perceiving is indiscriminable from hallucinating” (2006:10). That is, the indiscriminability condition is asymmetrical.

I hold that a key point to defend naïve realism from the argument from hallucination is to support the claim that the indistinguishability condition of hallucination is asymmetrical. Of course, disjunctivists who endorse this claim own us an explanation of this phenomenon. How is it possible that one cannot

distinguish through introspection alone a hallucination from a veridical perceptual experience of a certain kind, yet one can distinguish through introspection alone a veridical perceptual state from its introspectively indiscriminable hallucination? I will argue in chapter 6 that a theory that explains indistinguishability condition of hallucination in terms of subjective mistakes is the most suitable disjunctivist account to explain this phenomenon.

Advocates of premise 3 not only moves from an epistemological claim to a phenomenological claim, but they also move from a phenomenological claim to an ontological assumption: hallucinations and veridical perceptual experiences share phenomenal character because they have the same ontological constituents.

As we will see, disjunctivists present different reasons to reject premise 3. Some of them criticise the inference from the phenomenological claim to the ontological assumption (Logue, 2012; Kennedy, 2013); while others criticise both, the inference from the phenomenological claim to the ontological assumption and the inference from the epistemological claim to the phenomenological claim (Johnston, 2004; Martin, 2004, 2006; Fish, 2008, 2009; Allen, 2015).

The conclusion of the argument is the rejection of naïve realism. Proponents of the argument from hallucination advocate for the claim that veridical perceptual episodes and hallucinations are not constituted (even partly) by the perceived external objects and properties. According to common-kind theorists, what distinguishes veridical perceptual episodes from hallucinations is not the mental states themselves, but the aetiology of the experience—that is, whether the mental state is being appropriately caused by the external objects and properties that the subject seems to perceive (MacGregor, 2015:90).

Common-kind theorists who support the argument from hallucination endorse the local supervenience thesis. According to common-kind theorists, hallucinations and veridical perceptual experiences are mental states whose instantiation is assured by the neural activity alone (Fish, 2009:118).

The local supervenience thesis is motivated by scientific experiments. There is empirical evidence that brain activity is sufficient to produce mental

states that are introspectively indiscriminable from veridical perceptual episodes. Penfield & Perot (1963) conduct an experiment in which epileptic patients receive direct electrical stimulation in their brains. Those patients report to have detailed and even multi-modal experiences. Some of those episodes are said to be introspectively indiscriminable from veridical perceptual states. These findings have proven that hallucinations supervene upon neural states. However, they do not show that veridical perceptual experiences also supervene on neural states. These scientific experiments have motivated philosophers to present thought experiments, for example, the well-known brain-in-a-vat thought experiment:

> [Imagine that your brain] has been removed from the body and placed in a vat of nutrients which keeps the brain alive. The nerve endings have been connected to a super-scientific computer which causes the person whose brain it is to have the illusion that everything is perfectly normal. There seem to be people, objects, the sky etc; but really all the person (you) is experiencing is the result of electronic impulses travelling from the computer to the nerve endings (Putnam, 1981:6).

Proponents of the argument from hallucination appeal to this sort of scientific and thought experiments to bolster the common-factor principle: hallucinations and veridical perceptual experiences have the same ontological nature (Fish, 2010:13). However, as I have said, those experiments are not decisive to support the common-kind principle. They might, at best, suggest that one could artificially produce hallucinations.

Common-kind theories are motivated by the metaphysical possibility of causally matching hallucinations. However, they take for granted that those causally matching hallucinations are perfect hallucinations. If two mental states are impersonally introspectively indiscriminable from each another, then it is reasonable to think that both mental states share the same ontological nature. It is the onus of the disjunctivist to argue that this is not the case, and that veridical perceptual experiences and hallucinations are, after all, different sort of mental states. For that purpose, disjunctivists should give a response to two philosophical questions. An ontological one: what is the ontological nature of a hallucination? A phenomenological one: how should one account for the fact that a hallucination is introspectively indiscriminable from a veridical perceptual state? As we will see in the next chapters, disjunctivists offer different responses to these questions.

## 1.4 Common-kind theories of perception

In this section, I will explore two views that reject naïve realism—a sense-data theory and direct intentionalism. There are more theories that reject naïve realism, for example a qualia theory (see Block et al., 1997; Block, 2004; Papineau 2014) and adverbialism (see Ducasse, 1942; Cornman, 1971). I selected these two stances because they adjust better than others to our purposes, which is to compare them with naïve realism. As we will see, sense data theories reject direct realism and endorse the common-factor principle: hallucinations and veridical perceptual states have the same nature. In contrast, direct intentionalism supports direct realism and it is compatible with the common-factor principle.

### 1.4.1 Sense data theory

According to sense data theories, perceptual episodes and hallucinations consist in a perceptual relation between subjects and mind-dependent objects: sense data (Prince, 1932; Jackson, 1977, Robinson, 1994). Sense data are the direct objects of our sensory awareness, they bear sensible qualities that explain the phenomenal character of our perceptual episodes and hallucinations (Huemer, 2019). Thus, when we perceive, say, my dog Lucky, we are directly perceptually aware of a sense datum that bears certain sensible qualities that explain the phenomenal character of my veridical perceptual experience of Lucky. According to sense data theorists (e.g., Jackson, 1977, Robinson, 1994), what it is like to perceive Lucky metaphysically depends on the existence of a certain perceptual relation between the subject and a sense datum.

Sense data theories are motivated by the following reasoning—as one is not perceptually related to external objects in the hallucinatory case, and it introspectively seem to one that one is perceptually related to something, then one must be perceptually related to other sorts of objects in the hallucinatory case, namely, mind-dependent objects. Robinson is motivated by this reasoning to formulate the phenomenal principle, which goes as follows:

> If there sensibly appears to a subject to be something which possesses a particular sensible quality then there is something of which the subject is aware which does possess that quality (Robinson, 1994:32).

Sense data theorists endorse the common-factor principle and the phenomenal principle. They move from the epistemological claim that hallucinations are introspectively indiscriminable from veridical perceptual experiences to the following ontological assumption: as a hallucination is introspectively indiscriminable from a veridical perceptual episode, then both mental states are to be given the same ontological account.

According to sense-data theories, when one has a visual hallucination, one is visually aware of a sense datum. Therefore, when one perceives the external world, one must be perceptually aware of a sense datum as well. Sense-data theorists present a version of the argument from hallucination to reject direct realism (Reid, 1785/1941). The argument against direct realism is as follows:

1. In hallucination, the subject is perceptually aware of a sense datum.
2. Introspectively indistinguishable experiences have the same nature.
3. Hallucinations are introspectively indistinguishable from veridical perceptual experiences.
4. For each veridical perceptual experience there could be a hallucination that is introspectively indistinguishable from such veridical perceptual experience.

C. Therefore, in perception, the subject is perceptually aware of a sense datum.

As István states: “the argument is intended as a proof that in ordinary, veridical cases of perception, perceivers do not have unmediated perceptual access to the world” (2013:255).

Premise 1 derives from the traditional definition of hallucination and the phenomenal principle. Hallucinations are experiences that do not involve perception of external objects and properties. As there is something it is like for one when one hallucinates, then sense data theorists assume that one is perceptually aware of a non-external object in the hallucinatory case, namely, a sense-datum. As we will see, direct intentionalism reject this premise. The truth of premise 2 depends on whether one accepts the move from the epistemological claim to the ontological assumption that I have presented above—introspectively indiscriminable mental states are to be given the same ontological account. As we already know, disjunctivists reject premise 2 of the argument from hallucination.

Premise 3 is true by definition—hallucinations are introspectively indiscriminable from veridical perceptual experiences. Premise 4 derives from the plausible claim that causally matching hallucinations are metaphysically possible. As we have already seen when analysing the argument from hallucination against naïve realism, this premise is motivated by scientific experiments (Penfield & Perot, 1963). The conclusion entails the rejection of direct realism.

Thus, sense data theorists deny the claim that we have *direct* perceptual awareness of the external world, but this claim is not tantamount to the assertion that we are never perceptually aware of the external world. According to some sense data theorists, we *indirectly* perceive the external world in virtue of being in direct perceptual relation to sense data (Jackson 1977; Robinson, 1994). Sense data theory was the default view of perception until the second half of XX century. As Reid (1785/2002) states, almost all philosophers, from Plato to Hume, agree that we do not perceive the external world immediately, and that the direct object of perception is a mental image (sense datum) present to the mind.

However, sense data theories have lost their appeal in recent decades. Philosophers as Searle (2015, 2018) have criticised the first premise of the argument from hallucination against direct realism. Searle asserts that the idea that we directly perceive sense data, instead of the external world, is a mistake of great magnitude in the philosophy of perception (2015:11). He holds that the mistake stems from assuming that on the hallucinatory case we are perceptually aware of something. Instead, he claims that in the hallucinatory case we perceive nothing (Searle, 2015:21). On Searle's view, although veridical perceptual experiences and hallucinations have the same ontological nature, hallucinations lack intentional object—in the hallucinatory case, we are not perceptually related to any object. In short, Searle, as well as other intentionalists (e.g., Tye, 2000; Crane, 2001), reject the phenomenal principle and the first premise of the argument from hallucination—that is, in hallucination, the subject is perceptually aware of a sense datum. As we will see later in this section, intentionalists claim that hallucinations are introspectively indiscriminable from veridical perceptual episodes because both mental states have the same representational content. However, this does not mean that in the hallucinatory case one is perceptually related to mind-dependent objects. Rather, it means that in the hallucinatory

case one represents the external world as being in the same way as when one has a veridical perceptual experience of a certain kind.

It is worth point out that naïve realists are not committed to deny the first premise of the argument against direct realism. Naïve realism is a theory about veridical perceptual experiences, and therefore, naïve realists could defend different theories of the nature of hallucination. However, naïve realists deny premise 2 of the argument—introspectively indiscriminable states have the same nature. Naïve realism and sense data theories agree that the ontological constituents of veridical perceptual experiences are objects and properties, but they disagree about the metaphysical structure of those objects and properties. On naïve realism, the objects and properties that constitute the veridical perceptual state are mind-independent public objects and properties, while on a sense data theory the objects and properties that constitute the veridical perceptual episode are private mind-dependent objects and properties.

An advantage of sense data theories over naïve realism is that the nature of hallucinations does not pose, in principle, any problem to this theory of perception. According to sense data theories, a hallucination is introspectively indiscriminable from a veridical perceptual experience because both mental states have the same ontological constituents, namely, sense data. These mind-dependent objects explain the phenomenal character of those mental states.

As any other theory of perception, sense data theories are vulnerable to different sorts of objections. An objection of epistemic nature is that claiming that we are directly aware of sense data in perception rises a veil that separate us from the external world. How do we obtain perceptual knowledge of the external world if we are perceptually aware of mind-dependent objects and properties that are totally independent from the external world? A sense data theorist could argue that we are indirectly aware of the external world because in the veridical perceptual case sense data represent accurately the way the external world is. However, this possible response was questioned long time ago by Berkeley (1710). Berkeley claims that it does not make sense to claim that sense data and external objects visually resemble each other if one of them—the external object—is invisible. A sense datum can be like nothing but a sense datum

(Berkeley: 1710). There have been counterresponses to Berkeley's objection (see Russel, 1912; Jackson, 1977). However, Berkeley's objection has motivated scholars to support the claim that veridical perceptual episodes are transparent—we have direct perceptual access to the external world (see Moore, 1903; Harman, 1990; Tye 1992, 1995, 2000; Martin, 2002; Smith, 2008; Soteriou, 2013). According to the advocates of the transparency thesis—direct realists—we do not perceive the external world in virtue of perceiving something else, such as sense data.

Sense data theories are also subject to ontological problems. The ontological nature of sense data could be deemed obscure for at least two reasons. First, as Huemer (2001) argues, there does not seem to be any plausible response to the question of where in space sense data are located. One might propose that sense data are in the brain (O'Shaughnessy 2013). However, this view is problematic because the properties of the brain does not resemble the properties that sense data have—for example, the brain state involved in a veridical perceptual state of Lucky is not Lucky-shaped. One could propose that sense data are located where the perceived external objects are located. However, one is not perceptually related to any external object in the hallucinatory case, therefore, the question where the sense data are located when one has a hallucination remains open (Huemer, 2019). This problem might lead to sense data theorists to claim that sense data are located in a 'platonic world'—a world different from the external (physical) world where abstract entities, such as sense data, exist (Frege, 1884, 1892, 1919; Gödel, 1964; Russell, 1912; Quine, 1951). The second reason of why the ontological nature of sense data might be considered obscure is because it is far from clear how neural states could produce or interact with sense data—mind-dependent non-physical objects that (for some theorists) reside in another world.

Resistance to sense data theories has been motivated by these ontological and epistemological issues. Those philosophical problems have led to some scholars to reject this view and support direct intentionalism, a direct realist theory of perception that I will address in the next subsection.

### 1.4.2 Direct intentionalism

According to modern representationalism (also known as intentionalism), sensory experiences are constituted by intentional contents—states that represent the external world as being in certain way (McGinn, 1982; Davies, 1992; Tye, 1992, 1995, 2000, 2002; Shoemaker, 1994; Dretske, 1995; Byrne, 2001; Crane, 2001; Chalmers, 2004; Nanay, 2010). As Martin claims on behalf of modern representationalists: "perceptual states represent to the subject how her environment and body are. The content of perceptual experiences is how the world is represented to be" (1994:464).

Direct intentionalism is a form of modern representationalism that supports direct realism. Direct intentionalists (e.g., Tye, 2002) claim that we have direct perceptual access to the external world in virtue of having mental states with intentional (or representational) content. However, they reject both, the naïve ontological claim—veridical perceptual episodes are, at least, partly constituted by the external world—and the naïve phenomenological claim—the phenomenal character of a veridical perceptual experience metaphysically depends on our perceptual relation to external objects and properties. On direct intentionalism, the phenomenal character of a veridical perceptual experience is determined by our perceptual relation to the external world, but it does not metaphysically depend on it. According to direct intentionalists, the phenomenal character of a veridical perceptual state metaphysically depends on the intentional content of the experience—that is obtained in virtue of being perceptually related with the external world in the veridical perceptual case (Tye, 1995, 2002).

In contrast to sense-data theories and naïve realism, on direct intentionalism the metaphysically structure of perceptual experiences is not explained in terms of a fundamental sui generis perceptual relation between a subject and an object. Rather, the metaphysical structure of perceptual experiences consists of having an intentional content. However, this does not mean that the perceived object does not determine the ontological nature of such intentional content. There are two versions of direct intentionalism, according to the first version, the intentional content of a veridical perceptual experience does not metaphysically depend on the fact that the subject is perceptually related to

the external world. According to the second version, the intentional content of a veridical perceptual episode metaphysically depends on the fact that the subject is perceptually related to the external world.

1. The first version: common-kind direct intentionalism.

According to common-kind direct intentionalists (e.g., Tye, 1995; Searle, 2015), veridical perceptual episodes and hallucinations have the same nature. In other words, they endorse the common-factor principle. The intentional content that constitutes a veridical perceptual state—for example, a veridical visual experience of my dog Lucky—does not metaphysically depend on the fact that one is seeing Lucky. One could have an experience with the same sort of intentional content even when one is not seeing Lucky—for example, when one has a visual hallucination of Lucky. According to this view, veridical perceptual experiences and hallucinations have the same type of phenomenal character because they have the same sort of intentional content. If the intentional content of a sensory experience changes, so does the phenomenal character of such experience.

Common-kind direct intentionalists reject the first premise of the argument from hallucination against direct realism. According to common-kind direct intentionalists, in hallucination, the subject is not perceptually aware of anything. Rather, the subject has a mental state whose intentional content represents the external world in certain way—namely, as if one had a veridical perceptual experience of a certain kind. Advocates of this view accept the second premise of the argument—introspectively indiscriminable experiences have the same nature.

2. The second version: disjunctive direct intentionalism.

According to disjunctive direct intentionalists (e.g., Tye, 2007; Byrne and Logue, 2008; Schellenberg, 2010, 2011), veridical perceptual experiences and hallucinations do not have the same ontological nature. Therefore, unlike common-kind direct intentionalists, advocates of disjunctive direct intentionalism reject the second premise of the argument from hallucination against direct realism. To put it in another way, proponents of this view reject the common-factor principle. As Soteriou states: “if intentionalists are to accommodate

adequately the particularity of successful visual experiences, then they should hold that the truth-evaluable contents of such experiences are object-involving" (2000:173). The intentional content that constitutes a veridical perceptual experience—for instance, a veridical perceptual experience of my cat Neko—metaphysically depends on the fact that one is seeing Neko. One could not have an experience with the same sort of intentional content if one is not perceptually related to Neko—for example, when one has a visual hallucination of Neko.

Unlike common-kind direct intentionalists, advocates of disjunctive direct intentionalism claim that a change on the intentional content of the experience does not always entail a change in its phenomenal character. On this view, there could be two experiences with different intentional content—a veridical perceptual episode and a hallucination—that have the same type of phenomenal character. As Tye puts it:

> The content of visual experience in the hallucinatory case is different from the content of visual experience in the veridical case. At the level of content itself, there is indeed no common factor. For each experience, there is only a single admissible content, but this content is different in veridical and in hallucinatory cases. There is, however, in some such cases a common phenomenal character (2017:609).

Despite the differences between these two versions of direct intentionalism, both explain the nature of perceptual states and hallucinations in representational terms. There is a debate on whether representational contents are propositional in nature. Some intentionalists hold that representational contents have a propositional metaphysical structure (McDowell, 1994; Byrne, 2005), while others claim that representational contents are non-propositional (Crane, 2009). According to Campbell, intentionalists that explain the ontological nature of representational contents in propositional terms violate the explanatory role of experience. As he claims: "experience of objects has to be what explains our ability to think about objects. That means that we cannot view experience of objects as a way of grasping [propositions] about objects" (2002:122).

Intentionalists who explain the ontological nature of representational contents in non-propositional terms do not have to deal with issue. However, this view is not exempt from problems. An objection against this direct intentionalist

account is that the phenomenal character of the experience cannot be fully accounted in representational terms. Macpherson (2006) and Papineau (2004) point out some counterexamples to argue that changes in the representational content do not always entail a change in phenomenal character, and vice versa. Therefore, the phenomenal character of the mental state does not fully depend on the intentional non-propositional content.

I do not suggest that intentionalists cannot give an adequate response to those problems. The possible responses to those issues go beyond the purposes of this project. My aim here is rather to show that not only naïve realism, but also other theories of perception are subject to philosophical problems that might undermine their plausibility.

Although direct intentionalism has an advantage over sense data theories because it endorses the transparency thesis, it is thought that naïve realism has an advantage over direct intentionalism because it can accommodate the same thesis without appealing to those representational contents, whose ontological nature is not clear. Naïve realists offer a simple metaphysical picture of perception that requires nothing more than the external world, the subject's perceptual system and a point of view to explain the ontological and phenomenological nature of veridical perceptual experiences (MacGregor, 2015).

Whether naïve realists should appeal to representational contents or non-external objects and properties to explain part of the ontological and phenomenological nature of veridical perceptual experiences is an open question. Recall that, on naïve realism, the ontological nature of veridical perceptual states is *at least partly* constituted by the perceived external objects and properties. There could be other non-external elements that play a role in constituting the ontological and phenomenological nature of veridical perceptual episodes.

So far, I have presented some problems for sense data theories and modern representationalism, but I have not presented any issue for naïve realism save the argument from hallucination. In the last subsection of this chapter, I will present the particularity problem for naïve realism (Schellenberg, 2010).

## 1.5 The particularity problem for naïve realism

The transparency thesis—the claim that we directly perceive the external world—is closely related to the notion of particularity. On direct realism, when we directly perceive the external world, we perceive external particular objects. For instance, Sophie sees *that* dog, Lucky. She neither sees another dog nor a mental representation of a dog, but Lucky. As we have seen, naïve realists support the transparency thesis without appealing to representational contents. On naïve realism, veridical perceptual states have the phenomenal character they have in virtue of being perceptually related to certain external objects and properties. If this view is plausible, then the postulation of representational content, the nature of which is controversial, is unmotivated and unnecessary (Brewer, 2017:221).

However, Schellenberg argues that naïve realism cannot accommodate the transparency and particularity of veridical perceptual experience with the claim that the phenomenal character is multiply realizable (2010:24). The phenomenal character is multiply realizable if episodes with different ontological constituents can instantiate the same phenomenal character.

It is commonly thought that two different objects might look identical. For instance, two lemons that are qualitatively identical—lemon $L_1$ and lemon $L_2$. If Sophie has a veridical visual episode of $L_1$, that experience will be introspectively indiscriminable from a veridical visual episode of $L_2$, and vice versa, if Sophie has a veridical visual experience of $L_2$, that experience will be introspectively indistinguishable from a veridical visual experience of $L_1$. Both visual states have the same phenomenal character—what it is like to see $L_1$ is the same as what it is like to see $L_2$ even though the ontological constituents of both visual experiences are different in nature, one is constituted by $L_1$ and the other is constituted by $L_2$.

Schellenberg argues that the multiply realizable claim contrasts with Campbell's characterisation of the phenomenal character of veridical perceptual states. Campbell is a naïve realist who characterises the phenomenal character of veridical perceptual experiences as follows: "the phenomenal character of your experience, as you look around the room, is *constituted* by the actual layout of the room itself" (2002:116 *my italics*).

If the phenomenal character of a veridical perceptual state—what it is like to perceive—is *constituted* by the external object that the subject perceives, then experiences of two qualitatively but numerically distinct objects should have different phenomenal character. If the phenomenal character of an experience $P_1$ is constituted by $L_1$ and the phenomenal character of an experience $P_2$ is constituted by $L_2$, then both experiences have different phenomenal character: one is constituted by $L_1$ and the other is constituted by $L_2$. Furthermore, if $P_1$ and $P_2$ have different phenomenal character, but both experiences are introspectively indiscriminable from each other, then the phenomenal character of those veridical perceptual experiences is not *maximally determinate*—it does not fully determinate what it is like to perceive $L_1$ and $L_2$, respectively.

A phenomenal character is not maximally determinate when some of its components are not introspectively accessible. For instance, if one claims that $L_1$ constitutes the phenomenal character of the mental state, but it absolutely makes no difference in what it is like to see $L_1$ from what it is like to see $L_2$. This contrast with the standard characterisation of phenomenal character. To recall, the standard characterisation of phenomenal character refers to what it is like to have a mental state from the first-person point of view, an element of the experience that is introspectively accessible (Nagel, 1974; Chalmers, 2002). According to the standard characterisation of phenomenal character, if two experiences are introspectively indiscriminable from each other, then they have the same phenomenal character. Hence, Campbell's characterisation of the phenomenal character of veridical perceptual episodes leads to the unfortunate consequence that the phenomenal character is not maximally determinate, and therefore, it should be avoided. As Locatelli claims:

> While denying that phenomenal characters are maximally determinate may seem preposterous, the claim that phenomenal characters are multiply realized is in line with the intuitive understanding of phenomenal characters in terms of what it is like to have an experience (2016:237).

In defense of naïve realism, I hold that the best way to approach the question about the phenomenal character of veridical perceptual episodes is to move away from talking about constituents—As Campbell does (2002:116)—and frame it instead in terms of metaphysical dependence. To avoid the problem that

stems from Campbell's characterisation, it is better to present naïve realism as the theory that endorses the naïve ontological claim—veridical perceptual states are, at least, partly constituted by the external objects and properties that the subject perceives—and the naïve phenomenological claim—the phenomenal character of a veridical perceptual state metaphysically depends on the existence of a certain perceptual relation between the subject and the external world.

Note that the naïve phenomenological claim is compatible with the claim that episodes of two qualitatively identical but numerically distinct particulars have the same phenomenal character. $P_1$ has the phenomenal character it has in virtue of a perceptual relation between the subject and $L_1$. The phenomenal character of $P_1$ metaphysically depends on that perceptual relation between the subject and $L_1$. However, this does not rule out the possibility that the same sort of phenomenal character could be obtained in virtue of a perceptual relation between the subject and another object of the external world, for example, $L_2$.

However, this characterisation leads to another problem. If naïve realists hold that the phenomenal character is multiply realizable, then they cannot appeal to the phenomenal character of a veridical perceptual state to account for the relational particularity, as veridical perceptual experiences of qualitatively identical but numerically distinct objects instantiate the same phenomenal character (Schellenberg, 2010:31).

Martin (2002), French and Gomes (2019) are aware of this issue. They argue that naïve realists can accommodate the particularity of experience and the claim that the phenomenal character is multiply realizable without appealing to representational contents. For that purpose, they distinguish between phenomenal nature and phenomenal character.

- Phenomenal character: it is a general attribute of a mental state, it is repeatable or shareable (Martin, 2002:194). The phenomenal character is introspectively accessible, it captures how the experience is from the first-person point of view. The phenomenal character could be shared by experiences of numerically different objects. Veridical perceptual states have the phenomenal character they have in virtue of their phenomenal

nature—an aspect of the experience that is constituted by the perceived external objects and properties (French & Gomes, 2019).

- Phenomenal nature: it is an unique attribute of a mental state, it is not repeatable or shareable. The phenomenal nature of a veridical perceptual experience is an unrepeatable feature of the experience that is partly individuated by the particulars that the subject is perceiving (Martin, 2002:175). The phenomenal nature could not be shared by veridical perceptual experiences of numerically different objects.

This two-dimensional characterisation of the phenomenology of veridical perceptual experiences allows naïve realists to capture generality—sameness between qualitatively identical experiences of numerically different objects—and particularity—the difference between those qualitatively identical experiences of numerically different objects. Both, phenomenal character and phenomenal nature metaphysically depend upon a perceptual relation between the subject and the external world. The phenomenal nature, but not the phenomenal character, is constituted by the perceived external objects and properties.

Thus, for instance, a veridical visual experience $P_1$ of a lemon $L_1$ has the same phenomenal character $CH_1$ as the phenomenal character of a veridical visual episode $P_2$ of a lemon $L_2$ that is qualitatively identical to $L_1$. However, both mental states differ in phenomenal nature because $P_1$ is constituted by $L_1$ while $P_2$ is constituted by $L_2$. $P_1$ has the phenomenal character it has—$CH_1$—in virtue of being perceptually related to $L_1$, while $P_2$ has the phenomenal character it has—$CH_1$—in virtue of being perceptually related to $L_2$.

However, another problem for naïve realism arises, namely, there is an aspect of the phenomenology of veridical perceptual experiences—that is, their phenomenal nature—that is introspectively inaccessible. The argument goes as follows: if the phenomenal nature of the episode were introspectively accessible, then one should be able to distinguish by introspection alone a veridical visual experience of $L_1$ from a veridical visual experience of $L_2$ because both experiences have different phenomenal nature. However, a veridical visual episode of $L_1$ is

introspectively indiscriminable from a veridical visual episode of $L_2$, therefore, the phenomenal nature of experience is not introspectively accessible.

French and Gomes (2019) have a response to this problem. They argue that from the claim that one cannot distinguish by introspection alone a veridical visual experience of $L_1$ from a veridical visual experience of $L_2$ does not follow the claim that there are phenomenological aspects of the veridical perceptual experiences of $L_1$ and $L_2$ that are introspectively inaccessible. French and Gomes (2019:59) state that there is a phenomenological difference between the veridical perceptual experiences $P_1$ and $P_2$ that is introspectively inaccessible—namely, the fact that both experiences involve different phenomenal natures. However, French and Gomes (2019:59) hold that when one has a veridical visual experience $P_1$, one is in a position to know by introspection alone that one is having a visual experience whose phenomenal nature is constituted by a particular lemon, namely, $L_1$. The phenomenal nature of a certain veridical perceptual experience is, after all, introspectively accessible. If Sophie undergoes a veridical visual experience of $L_1$, then she has introspective access to the visual phenomenal character of the experience—what it is like to see $L_1$ from Sophie's point of view—and to the phenomenal nature of the visual experience—that is, $L_1$. However, this is compatible with the claim that Sophie is not able to know by introspection alone a fact about the *relation* between two visual episodes, $P_1$ and $P_2$, namely, the fact that they have different phenomenal nature. In short, the phenomenal differences of $P_1$ and $P_2$ are introspectively inaccessible, however, this is not a phenomenological aspect of $P_1$ or $P_2$, the relevant phenomenological aspects of $P_1$ and $P_2$ are introspectively accessible.

As to whether this response solve the problem, I leave the reader to decide. Be as it may, I will follow the distinction between phenomenal nature and phenomenal character for the purposes of this thesis. If we follow this distinction, then the phenomenal nature of a hallucination is radically different from the phenomenal nature of veridical perceptual experience because the former does not involve external objects and properties. As we have seen, according to naïve realism, the phenomenal character of an experience metaphysically depends on a perceptual relation between the subject and the external world, therefore, veridical perceptual states and hallucinations have different phenomenology—

phenomenal character and phenomenal nature. On naïve realism, veridical perceptual states and hallucinations are not introspectively indiscriminable *from each other*. When one has a veridical perceptual episode, one should be in a position to know by introspection alone that one is not having a hallucination. Disjunctivists who aim to support naïve realism should accommodate this view with the claim that hallucinations are introspectively indiscriminable from veridical perceptual experiences.

## 1.6 Conclusion

In this chapter I explored different versions of direct realism—the view that we directly perceive the external world. I distinguished one version of direct realism, namely, naïve realism, from other versions of direct realism by presenting two claims that naïve realists endorse. The naïve ontological claim: veridical perceptual experiences are at least partly constituted by the external objects and properties that the subject perceives. The naïve phenomenological claim: the phenomenal character of a veridical perceptual episode metaphysically depends on the existence of a certain perceptual relation between the subject and the external world.

On naïve realism, hallucinations cannot have the same sort of phenomenal character as veridical perceptual episodes because the phenomenal character of veridical perceptual experiences metaphysically depends on a perceptual relation between the subject and the external world—relation that is missing in the hallucinatory case[8]. However, the nature of hallucination poses a problem for naïve realism: how can naïve realists accommodate the claim that hallucinations are introspectively indiscriminable from veridical perceptual experiences if they do not have the same sort of phenomenal character?

[8] It is worth pointing out that, according to some naïve realists, in the hallucinatory case one is also perceptually related to the objects that one seems to perceive (Weir, 2004; Raleigh, 2014; Manzotti, 2016; Power, 2018). Therefore, naïve realists are not forced to endorse disjunctivism. However, in this thesis I will not address this approach because it rejects the traditional characterisation of hallucination—a mental state that does not involve perception.

Common-kind theorists—those who claim that veridical perceptual experiences and hallucinations have the same ontological nature—offer the argument from hallucination to reject naïve realism. I have argued that the argument from hallucination is not a sound argument because it takes two assumptions for granted. First, the assumption that the indistinguishability condition of hallucination is symmetrical: if a hallucination is introspectively indiscriminable from a veridical perceptual experience, then that veridical perceptual episode is introspectively indiscriminable from such hallucination. According to common-kind theories, both mental states have the same sort of phenomenal character. Second, experiences that have the same phenomenal character are identical qua mental states, in other words, those mental states have the same ontological constituents.

Common-kind theories come in many forms. Some of them denies direct realism, for example, sense data theories—the view that we directly perceive mind-dependent objects—and others support direct realism, for instance direct intentionalism—the view that we directly perceive the external world in virtue of having mental states with intentional content. Naïve realists hold that they offer a more attractive explanation of the nature of veridical perceptual experience than common-kind theories for the following two reasons. First, it provides a simple metaphysical picture of perception, which explains the ontological nature of veridical perceptual experiences in terms of being directly perceptually related to external objects and properties (Macgregor, 2015). Second, it is an intuitive account, as it characterises the phenomenology of veridical perceptual states by appealing to what seems to be the case when we introspect our perceptual episodes—that is, we have direct perceptual access to external objects and properties (Locatelli, 2016). It is for these two reasons that, despite the strong criticism that naïve realism has suffered from ancient times, there has recently been a resurgence of interest in this theory of perception.

I hold that the best way naïve realists can capture the phenomenology of veridical perceptual experiences is by distinguishing phenomenal nature from phenomenal character. The phenomenal nature captures particularity, while the phenomenal character captures generality. Two veridical visual experiences of qualitatively identical but numerically distinct particulars have the same

phenomenal character, but they differ in phenomenal nature. Experiences have the phenomenal character they have in virtue of their phenomenal natures.

In contrast to common-kind theories, phenomenological disjunctivism, a view that aims to defend naïve realism from the argument from hallucination, holds that veridical perceptual states and hallucinations have different ontological and phenomenological nature. In the following chapters I will explore different disjunctivist theories of perception.

# CHAPTER 2: THE DISJUNCTIVE THEORY OF PERCEPTION

The second chapter is divided in four sections. In the first section, I will present different types of disjunctivism. I will explore non-phenomenological disjunctivism—the view that veridical perceptual experiences and causally matching hallucinations have different ontological constituents, but they have the same phenomenal character. In the second section, I will explore sensory disjunctivism—the view that veridical perceptual experiences and hallucinations have different ontological constituents and different sensory phenomenal character. In the third section, I will argue that those theories of hallucination that endorse either non-phenomenological disjunctivism or sensory disjunctivism, fall prey of the screening-off worry if they accept the metaphysical possibility of perfect hallucinations. In short, this is the problem that the common phenomenal nature of veridical perceptual states and causally matching hallucinations screens off the naïve realist aspects of perception—the perceived external objects and properties—from playing a role in explaining the perceptual phenomenal character of veridical perceptual episodes (Robinson, 1994, Martin, 2004, Kennedy, 2013). In the last section, I will conclude that the sensory imagery theory of hallucination—the view that hallucinations are involuntary sensory imagery episodes whose phenomenal character is different from the phenomenal character of veridical perceptual experiences—can block the rejection of naïve realism if it does not accept the metaphysical possibility of perfect hallucinations.

## 2. 1. Different types of disjunctivism

Disjunctivist theories of perception reject the common-kind theory. To recall, the common-kind theory supports the common-factor principle—veridical perceptual episodes and hallucinations have an underlaying mental state in common. In contrast to common-kind theorists, disjunctivists argue that hallucinations do not have the same ontological nature as experiences that we have while perceiving the external world—that is, veridical perceptual states.

In the literature of philosophy of perception, we can find a theory commonly named 'epistemological disjunctivism' (McDowell, 1982, 1986, 1995) that does not fall under this definition of disjunctivism. Epistemological disjunctivism does not necessarily reject the common-factor principle. On epistemological disjunctivism, veridical perceptual experiences and hallucinations are epistemologically very different. As Fish claims: "the epistemological disjunctivist denies that a subject's perceptual evidence is the same across indiscriminable cases of perception and hallucination" (2010:91). Epistemological disjunctivism aims to give an answer to the question about the nature of perceptual knowledge, but it does not address questions concerning the ontological constituents and phenomenological nature of sensory experiences. I will set aside this disjunctivist approach in this thesis, I will focus on those disjunctivist theories that reject the common-factor principle.

The disjunctivist view that is under examination—the one that rejects the common-factor principle—is called experiential disjunctivism by Macpherson and Haddock (2008) and metaphysical disjunctivism by Fish (2010). I will call this view simply disjunctivism. We will see that scholars who endorse disjunctivism support different theories of the nature of hallucination. In this chapter, I will classify those theories of the nature of hallucination under different sorts of disjunctivism for the sake of clarity. This will help the reader to understand the similarities and differences among those disjunctivist theories.

It is commonly thought that the first philosopher who supported a disjunctivist theory of perception was Hinton (1967a, 1967b 1973). He provides the following simple description of a visual experience: 'I seem to see a pink elephant', which is a compact form of the following disjunctivist statement: "either I see a pink elephant, or I am having a hallucination of a pink elephant" (Fish, 2010:89). Note that this is a neutral disjunctivist characterization of a sensory experience since it does not commit to any metaphysical claim with regards to the ontological nature of such experiences. Non-naïve realists who support the common kind theory of perception could endorse this disjunctivist statement. According to common kind theorists, there is a difference in both cases—in the veridical perceptual case one sees a pink elephant, while in the hallucinatory case one does not see a pink elephant.

It is then essential to empathise that Hinton's disjunctivist statement should be accompanied by a further metaphysical commitment to make clear that disjunctivism is different from the common-kind theory. The claim is that the nature of the ontological constituents of veridical perceptual episodes differs from the nature of the ontological constituents of hallucinations. Thus, disjunctivism is not just different, but also antagonistic to the common-kind theory.

Note that this characterisation of disjunctivism is still consistent with a non-naïve realist theory of perception. For example, one could assert that, when seeing a pink elephant, the conscious visual episode is fully constituted by a representational content that cannot be instantiated—in a metaphysical sense—when hallucinating a pink elephant. As we have seen in the previous chapter, disjunctive direct intentionalists (e.g., Tye, 2007; Byrne and Logue, 2008; Schellenberg, 2010, 2011) endorse this sort of disjunctivist account. I will set aside this theoretical possibility. For our purposes, I will analyse disjunctivist accounts that endorse the naïve ontological claim—veridical perceptual experiences are, at least partly, constituted by the perceived external objects and properties.

A standard way to individuate disjunctivist theories from each other is to explore the phenomenological commitments that they endorse. But first, let me explain something with regards to the phenomenal nature of mental states.

The phenomenal nature of a mental state could be constituted by elements of different sort: some of them are sensory in nature while others are not sensory in nature. Mental states with sensory phenomenal nature are those whose ontological constituents involve sensory properties of a certain kind. For example, on naïve realism, a veridical perceptual experience of Lucky has a sensory phenomenal nature because it is constituted by an external object that present some sensory properties—whiteness and dog-shape. In contrast to mental states with sensory phenomenal nature, mental states with cognitive phenomenal nature are those whose ontological constituents do not involve sensory properties of a certain kind. As we will see, some disjunctivists (e.g., Martin, 2004, 2006; Fish, 2008, 2009) claim that at least some hallucinations have a cognitive phenomenal nature—that is, those hallucinations lack sensory properties.

There are disjunctivists theories that hold that perfect hallucinations are metaphysically possible, while others reject that claim. Thus, we can find in the literature of perception disjunctivist theories that address the nature of perfect hallucinations (e.g., Martin, 2004, 2006), disjunctivist theories that tackle the nature of non-perfect hallucinations (e.g., Fish, 2008, 2009), and disjunctivist views that address the nature of hallucination in general (e.g., Allen, 2015). Here is a list of different types of disjunctivism that I will address in this thesis:

1. Non-phenomenological disjunctivism. Proponents of this approach hold that veridical perceptual experiences and causally matching hallucinations have the same phenomenal character. On this view, perfect hallucinations are metaphysically possible (e.g., Logue, 2013; Kennedy, 2013).

2. Phenomenological disjunctivism. This view holds that veridical perceptual episodes and hallucinations of any type do not have the same phenomenal character. There are two sorts of phenomenological disjunctivism: positive phenomenological disjunctivism and reflective disjunctivism.

   2.1. Positive phenomenological disjunctivism. This view offers a positive explanation of what makes a hallucination introspectively indiscriminable from a veridical perceptual experience of a certain type. There are two types of positive phenomenological disjunctivism.

      2.1.1. Sensory disjunctivism. Sensory disjunctivists claim that all hallucinatory experiences have a sensory phenomenal character that is different from the perceptual phenomenal character of veridical perceptual experiences (e.g., Johnston, 2004; Allen, 2015).

      2.1.2. Cognitive disjunctivism. Advocates of this view deny the claim that the phenomenal nature of hallucination is constituted by sensory properties. Instead, they claim that hallucinations have a cognitive phenomenal nature. According to this view, veridical perceptual episodes and hallucinations have different phenomenal character. Cognitive disjunctivists deny

the claim that perfect hallucinations are metaphysically possible (e.g., Fish, 2008, 2009).

2.2. Reflective disjunctivism. Reflective disjunctivists accept the metaphysical possibility of perfect hallucinations. This view does not offer a positive explanation of what makes a causally matching hallucination impersonally introspectively indistinguishable from a veridical perceptual experience. Reflective disjunctivists deny the claim that the phenomenal nature of a causally matching hallucination is constituted by sensory properties. Proponents of this theory hold that veridical perceptual experiences and hallucinatory episodes have different phenomenal character (e.g., Martin, 2004, 2006; Brewer, 2011, 2017; Nudds, 2013).

In this chapter I will explore 1. non-phenomenological disjunctivism and sensory disjunctivism. In chapter 3 and 4 I will analyse in detail reflective disjunctivism. In chapter 5 and 6 I will examine in detail cognitive disjunctivism. I will argue that the sensory imagery theory of perception—a sensory disjunctivist account—and cognitive disjunctivism offer a plausible explanation of the phenomenal nature of non-perfect hallucinations: experiences that are personally introspectively indiscriminable from veridical perceptual experiences. I will argue that no disjunctivist theory of perception can give an adequate explanation of the phenomenal nature of perfect hallucination without failing into the screening-off worry. Therefore, disjunctivists are forced to deny the metaphysical possibility of perfect hallucinations to preserve naïve realism from the screening-off problem.

Non-phenomenological disjunctivists accept the metaphysical possibility of causally matching hallucinations. On non-phenomenological disjunctivism, a causally matching hallucination is a perfect hallucination—that is, it is hallucinatory episode that is impersonally introspectively indistinguishable from a veridical perceptual state of a certain kind. Non-phenomenological disjunctivists claim that causally matching hallucinations and veridical perceptual experiences have the same sort of phenomenal character. As we have seen, naïve realists (e.g., Campbell, 2002; Johnston, 2004; Martin, 2004, 2006, 2013; Fish, 2008, 2009, 2013; Nudds, 2013; Brewer, 2011, 2017; Dokic & Martin, 2012, 2017; Allen, 2015; MacGregor 2015; Locatelli, 2016; French & Gomes, 2019) endorse the naïve

phenomenological claim—the phenomenal character of veridical perceptual experiences metaphysically depends on the existence of a perceptual relation between the subject and the external world. Therefore, veridical perceptual experiences and causally matching hallucinations cannot have the same sort of phenomenal character. Thus, this disjunctivist account cannot be used to support naïve realism, since it entails the rejection of the naïve phenomenological claim. However, it could be used to supports the naïve ontological claim.

I will present two approaches to non-phenomenological disjunctivism that support direct realism and the naïve ontological claim:

1. Veridical perceptual experiences and causally matching hallucinations have the same phenomenology (Logue, 2013; Kennedy, 2013). Logue and Kennedy claim that the ontological nature of veridical perceptual experiences is different from the ontological nature of causally matching hallucinations—the former is constituted by the perceived objects and properties and a representational content while the latter is only constituted by a representational content. However, it is the common representational content that fully constitutes the phenomenal nature of both mental states. On this view, veridical perceptual episodes and causally matching hallucinations have the phenomenal character they have in virtue of their common intentional content.

2. Veridical perceptual experiences and causally matching hallucinations have the same phenomenal character, but they have different phenomenal nature. Consider the following example to illustrate this approach. A view holding that the phenomenal nature of a veridical visual experience of a lemon is constituted by the external lemon itself and its properties—as naïve realists claim—while the phenomenal nature of a causally matching visual hallucination of a lemon is constituted by a sense-datum. Nothing rules out the possibility that these two different entities—the lemon and the sense datum—might *look* the same to the subject. That is, although the veridical perceptual state and the causally matching hallucination have different phenomenal nature—one is a physical external object, while the other is a mental mind-dependent object—they might seem to be the same

from the first-person perspective. On this view, both episodes are impersonally introspectively indiscriminable from each other, and therefore, they have the same sort of phenomenal character. We can find a similar line of reasoning when we compare different physical objects. As Austin (1962:50) points out, a lemon could look exactly the same as a bar soap that has a lemon-shape, even though both objects are not of the same kind. In the same way, according to non-phenomenological disjunctivists, a lemon could look the same as a sense-datum of a lemon. Price (1932:40) endorses this stance, he contends that sense-data could be indiscriminable from physical external objects because they instantiate sensory properties that are identical in appearance (see also Langsam, 1997; Alston, 1999).

As these two approaches reject the naïve phenomenological claim, they are not disjunctivist accounts that one could use to support naïve realism. However, this does not mean that these disjunctivist theories fail to account for the phenomenology of veridical perceptual experiences and causally matching hallucinations. It could be the case that the phenomenal nature of those sensory states is better explained in representational terms, or it could be the case that the phenomenal nature of those sensory states is constituted by sense data. They might have the same phenomenal character, or they might not. What I am arguing for here is that these disjunctivist views are not being fully consistent with the naïve realist commitments, and therefore, naïve realists should search for alternative disjunctivist accounts.

One of the main motivations for endorsing naïve realism is the idea that this theory of perception offers the best articulation of how our veridical perceptual episodes strike us as being to introspective reflection on them (Martin, 2004:42). When we introspect our veridical perceptual experiences, we do not find anything else other than the presentation of some aspects of the external world. It is then appropriate to say that the phenomenal character of veridical perceptual states metaphysically depend on a perceptual relation between the subject and the external world. To put it another way, the fact that the external world partly constitutes the ontological nature of veridical perceptual experiences also plays a role in explaining the phenomenal character of such mental states. The naïve phenomenological claim does justice to the idea that the external

objects and properties "shape the contours of the subject's conscious experience" (Martin, 2004:64).

In the next section, I will explore two theories of hallucination—Johnston's view and the sensory imagery account of hallucination—that aim to support naïve realism. For that purpose, they endorse sensory disjunctivism.

## 2. 2. Sensory disjunctivism

This section is divided in two sub-sections. In the first one I will analyse Johnston's view, in the second one I will explore the sensory imagery theory of hallucination. Both stances support naïve realism and sensory disjunctivism. However, they present different accounts of the nature of hallucination.

### 2.2.1 Johnston's view: the sensible profile theory

According to Johnston (2004), causally matching hallucinations—those hallucinations that have the same proximate causal conditions as veridical perceptual episodes—are metaphysically possible. He claims that those hallucinatory experiences are impersonally introspectively indiscriminable from veridical perceptual episodes. In short, on Johnston's view, causally matching hallucinations are perfect hallucinations. His disjunctivist account is focused on this sort of hallucinatory experience. To defend naïve realism from the argument from hallucination, Johnston endorses sensory disjunctivism. According to Johnston's view, veridical perceptual states and causally matching hallucinations have different phenomenal character[9]. Johnston claims that when one has a veridical perceptual experience, one is perceptually related to the external world; while when one has a causally matching hallucination, one is perceptually related to uninstantiated complexes of sensible qualities and relations—sensible profiles (Johnston, 2004:135). The sensible profile is an array of qualities that constitutes

[9] It is worth noting that scholars have construed Johnston's view in different ways (Locatelli, 2016). One of the readings presents Johnston's view as a non-phenomenological disjunctivist account, while the other present Johnston's stance as a sensory disjunctivist account. In this thesis, I will focus only on the second reading of Johnston's theory because it supports naïve realism.

the phenomenal nature of the sensory experience. In the perceptual veridical case, that sensible profile is instantiated in worldly particulars.

On Johnston's view, when one has a veridical perceptual state, one is also perceptually aware of a sensible profile. Hence, the sensible profile is a common factor of the causally matching hallucination and the veridical perceptual episode.

It is important to note that, on Johnston's view, the subject who perceives the external world does not do it in virtue of perceiving something else, namely, a sensible profile. Rather, the subject is in direct perceptual contact with the external world, which bears a certain sensible profile. On Johnston's view, by perceiving a certain external object, say, my dog Lucky, the subject is in turn perceptually related to a certain sensible profile, as this latter is instantiated in the former. As Johnston notes:

> The objects seen – instantiations of sensible profiles – are not "indirect" objects of awareness in the fashion of the Conjunctive Analysis. When we see them, our awareness of them is not mediated by anything of which we are more directly aware (2004:137).

Johnston claims that in the causally matching hallucinatory case the subject is also in a direct perceptual relation to a certain object—an uninstantiated sensible profile. Hence, in both cases—veridical perceptual episode and causally matching hallucination—the subject is perceptually related to something: sensible profiles instantiated in worldly objects and properties or uninstantiated sensible profiles in form of universals (Johnston, 2004:134).

According to Johnston, there is a common factor of veridical perceptual experiences and causally matching hallucinations, namely, a sensible profile. However, Johnston holds that the phenomenal character of the veridical perceptual episode is different from the phenomenal character of the causally matching hallucination because the instantiated sensible profiles—external objects and properties—play a role in explaining the phenomenal character of the veridical perceptual state. As Johnston contends: "the common factor is merely a part of what I am aware of in the veridical case. It is of course the factor that is not in common, namely awareness of sensible particulars and sensible kinds, which

makes all the difference" (2004:148). In contrast to the veridical perceptual case, Johnston argues that in the hallucinatory case "we are instead aware of a *part* of what we are aware in the corresponding case of seeing, a sensible profile that it is no more than a certain layout of qualities" (2004:138-139).

Consider the following example to illustrate Johnston's view. When Sophie sees Lucky, she has a visual experience whose phenomenal nature—instantiated sensible profile—explains what it is like for Sophie to see Lucky. Part of what constitutes that instantiated sensible profile is also present in the hallucinatory case, when Sophie has a causally matching hallucination of Lucky. Hence, there is a common factor of the veridical perceptual episode and the casually matching hallucination of Lucky. This common factor fully constitutes the phenomenal nature of the causally matching hallucination, but not the phenomenal nature of the veridical perceptual experience. According to Johnston, the fact that the sensible profile is instantiated in Lucky makes a difference in the phenomenal character of the veridical visual experience of Lucky.

Thus, Johnston denies premise 3 of the argument from hallucination against naïve realism. To recall, the argument is as follows:

1. Hallucinatory episodes are not constituted by the external world.
2. For every veridical perceptual state there could be a hallucination that is introspectively indiscriminable from such veridical perceptual state.
3. Introspectively indistinguishable episodes have the same nature.

C. Therefore, veridical perceptual episodes are not constituted by the external world.

According to Johnston, not all introspectively indiscriminable experiences have the same ontological and phenomenological nature. He claims that causally matching hallucinations are constituted by uninstantiated sensible profiles, while veridical perceptual experiences are constituted by instantiations of sensible profiles—external objects and properties. He claims that veridical perceptual episodes and causally matching hallucinations have different phenomenal character because they have different ontological constituents.

Johnston's view has been subject to ontological and phenomenological questions that undermine this stance. On the ontological side, As Locatelli points out (2016:254-255), it is not clear how a subject can be perceptually related to universals. This idea would require one to adapt a radical platonic view of universals, and Johnston (2004) does not develop such a view. On the phenomenological side, it is not clear how direct perceptual awareness of universals give rise to the experience of seemingly being presented with instantiated external objects and properties. Recall that, according to Johnston, causally matching hallucinations are impersonally introspectively indiscriminable from veridical perceptual episodes. On Johnston's view, causally matching hallucinations are constituted by nothing more than uninstantiated sensible profiles. The fact that the subject is perceptually related to universals on the causally matching hallucinatory case does not seem to be well accommodated with a fundamental feature of causally matching hallucination—that is, the seeming presence of particulars. Johnston should explain what gives rise to the seeming presence of individuals in the causally matching hallucinatory case.

Although Johnston deny the idea that uninstantiated sensible profiles are sense data (Johnston, 2004:135), Johnston's view and sense data theories face similar problems. It is far from clear how neural states could produce or interact with uninstantiated sensible profiles. Those problems might lead one to explore other sensory disjunctivist theories that do not appeal to those obscure objects of hallucination. In the next sub-section, I will analyse a sensory imagery account of the nature of hallucination that supports sensory disjunctivism.

### 2.2.2 The sensory imagery theory of hallucination

Proponents of the sensory imagery theory of hallucination, as well as any other advocate of phenomenological disjunctivism, deny premise 3 of the argument from hallucination—introspectively indistinguishable experiences have the same nature. It is, however, an open question whether some sensory imagery theories also deny premise 2 of the argument from hallucination—for every veridical perceptual episode there could be a hallucination that is introspectively indistinguishable from such veridical perceptual experience. As I have said, this premise is motivated by the metaphysical possibility of causally matching

hallucinations. In the last chapter I will argue that the sensory imagery account of hallucination is compatible with naïve realism so long as it rejects the claim that causally matching hallucinations are *impersonally* introspectively indiscriminable from veridical perceptual experiences.

Advocates of the sensory imagery theory claim that hallucinations are sensory imagery experiences[10] (Sietz & Malholm 1947; Mintz & Alpert, 1972; Horrowitz, 1975; Bentall, 1990, 2013; 1996; David, 1999; Dierks et al., 1999; Kosslyn et al.1999; Currie, 2000; Allen, 2015). David claims that this is not just an intuitive idea, but also a statement supported by empirical evidence: "Auditory imagery – that is, a sensory component – is intuitively central to the experience of [auditory] hallucinations, and recent fMRI studies support this" (1999:140). According to the sensory imagery theory, these hallucinations have a sensory phenomenal character, but not the same type of phenomenal character that veridical perceptual episodes have. As Macpherson says, "visual imaginings and visual rememberings are thought to be different from perceptual experience at least in respect of their liveliness or vivacity of phenomenal character, which is said to be weaker than that of perceptual experience" (2013:19).

Proponents of the sensory imagery theory claim that hallucination is an experience that "is not amenable to direct and voluntary control by the experiencer" (Bentall, 1990:82). On this view, hallucinations are considered *degenerative* (especial) sort of sensory imagery experiences (Allen, 2015). Thus, for example, if Sophie claims that she is hallucinating when she voluntarily imagines an apple, we would be tempted to think that Sophie does not understand well the concept of hallucination. There should be some constraints that make a sensory imagery experience to be categorised as a hallucinatory one. Aleman claims that in order to distinguish standard sensory imagery states from hallucinations, it is instructive to add that hallucinatory experiences are not under the voluntary control of the individual (2000:130).

[10] I distinguish sensory imagery experiences from propositional imagery mental states. The former sort of imagination instantiates sensory phenomenal character, while the latter does not. Sophie might imagine (believe) that her sister Julia is going to kill her in a particular way without recreating the scene in a visual way—for example, without visually imagining the room and the way that Julia will kill her sister Sophie. Sensory visual imaginations instantiate this sort of visual phenomenal character that propositional imagery mental states lack.

Although the fact that hallucinations are not under the voluntary control of the individual is important to distinguish such type of experiences from standard sensory imagery episodes, the most important constraint to distinguish a hallucination from a standard sensory imagery episode is the indistinguishability condition of hallucination. Unlike common sensory imagery states, hallucinations are experiences that are introspectively indiscriminable from veridical perceptual episodes. Thus, according to the sensory imagery theory, the nature of hallucination is defined as an involuntary sensory imagery experience that is introspectively indistinguishable from a veridical perceptual state of a certain kind (Currie, 2000; Currie and Jureidini 2001; Currie and Ravenscroft, 2002).

The reader might question how it is possible that the subject does not know by introspection alone that she is not perceiving if she has an experience with sensory imagery phenomenal character—which is different from the perceptual phenomenal character of the experience that she would have while perceiving the external world. Currie points out that a visual imagery episode is strikingly similar to that of veridical visual state. We describe both using the same visual terms and in a similar way. This fact might lead us to mistake perception for imagery on certain occasions (Currie, 2000:180). However, this similarity between sensory imagery states and perceptual episodes is not, at least in some possible scenarios, enough to mistake one for the other. Although visual imagery states and visual perceptual experiences instantiate similar visual phenomenal character, there are still some phenomenal differences that are accessible by introspection. Proponents of the sensory imagery account of hallucination claim that it is usually a cognitive mistake that makes the subject incapable of introspectively distinguishing between these two different mental states. As Bentall claims, “the hallucinations of psychiatric patients result from an impairment of the skill or skills involved in discrimination between real and imagery events” (1990:90).

Thus, proponents of the sensory imagery account hold that at least some hallucinations are non-perfect hallucinations. The indistinguishability condition of such mental states is relative to a subject and relative to a time. In other words, these experiences are not introspectively indiscriminable from veridical perceptual states in an impersonal sense. Another subject in the same situation or the same subject in different conditions could have known by introspection

alone that the mental state in question is not a veridical perceptual experience. It is then an open question whether there are also impersonally introspectively indiscriminable hallucinations that are involuntary sensory imagery episodes. In the next section, I will explore Allen's view (2015). Allen holds that there could be impersonally introspectively indiscriminable hallucinations that are involuntary sensory imagery episodes. I will argue that Allen's theory, as well as Johnston's view, fall prey of the screening-off worry. As we will see, this problem threatens to undermine naïve realism. I will explain why the disjunctivist views that fall into the screening-off worry should not be considered as suitable theories to support naïve realism.

### 2.3. The causal argument and the screening-off problem

The metaphysically possibility of causally matching hallucination is motivated by the causal argument (see Martin, 2004:53; Fish, 2010:89-90). This argument is in turn motivated by the same proximate cause same effect principle (henceforth, SC/SE principle). This is the principle that the same proximate cause entails the same effect. Following this principle, one assumes that if a neural state $N_1$ causes effect $E_1$, then no matter what triggers $N_1$ the effect will always be $E_1$.

The key point of the discussion is to determine what the effects of such neural states are. According to the common-kind theory, the stimulation of these neural states is sufficient to produce a mental state—causally matching hallucination—that has the same nature as a veridical perceptual experience of a certain kind. As we have seen, some disjunctivists, for example Kennedy (2013) and Logue (2013), hold that the stimulation of these neural states is not sufficient to determine the ontological nature of the sensory episode, but it is sufficient to give rise to the representational content that explains the phenomenal character of the experience. In contrast to Kennedy and Logue, those who support phenomenological disjunctivism hold that the stimulation of the relevant set of neural states is sufficient to produce a causally matching hallucination. However, according to phenomenological disjunctivists, causally matching hallucinations and veridical perceptual episodes do not have the same phenomenal character.

The assumption that causally matching hallucinations—those hallucinations that have the same underlying neural states as veridical perceptual experiences—are identical in nature to veridical perceptual episodes is supported by the causal argument (Fish, 2010:89-90):

1. It is possible to activate a component of the causal chain involved in standard perception in a nonstandard manner, for instance by direct stimulation of the retina.
2. If a component of the causal chain involved in standard perception was to be activated in a nonstandard manner, this would not alter the latter stage of the causal chain.
3. If the latter stage of the causal chain is the same as that involved in perception, then the same kind of experience would result.

C. Hence, the same kind of experience can be caused by an external object or by direct stimulation of the retina.

Premise 1 is widely accepted. There is empirical evidence that one can stimulate a neural state of the causal chain involved in standard perception in a nonstandard manner (e.g., Penfield & Perot, 1963). Premise 2 is also widely accepted by common-kind theorists and disjunctivists. If a component of the causal chain—for example, the retina—is stimulated in a non-standard way, this will not alter the latter stage of the causal chain, which is the stimulation of a certain neural state. Premise 3 is rejected by disjunctivists—even for those who do not support naïve realism. Disjunctivists argue that hallucinations and veridical perceptual experiences are not the same sort of mental state because an essential condition is missing in the hallucinatory case: a perceptual relation between the subject and the external world. As disjunctivists deny the truth of premise 3, they claim that the conclusion is false. Disjunctivists hold that the same kind of episode cannot be caused by an external object or by direct simulation of the retina.

It is worth noting that premise 3 of the causal argument is quite related to premise 2 of the argument from hallucination against naïve realism. To recall, the argument from hallucination against naïve realism is as follows:

1. Hallucinations are not constituted by the external world.

2. For every veridical perceptual state there could be a hallucination that is introspectively indiscriminable from such veridical perceptual state.
3. Introspectively indistinguishable experiences have the same nature.

C. Hence, veridical perceptual experiences are not constituted by the external world.

Advocates of the truth of Premise 2 of the argument from hallucination against naïve realism are assuming the metaphysical possibility of causally matching hallucinations, which is motivated by the causal argument. The neural states underlying veridical perceptual experiences could be, in principle, stimulated in a non-standard way. The proponent of the argument from hallucination and the causal argument holds that the result will be an experience that is impersonally introspectively indiscriminable from a veridical perceptual experience. Premise 3 of the causal argument is motivated by premise 3 of the argument from hallucination: causally matching hallucinations and veridical perceptual states are impersonally introspectively indiscriminable from each other because they have the same ontological nature. As we have seen, all disjunctivists reject both, premise 3 of the argument from hallucination and premise 3 of the causal argument. However, as I will show now, the rejection of both premises is not enough to solve the problem that the phenomenological nature of causally matching hallucination poses to naïve realism.

The metaphysical possibility of causally matching hallucinations give rise to the screening-off worry. The screening-off problem is if what it is like to have a causally matching hallucination can be explained by reference to an element that is common to veridical perceptual episodes and causally matching hallucinations, then the naïve realist aspects of the veridical perceptual experience are explanatory idle in explaining the phenomenal character of veridical perceptual episodes (Robinson, 1994, Martin, 2004, 2006, 2013 Nudds, 2013). As Kennedy claims, a solution to the screening-off problem is required for a satisfactory development of naïve realism. This problem undermines the naïve realist's ambitions to ground the phenomenal character of veridical perceptual episodes in the perceived external objects and properties (Kennedy, 2013:233).

Let me present an example to explain the screening-off problem. Imagine that Sophie has a veridical perceptual experience of Neko, my cat. According to naïve realism, the phenomenal nature of such experience is (at least partly) constituted by the cat himself and his properties. The phenomenal character of Sophie's veridical perceptual episode is obtained in virtue of being in a perceptual relation with Neko. When undergoing this veridical perceptual episode, a neural state, say $N_1$, is stimulated. Let us suppose that after this event, Sophie has a causally matching hallucination of Neko. Sophie's causally matching hallucination has the same proximate cause—neural state $N_1$—as its causally matching veridical perceptual state. In the causally matching hallucinatory case, the phenomenal nature of the episode cannot be constituted by the cat and his properties because Sophie is not perceptually related to Neko. The phenomenal nature of the causally matching hallucination of Neko is fully constituted by the element(s)—whatever they are—that are obtained simply in virtue of the presence of $N_1$.

The possibility of casually matching hallucinations leads to an unfortunate consequence for naïve realism because the neural state $N_1$ is a common factor of the veridical perceptual state and the causally matching hallucination of Neko. The presence of $N_1$, which is sufficient to bring about the phenomenal nature of the causally matching hallucination will be sufficient to bring about the phenomenal nature of the veridical perceptual episode too. The stimulation of $N_1$ produces φ that fully constitutes the phenomenal nature of the causally matching hallucination. The phenomenal nature of the causally matching hallucination—that is, φ—explains the phenomenal character of the causally matching hallucination. The problem with this analysis—if one accepts the SC/SE principle—is that the stimulation of $N_1$ will play the same role in the veridical perceptual case—it produces φ. As both experiences have the same proximate cause, $N_1$, they have the same effect: φ. Furthermore, as φ suffices to fully constitute the phenomenal nature of a mental state that is introspectively indistinguishable from the veridical perceptual experience, that is, its causally matching hallucination, then the detractor of phenomenological disjunctivism argues that φ is also sufficient to constitute the phenomenal nature of that veridical perceptual experience. Both, the veridical perceptual episode and the causally matching hallucination, have the phenomenal character they have in virtue of φ. Hence, the naïve realist aspects of perception—the external world—do not play any role

in explaining the phenomenal character of the veridical perceptual experience. As Kennedy claims: “the presence of a common, structure-level property undermines the naïve realist’s ambitions to ground the phenomenal character of Good experience in the structural elements that are present in Good experience alone” (Kennedy, 2013:23).

In the next subsections, I will explain in detail how the screening-off worry undermines non-phenomenological disjunctivism and sensory disjunctivism—in particular, Johnston’s view (2004) and Allen’s stance (2015).

### 2.3.1 The screening-off worry and non-phenomenological disjunctivism

As we have seen, non-phenomenological disjunctivists do not endorse the naïve phenomenological claim. According to non-phenomenological disjunctivists, causally matching hallucinations and veridical perceptual experiences have the same phenomenal character. However, a version of non-phenomenological disjunctivism (Price, 1932; Langsam, 1997; Alston, 1999) holds that the phenomenal character of a veridical perceptual state is obtained in virtue of being perceptually related to the external world, while the phenomenal character of a hallucination is obtained in virtue of being perceptually related to a sense-datum.

The screening-off problem comes into play as follows. According to this version of non-phenomenological disjunctivism, if one has a causally matching hallucination of, say, Neko, the phenomenal nature—sense-datum—of such experience is obtained simply in virtue of the presence of the neural state, say $N_1$. The neural state $N_1$ is a common factor of the causally matching hallucination of Neko and its causally matching veridical perceptual experience. If advocates of this disjunctivist view accept the SC/SE principle, then in the veridical perceptual case $N_1$ produces the same effect as in the causally matching hallucinatory case, namely, a sense-datum. Thus, this sense-datum is also present in the veridical perceptual case. This sense-datum is sufficient to explain the phenomenal character of a causally matching hallucination of Neko, which, according to this disjunctivist view, is impersonally introspectively indiscriminable from a veridical perceptual episode of Neko because both mental states are phenomenologically identical. Therefore, the sense datum should be also sufficient to explain the

phenomenal character of the veridical perceptual experience of Neko. As a consequence, the naïve realist aspects of perception—my cat Neko—does not play any role in explaining the phenomenal character of the veridical perceptual episode of Neko. The common factor of the veridical perceptual experience and the causally matching hallucination—that is, the sense-datum—is sufficient to fully explain the phenomenal character of the veridical perceptual experience of Neko.

If advocates of this version of non-phenomenological disjunctivism reject the SC/SE principle, then they do not have to face the screening-off worry because there is not a common factor—sense-datum—that suffices to explain the phenomenal character of the veridical perceptual state and its causally matching hallucination. $N_1$ will not produce a sense-datum in the veridical perceptual case. However, as Martin claims, this conceivable solution leaves the proponents of this view in a weak position "for it would commit them to determinate empirical consequences which they have insufficient evidence to predict" (2004:55). Proponents of this account will have to explain why the effect that is obtained in virtue of the presence of $N_1$ in the causally matching hallucinatory case—the sense-datum—does not occur in the veridical perceptual case. There must be something that occurs in the veridical perceptual case that prevents that the neural state $N_1$ produces the sense-datum. However, As Robinson suggests, this postulation presents a strange metaphysical picture: if the neural state is a sufficient causal condition to produce a sense-datum when Neko is not perceived, why is it not so sufficient when he is perceived? Does the neural state mysteriously know how it is being triggered; does it, by some extra sense, discern whether Neko is perceived or not and acts accordingly, or does Neko, when perceived, inhibit the production of the sense-datum by some sort of action at a distance? (Robinson, 1994:154).

As Martin claims, this postulation is not a suitable refuge for disjunctivists. Few neuroscientists with the hope to obtain serious findings about the nature of sensory experiences would pursue seriously the hypothesis that there is some sort of action a distance that prevents sense-data from happening (Martin, 2004:54). Therefore, proponents of this version of non-phenomenological disjunctivism either fall prey of the screening-off problem or they are forced to endorse an implausible metaphysical theory of causation.

### 2.3.2 The screening-off worry and Johnston's view

Like Robinson (1994), Johnston (2004:171) is aware of the problem that the rejection of the SC/SE principle entails. Johnston does not claim that the phenomenal nature of causally matching hallucinations is constituted by sense data. Instead, he holds that the phenomenal nature of causally matching hallucinations is constituted by an uninstantiated sensible profile. The elements that constitute the uninstantiated sensible profile are a common factor of the veridical perceptual experience and the causally matching hallucination. Hence, the same sort of elements also constitutes the phenomenal nature of the veridical perceptual experience. However, he claims that there is an extra phenomenal element that is exclusive to veridical perceptual experiences that makes a difference in the phenomenal character of such episode. Thus, on Johnston's view, veridical perceptual experiences and causally matching hallucinations have neither the same phenomenal nature nor the same phenomenal character.

I contend that Johnston's view also falls prey of the screening-off problem. On Johnston's view, the extra elements that constitute the phenomenal nature of veridical perceptual experiences are not introspectively accessible. According to Johnston, it is impossible simpliciter for a subject to notice the difference in phenomenal character between the veridical perceptual experience and its causally matching hallucination. Johnston supports this idea in different passages. He asks us to imagine a hypothetical scenario in which the subject goes from a causally matching hallucination, through a veridical causally matching hallucination to a veridical perceptual experience of spotlights in the ceiling without noticing it. As he states: "try as you might, you would not notice any difference, however closely you attend to your visual experience" (2004:122). Johnston claims that the subject cannot be in a position to notice that a change in their environment has taken place (2004:112). This is so because according to Johnston, causally matching hallucinations are *impersonally* introspectively indistinguishable from veridical perceptual experiences, and as this reading suggests, Johnston holds that the indiscriminability condition of causally matching hallucination is symmetrical. The subject could not notice a difference when she goes from a causally matching hallucination to a veridical perceptual experience.

Consider the following example to illustrate Johnston's stance. Imagine that Sophie has her eyes closed. She has a causally matching visual hallucination of Neko in a certain location in her room. It is as if Sophie were in perceptual contact with Neko, but she is not. Then she opens her eyes and she has a veridical visual experience that, according to Johnston, it is impersonally introspectively indiscriminable from such causally matching hallucination. From Sophie points of view, what it is like to have the causally matching visual hallucination of Neko is identical to what it is like to have the veridical visual experience of Neko. On Johnston's view, it is metaphysically impossible to detect by introspection alone any difference in phenomenal character when she goes from the causally matching visual hallucination of Neko to the veridical visual episode of Neko. As a consequence, the extra phenomenal elements that constitute the phenomenal nature of the veridical perceptual episode of Neko does not play any role in explaining what it is like to see Neko. The common factor of the veridical perceptual estate and causally matching hallucination is sufficient to fully explain what it is like to see Neko. Hence, as Kennedy claims, the presence of the common factor undermines the naïve realist's ambitions to explain the phenomenal character of the veridical perceptual episode (Kennedy, 2013:233).

Although Johnston claims that the phenomenal character of veridical perceptual experiences is different from the phenomenal character of causally matching hallucinations, I have shown that on Johnston's view the extra phenomenal character of the veridical perceptual episode does not play any role in explaining what it is like to perceive. The common factor of the veridical perceptual episode and the causally matching hallucination—that is, the elements that constitute the uninstantiated sensible profile—is sufficient to explain what it is like to perceive and hallucinate. This contrast with the claim that the external world shapes the contours of the subject's conscious perceptual episode. Therefore, I conclude that Johnston's view is not a suitable theory of perception to support naïve realism because it falls into the screening-off problem.

### 2.3.3 The screening-off worry and Allen's view

Another approach to sensory disjunctivism that I have presented in this chapter was the sensory imagery theory of hallucination. As I said, this stance

holds that hallucinations are involuntary sensory imagery episodes that are introspectively indiscriminable from veridical perceptual states. However, the question whether there are hallucinations that are *impersonally* introspectively indiscriminable from veridical perceptual episodes remains.

Allen (2015) supports a sensory imagery theory of hallucination. He assumes the metaphysical possibility of causally matching hallucinations. According to Allen, causally matching hallucinations are perfect hallucinations—they are *impersonally* introspectively indistinguishable from veridical perceptual states. Allen claims that causally matching hallucinations are involuntary sensory imagery episodes, therefore, they have sensory phenomenal character. In this last subsection, I will argue that Allen's view, as well as any other positive phenomenological disjunctivist view that accepts the metaphysical possibility of perfect hallucinations, falls into the screening-off problem.

Like Robinson (1994, 2013) and Johnston (2004), Allen (2015) is aware of the screening-off problem. Allen knows that the phenomenal nature of the causally matching hallucination, that is obtained in virtue of the presence of the common neural state of the veridical perceptual experience and its causally matching hallucination, will be sufficient to explain the phenomenal character of the veridical perceptual experience. He presents this problem as follows:

> The proponent of the view that hallucination is a kind of imagination cannot allow that the phenomenal character of hallucination supervenes locally on a subject's brain states: if phenomenal character is locally supervenient, and the same brain state occurs when perceiving and hallucinating, then a subject's brain state would be sufficient to explain the experience's phenomenal character; this would then 'screen off' whatever is true of veridical perception, making the presence to the subject of mind-independent objects, properties, and relations irrelevant to the explanation of the experience's phenomenal character (Allen, 2015:300).

As we have seen, the screening-off problem arises if one accepts the claim that the non-standard stimulation of the neural state underlying a veridical perceptual state is sufficient to explain the phenomenal character of the causally matching hallucination. Allen's strategy to avoid the screening-off problem is to claim that there are extra neural conditions that are required to produce a mental state with sensory imagery phenomenal character. He states that those extra

neural conditions are not present in the veridical perceptual case, therefore, the subject does not have an experience with sensory imagery phenomenal character in the veridical perceptual case. According to Allen, this extra neural condition is the *absence* of the appropriate external object (Allen, 2015:300).

According to Allen (2015), the sensory imagery phenomenal character of a causally matching hallucination does not supervene locally on a subject's brain state. He claims that non-casual conditions are required for there to be experiences with sensory imagery phenomenal character. In the veridical perceptual case, the fact that the subject perceives the external world is a necessary condition to have an experience with perceptual phenomenal character. In the causally matching hallucinatory case, the fact that the subject *does not perceive* the external world is a necessary condition to have an episode with sensory imagery phenomenal character. Allen argues that, as the external world is perceived in the veridical perceptual case, the neural state does not produce a mental state with sensory imagery phenomenal character. Therefore, there is not a common element that screens off the naïve realist aspects of perception.

Allen (2015) claims that the neural state's role is to select between different external objects and properties that could be present to the subject. Consider the following example to illustrate Allen's view. The neural state underlaying a veridical visual episode of my dog Lucky from certain perspective is $N_2$. If Lucky is not perceived, then the stimulation of the neural state $N_2$ still *selects* that external object—and not, say, my cat Neko—and produces a mental state with the sensory imagery phenomenal character of Lucky. The resulting experience is a causally matching hallucination that does not have the same phenomenal character as the veridical visual experience of Lucky. The causally matching hallucination has a sensory imagery phenomenal character, while the veridical perceptual experience has a perceptual (naïve) phenomenal character.

I suggest that this possible response to the screening-off problem is not a suitable refuge for disjunctivists because it entails the rejection of the SC/SE principle. Allen's response leads to the action a distance problem, which is already discussed in this chapter. It is metaphysically implausible that the neural state could 'know' that it has been triggered when the external object is not perceived,

and thus, produce a totally different sort of effect, namely, a sensory imagery episode. Allen does not deal with this problem at all. He limits himself to the idea that disjunctivists are likely to reject the SC/SE principle. Once this principle is rejected, he claims, then the idea that the same neural state could produce different effects should not be considered as implausible (Allen, 2015:300).

However, I have not found any disjunctivist theory of perception, except Allen's view, that rejects the SC/SE principle. I also suspect that disjunctivists theories are likely to reject the SC/SE principle, as Allen suggests (2015:300). For instance, Logue (2013) and Kennedy (2013) do not reject this principle because the common neural state produces the same effect in the causally matching hallucinatory case and the veridical perceptual case—a representational content. Johnston (2004) also accepts that the common neural state produces the same effect in both cases—a sensible profile. As we will see in the next chapters, Martin (2004, 2006) and Fish (2008, 2009) also accept the SC/SE principle. Therefore, according to Allen—and only Allen among the disjunctivists that I explore in this thesis—the same neural state can produce totally different effects.

If Allen's theory of hallucination rejects the SC/SE principle, then it does not have to face the screening-off problem. The phenomenological nature of causally matching hallucination does not pose a problem for naïve realism. However, the benefits from adopting this strategy does not outweigh the costs. Allen's stance is forced to adapt a metaphysical picture of causation that, as we have seen when exploring the action at a distance problem, is implausible.

## 2.4 Conclusion

In this chapter I have examined different disjunctivist theories that support the naïve ontological claim—veridical perceptual experiences are, at least partly, constituted by the perceived external objects and properties. I have argued that the disjunctivist views that I have examined in this chapter that accept the metaphysical possibility of causally matching hallucination fall prey of the screening-off problem. A solution to the screening-off worry is required for a successful development of naïve realism. This problem undermines the naïve

realist's ambitions to explain the phenomenal character of the veridical perceptual episode in terms of being perceptually related to the external world.

I also argued that the rejection of the same proximate cause same effect (SC/SE) principle to avoid the screening-off problem is not a suitable refuge for disjunctivists, as it leads to an implausible metaphysical account of causation.

I will argue that the best alternative that phenomenological disjunctivists have to avoid the screening-off worry is to reject the claim that causally matching hallucinations are perfect hallucinations. As we will see in chapter 5 and 6, Fish's view (2008, 2009) rejects the metaphysical possibility of perfect hallucinations and explains the phenomenal nature of hallucinatory experiences in terms of cognitive errors that are relative to a subject and relative to a time. As we have seen, the sensory imagery theory of hallucination also appeals to cognitive mistakes to explain the indistinguishability condition of hallucination. I will go back to the sensory imagery theory in chapter 6 to examine whether this theory of hallucination can provide a plausible explanation of the nature of causally matching hallucination that is compatible with naïve realism.

In the following two chapters, I will explore reflective disjunctivism (Martin, 2004, 2006, 2013; Brewer, 2011, 2017; Nudds, 2013). Reflective disjunctivists aim to avoid the screening-off problem without rejecting the metaphysical possibility of perfect hallucinations and the SC/SE principle.

# CHAPTER 3: REFLECTIVE DISJUNCTIVISM

In the previous chapter, I have argued that Johnston's view (2004) fails to preserve naïve realism from the screening-off worry. To recall, the screening-off problem is if what fully constitutes the phenomenal nature of a causally matching hallucination is a non-naïve realist aspect of perception that is common to the causally matching hallucination and its causally matching veridical perceptual experience, then the naïve realist aspects of perception are explanatorily idle because the common element is sufficient to explain what it is like to perceive. I have argued that on Johnston's view the common factor to the veridical perceptual experience and its causally matching hallucination—that is, the uninstantiated sensible profile—is sufficient to explain what it is like to perceive.

In order to avoid this problem, Allen (2015) rejects the SC/SE principle. According to Allen, the common neural state underlying a veridical perceptual state and its causally matching hallucination do not produce the same effect in both situations. However, I have argued that this solution leaves naïve realism in a very disadvantage position, as it has to embrace an implausible metaphysical picture—the neural state 'knows' how it is being stimulated: if it has been stimulated in a standard way, it would produce one effect—an experience with perceptual phenomenal character—however, if it has been stimulated in a non-standard way, then it would produce another different effect—an experience with sensory imagery phenomenal character.

Martin (2004, 2006) is aware of these issues. He argues that sensory disjunctivists cannot avoid the screening-off problem. So, he proposes a different disjunctivist account to avoid the screening-off worry: reflective disjunctivism. According to reflective disjunctivism, causally matching hallucinations do not have sensory properties. As we will see in this chapter, reflective disjunctivists explain the nature of causally matching hallucinations solely in negative epistemic terms: it is metaphysically impossible to know by introspection alone that the causally matching hallucination is not a veridical perceptual experience of a certain kind.

In the first section of this chapter, I will explain how reflective disjunctivists address enquiries concerning the ontological and phenomenological nature of causally matching hallucinations. In the second section, I will explore in detail the notion of introspection. On reflective disjunctivism, the notion of introspection plays a fundamental role in explaining the nature of causally matching hallucination. In the third section, I will examine how reflective disjunctivists characterise the indistinguishability condition of causally matching hallucination. In the fourth section, I will analyse how reflective disjunctivists accommodate the SC/SE principle with the metaphysical possibility of causally matching hallucination and how they deal with the screening-off problem. In the last section, I will summarise the key points that have been addressed in this chapter. Chapter 4 will be dedicated to exploring objections against Martin's conception of sensory experience and reflective disjunctivism.

## 3.1 Reflective disjunctivism and the nature of hallucination

Martin (2004, 2006, 2013) takes naïve realism to be the best philosophical articulation of what is accepted as a pre-theoretical reflection of the nature of veridical perceptual experience—that is, when we perceive, we are in a direct relation of perceptual awareness with the external world. It is the external world that constitutes the phenomenal nature of a veridical perceptual episode, as it seems to be when we reflect on our mental state. As Martin states:

> When one reflects on one's experience it seems to one as if one is thereby presented with some experience-independent elements of the scene before one as constituents of one's experience and not merely as represented to one as in imagination (2004:49).

Martin acknowledges that causally matching hallucinations threaten this theory of perception because they give rise to the screening-off problem. To recall, causally matching hallucinations are those hallucinations that have the same proximate causal conditions as veridical perceptual experiences. In order to defend naïve realism from the screening-off problem, Martin (2004, 2006) develops a novel theory of hallucination: reflective disjunctivism. According to reflective disjunctivism, there is not a common positive constitutive element of

the phenomenal nature of causally matching hallucination and veridical perceptual experience that screens off the naïve realist aspects of perception. Reflective disjunctivists (Martin, 2004, 2006, 2013; Brewer, 2011, 2015; Nudds, 2013; Locatelli, 2016) claim that this disjunctivist theory of perception solves the screening-off problem because the naïve realist aspects of perception—the external world—play an essential role in explaining the phenomenal character of both: veridical perceptual experiences and causally matching hallucinations.

Proponents of reflective disjunctivism hold that causally matching hallucinations do not have a sensory phenomenal nature—the phenomenal nature of causally matching hallucinations is not constituted by sensory properties (Martin, 2004, 2006; Brewer, 2017; Nudds, 2013). They claim that there is not a positive mental element in virtue of which a causally matching hallucination is *impersonally* introspectively indiscriminable from a veridical perceptual experience of a certain kind. Reflective disjunctivists assume that causally matching hallucinations are perfect hallucinations, and therefore, they explain the indiscriminability condition of such type of hallucination in impersonal terms.

Although, according to reflective disjunctivists, causally matching hallucinations do not have a sensory phenomenal nature, this does not mean that they lack phenomenal character. On reflective disjunctivism, there is something it is like to have a causally matching hallucination, namely, it is as if the subject were perceptually related to certain external objects and properties. According to reflective disjunctivists, the phenomenal character of a causally matching hallucination is not the same as the phenomenal character of a veridical perceptual experience. They endorse the naïve phenomenological claim—the phenomenal character of veridical perceptual episodes metaphysically depends on a perceptual relation between the subject and the external world. As in the causally matching hallucinatory case the subject is not perceptually related to the external world, causally matching hallucinations and veridical perceptual states have different phenomenal character. Thus, like sensory disjunctivists, reflective disjunctivists reject the common-factor principle.

On reflective disjunctivism, the only property that explains the phenomenal character of a causally matching hallucination is the property of being

impersonally introspectively indiscriminable from a veridical perceptual experience of a certain kind (2004:71; Brewer, 2017:225; Nudds, 2013:277). As Martin claims: “there is no more to the phenomenal character [of causally matching hallucination] than that of being [impersonally introspectively] indiscriminable from a corresponding veridical perception” (2006:369).

As we will see in detail in this chapter and the following one, according to reflective disjunctivists, the property of being impersonally introspectively indiscriminable from a veridical perceptual experience does not screen off the naïve realist aspects of perception from playing a role in explaining what it is like to perceive. However, I will argue in chapter 4 against reflective disjunctivism that the property of being impersonally introspectively indiscriminable from a veridical perceptual state screens off the naïve realist aspects of perception.

It is worth pointing out that reflective disjunctivists (Martin, 2004, 2006, 2013; Brewer, 2011, 2015; Nudds, 2013; Locatelli, 2016) do not make a distinction between the phenomenal nature and the phenomenal character of causally matching hallucinations. As I have said in chapter 1, an experience has the phenomenal character it has in virtue of its phenomenal nature. Thus, for example, the phenomenal character of my veridical visual episode of my dog Lucky—what it is like for me to see Lucky—is what it is (at least partly) in virtue of my perceptual relation to Lucky himself. On my analysis of reflective disjunctivism, I will also make a distinction between the phenomenal nature and the phenomenal character of veridical perceptual episodes and causally matching hallucinations. According to reflective disjunctivism, a causally matching hallucination of Lucky has the phenomenal character it has—it is as if I were in perceptual contact with Lucky—in virtue of the property of being impersonally introspectively indistinguishable from a veridical perceptual episode of Lucky. This property constitutes the phenomenal nature of the causally matching hallucination of Lucky. The phenomenal character of the causally matching hallucination of Lucky metaphysically depends on the property of being impersonally introspectively indiscriminable from a veridical perceptual experience of Lucky. Reflective disjunctivists claim that the property of being impersonally introspectively indiscriminable from a veridical perceptual

experience of a certain kind is necessary and sufficient to constitute the phenomenal nature of its causally matching hallucination.

Consider the following example to understand the difference between sensory disjunctivism and reflective disjunctivism. According to reflective disjunctivism, if Sophie had a causally matching hallucination of a book with certain sensory properties[11], say $Q_{1, 2, 3,}$ then she would have a mental state that is impersonally introspectively indistinguishable from a veridical perceptual experience of a book with $Q_{1, 2, 3.}$ However, the phenomenal nature of the causally matching hallucination is not constituted by any sort of sensory property. The only property that the phenomenal nature of Sophie's causally matching hallucination presents is the property of being impersonally introspectively indistinguishable from a veridical perceptual experience of a book with $Q_{1, 2, 3.}$

Let us contrast this example with the story that a sensory disjunctivist tells us. According to a proponent of sensory disjunctivism, say, Johnston (2004), if Sophie had a causally matching hallucination of a book with certain sensory properties, say $Q_{1, 2, 3,}$ then she would have a mental state that is impersonally introspectively indistinguishable from the veridical perceptual episode of a book with $Q_{1, 2, 3.}$ The key point to distinguish sensory disjunctivism from reflective disjunctivism is that, according to the former, the phenomenal nature of the causally matching hallucination is constituted by sensory properties. Sensory disjunctivists claim that those sensory properties that constitute the phenomenal nature of the causally matching hallucination are not properties of the external world, but other sort of sensory properties—on Johnston's view, those sensory properties are uninstantiated sensible profiles.

As we have seen in chapter 2, Johnston defines sensible profile as an array of properties that constitutes the phenomenal nature of the sensory experience. In the causally matching hallucinatory case, this sensible profile is not instantiated in worldly objects and properties. In the veridical perceptual case, the sensible profile is instantiated in worldly objects and properties. However, both sensible profiles have certain sensory properties in common, since the uninstantiated

[11] It is important to note that the sensory properties mentioned here are those that the putative book is supposed to have, not the properties of the hallucination (the experience itself).

sensible profile is also present in the veridical perceptual case. The common neural state produces the same effect in both situations: an array of sensible properties that are not instantiated in external objects and properties.

On Johnston's view, a causally matching hallucination is impersonally introspectively indistinguishable from a veridical perceptual experience of a certain kind because both share some sensory properties. In contrast, reflective disjunctivists deny the idea that the phenomenal nature of causally matching hallucination is constituted by any sort of sensory property. Instead, they explain the indistinguishability condition of causally matching hallucination by appealing solely to the seeming presence of the external world in epistemic terms. When one has a causally matching hallucination, it seems to one that one is perceiving the external world. On reflective disjunctivism, the seeming presence of the external world is explained only in negative epistemic terms: as the impossibility to know by introspection alone that the subject is not perceiving the external world. Thus, for example, if one has a causally matching hallucination of the book that is over my table, there is nothing that characterises the phenomenal nature of that experience other than the negative epistemic fact that one is in a situation in which it is impossible to distinguish by reflection alone such experience from a veridical perceptual episode of that particular book.

To present a more nuanced analysis of reflective disjunctivism, we can say that reflective disjunctivists endorse three main commitments:

1. The sort of experience that one has when perceiving cannot occur when one is not perceiving (Martin, 2006). This first commitment is accepted for any disjunctivist theory of perception. This commitment is opposed to the traditional common-kind theory, which holds that veridical perceptual experiences and causally matching hallucinations are identical in nature.

2. When one has a causally matching hallucination of *F*, one is in a situation in which it is metaphysically impossible to distinguish through introspection alone such mental state from a veridical perceptual experience of *F*. Those who endorse this second commitment characterise the indistinguishability condition of causally matching hallucination in impersonal negative

epistemic terms. Sensory disjunctivism and traditional common-kind theories are compatible with this commitment. Proponents of those views can also characterise the nature of causally matching hallucinations in impersonal negative epistemic terms.

3. There is no more to constitute the phenomenal nature of a causally matching hallucination than the property of being impersonally introspectively indistinguishable from its causally matching veridical perceptual experience (Martin, 2006:16). It is this third commitment that makes reflective disjunctivism an exclusive disjunctivist account of the nature of causally matching hallucination. This commitment is not supported by traditional common-kind theories or sensory disjunctivism.

Reflective disjunctivists fault sensory disjunctivism and the traditional common-kind theory of being immodest theories of the phenomenal nature of causally matching hallucination. According to reflective disjunctivists, nothing rules out the possibility that a subject might have a mental state whose phenomenal nature lacks sensory properties and yet the subject is in a situation in which it is impossible to tell apart through introspection alone such mental state from a veridical perceptual state of a certain type. In contrast to reflective disjunctivism, traditional common-kind theory and sensory disjunctivism deny this possibility. Proponents of such views hold that the indistinguishability condition of causally matching hallucinations must be grounded on sensory properties that are common to the phenomenal nature of veridical perceptual episodes and causally matching hallucinations—although sensory disjunctivists hold that there are extra sensory properties that the phenomenal nature of veridical perceptual experience has, and the phenomenal nature of causally matching hallucination lacks. The key point of reflective disjunctivism is that causally matching hallucinations do not have the property of being impersonally introspectively indiscriminable from a veridical perceptual experience of a certain type in virtue of having sensory properties (Siegel, 2004:91). As Kennedy claims:

> The only mental properties possessed by matching hallucinations are properties of being indiscriminable from veridical perceptions. The mental nature of matching hallucinations is epistemic and, moreover, definable only in terms of relations to veridical perception (2013:5).

According to Martin (2004, 2006, 2013), this is a modest or minimal conception of the nature of causally matching hallucination. We need not look for further mental characteristics in virtue of which a mental state is qualified as a causally matching hallucination. On reflective disjunctivism, the phenomenal nature of a mental state can seem to be constituted by sensory properties even when it is not. The seeming presence of these sensory properties—properties that seem to be constituted by the external world—is fully explained in negative epistemic terms, in which the notion of introspection plays a fundamental role.

## 3.2 Reflective disjunctivism and the notion of introspection

In this section, I will analyse the role that the notion of introspection plays in reflective disjunctivism. To recall, introspection is the ability that subjects have to access to their own mental states from the first-person perspective. The phenomenal character of a sensory experience—what it is like to have that sensory episode—is a feature of the sensory experience that is accessible through introspection (see, Nagel, 1974; Chalmers, 2002).

### 3.2.1 Immodest views and the limits of introspection

Martin claims that immodest approaches to the nature of causally matching hallucination—sensory disjunctivism and the traditional common-kind theory—carry more theoretical burdens than reflective disjunctivism because they are too restrictive (2004:51). According to these immodest approaches, one cannot be in an impersonally introspectively indistinguishable situation unless one is undergoing a mental state with sensory phenomenal nature. Thus, for example, if Sophie has a delusion, that is, a mental state whose phenomenal nature is not constituted by sensory properties, she cannot be in a situation in which it is impossible simpliciter to know by introspection alone that she is not perceiving. Martin contends that immodest approaches are bestowing epistemological powers that subjects might not, in fact, have—that is, the infallible cognitive ability to recognise, by introspection alone, that certain mental state has a sensory phenomenal nature (Martin, 2004:48).

However, these immodest views are compatible with the claim that subjects could be wrong about the metaphysical structure of the phenomenal nature of their sensory experiences. One might be mistaken about the ontological nature of sensory properties—for example, one could think that those sensory properties are properties of the external world when they are not. In fact, that is what frequently happens on the lights of a traditional common-kind theory when we introspect our veridical perceptual experiences: it seems to the subject that the phenomenal nature of a veridical perceptual episode is constituted by worldly objects and properties, but actually, they are constituted by something else—e.g., sense data or representational contents. Therefore, proponents of immodest views do not necessarily hold that responsible subjects are infallible when it comes to characterise the phenomenal nature of their sensory experiences. However, according to these immodest views, introspective abilities provide infallible grounds for discriminating mental states with sensory phenomenal nature from mental states with cognitive phenomenal nature—that is, experiences whose phenomenal nature is not constituted by sensory properties (Siegel, 2004:102).

I hold that it is not clear that immodest theories carry more theoretical burdens than reflective disjunctivism as Martin suggests (2004:51). Proponents of those theories could consider that Martin's characterisation of introspection is too limited, but for different reasons. On the one hand, Martin claims that those immodest views are too restrictive because they deny the possibility that there could be causally matching hallucinations that have a cognitive phenomenal nature. On the other hand, proponents of so-called immodest theories could hold that reflective disjunctivism is too limited when characterising our introspective abilities—according to reflective disjunctivism, when subjects have a causally matching hallucination, one's introspective capacity is so limited that one cannot know by introspection alone that one has an episode that lacks sensory properties. As Logue (2010:35) states, introspection is not so bad as to systematically generate the belief that one has an experience with sensory phenomenal nature, when in fact, the phenomenal nature of such mental state does not instantiate any sort of sensory property. However, Logue does not present any argument to bolster her assumption. Furthermore, there is no empirical evidence that rules out the possibility that a subject might have a mental state without sensory phenomenal

nature that is impersonally introspectively indistinguishable from a veridical perceptual experience (Macpherson, 2013:29).

Although I hold that it is not clear that immodest theories carry more theoretical burdens than reflective disjunctivism, I contend that we do not have enough reasons to reject Martin's account of the limitations of our introspective abilities. Whether immodest views offer a more plausible account of the nature of causally matching hallucination that reflective disjunctivism is a question that we should address after fully developing reflective disjunctivism. For that purpose, we have to accept Martin's characterisation of the limits of introspection, otherwise reflective disjunctivism does not even come into play.

### 3.3.2 Introspective abilities do not fail, they are limited.

As we have seen, reflective disjunctivists characterise the phenomenal nature of causally matching hallucination appealing to our introspective limitations. As Brewer states:

> Hallucinatory experiences have to be characterized by giving a qualitative description of a more or less specific mind-independent scene, and saying that the subject is having an experience that is not distinguishable by introspection alone from one in which the constituents of such a scene are the direct objects. No more positive characterization of the experience may be given (2011:109).

The introspection alone clause is intended to limit the possibility of not knowing about the constituents of the phenomenal nature of the causally matching hallucination to only attending to the experience itself from the first-person point of view (Martin, 2006:11). The idea is that using only introspective judgement, setting testimony and background knowledge aside, a causally matching hallucination could not be told apart from a certain veridical perceptual episode. For instance, if Sophie has a causally matching hallucination of a zebra, she could know that she is not perceiving a zebra because she remembers taking a hallucinatory drug, or because she knows that it is far more likely that she is hallucinating rather than perceiving a zebra in that given context. However, Sophie could not know that she does not have a veridical perceptual episode of a zebra if she only attends to her mental state from the first-person point of view.

To fully understand reflective disjunctivism, it is crucial to understand Martin's conception of introspection. According to Martin, introspection is not like a mechanism that could breakdown (see, Martin, 2006:39-40). He argues that when one fails to introspectively distinguish a causally matching hallucination from a veridical perceptual experience is not because one's introspective abilities go wrong. Rather, one fails to introspectively distinguish a causally matching hallucination from a veridical perceptual episode due to the limitations of our introspective abilities (Martin, 2006). Let me explain the view in more detail.

Martin (2006) brings about two possible ways of understanding the nature of introspection and he compares them with the nature of perception. One way is to characterise introspection as a mechanism, another way is not to do so.

1. Introspection is like a mechanism[12]. On this view, introspection is like a source that gives us access to an aspect of the world, just as perception does. Unlike the senses, introspection is not a faculty that relies on a visible organ, "but still it is a means by which we can come to track and aspect of reality and know things about it" (Martin, 2006:38). As other mechanisms, introspection is also prone to breakdown and to improper use. When one introspects a mental state, if one's introspective abilities fail, one does not get introspective knowledge of the phenomenal character of one's mental state. On this theory, there are therefore a set of proper conditions that must be met for introspection gives them access to the phenomenal character of a mental state. When such set of conditions obtain, they acquire knowledge about the phenomenal character of that mental state. When such set of conditions are not met, they do not acquire knowledge about the phenomenal character of such sensory experience. According to this view, if one does not have introspective knowledge of the phenomenal character of one's sensory experience, it could nevertheless seem to one that one has introspective knowledge of the phenomenal character of one's sensory episode.

To illustrate this account, consider the following example. It is possible that Sophie has a sensory experience of a butterfly—it does not matter whether it

[12] This account of introspection is also known as an inner sense account (see, Gertler, 2020). Some of the philosophers who have endorsed this view are Armstrong (1968/1993), Chisholm (1969), Kind (2003), Nichols and Stich (2003) and Goldman (2006).

is a perceptual experience or a hallucination—but she judges that she is seeing a pigeon because her introspective mechanism goes wrong. In such a circumstance, how the sensory experience introspectively seems to Sophie—a sensory episode of a pigeon—is not how the sensory experience phenomenally is to Sophie—a sensory episode of a butterfly. Sophie does not have introspective knowledge about the phenomenal character of her own mental state (see Martin, 2006:37).

2. Introspection is not like a mechanism. Martin (2006) supports this account of the nature of introspection. On this view, introspection is not a form of inner observation that is subject to error[13]. According to this view, introspective awareness of the phenomenal character of our mental states is immediate. Proponents of this view hold that introspection is not like our perceptual mechanisms, which are subject to error—the external world plays a role in determining whether a perception goes right or wrong. In contrast, according to this theory of introspection, our introspective faculty is not subject to conditions of satisfaction—that is, it is not something that might go right or wrong.

Let us now illustrate this account of introspection through an example. If Daniel has a veridical visual episode of a spider and he introspects his mental state, then he gets direct access to the phenomenal character of his visual episode. This is compatible with the possibility that Daniel could not know by introspection alone that he is seeing a spider for some reason—for example, because Daniel lacks the concept of Spider. Daniel does not know by reflecting on his episode that he is seeing a spider, even though his introspective abilities give him direct access to the phenomenal character of his veridical perceptual state.

It is important to note that sensory disjunctivism and the traditional common-kind theory are also compatible with both theories of introspection. Let us focus on the sensory imagery account—the view that hallucinations are involuntary sensory imagery experiences—to explain the differences between these two theories of introspection from the perspective of a sensory disjunctivist.

[13] Some of the philosophers who endorse this view are Anscombe (1975), Shoemaker (1994), Burge (1996), Wright (1998), Martin (2006) and Macpherson (2010).

On the one hand, Advocates of the sensory imagery theory might hold that introspection is like a mechanism. If so, then a subject, say, Sophie, might mistake a sensory imagery episode of, for example, Neko, for a veridical perceptual experience of Neko because her introspective abilities go wrong. In such a case, it introspectively seems to Sophie that she has a veridical perceptual experience of Neko. However, she has an experience with sensory imagery phenomenal character. Sophie does not know how things phenomenally are from her own point of view because her introspective abilities to access to that aspect of reality fail. As a result, she judges that she has a veridical perceptual experience of Neko when she actually has a sensory imagery episode of Neko. If that occurs, then sensory imagery theorists would say that Sophie has a hallucination of Neko. Note that this is in principle compatible with the possibility of mistaking a sensory imagery episode of Neko for a veridical perceptual state of Neko even when her introspective abilities to access to the phenomenal character of her own mental state do not fail. In other words, Sophie might mistake a sensory imagery episode of Neko for a veridical perceptual state of Neko even when she has introspective access to the sensory imagery phenomenal character of her own episode.

On the other hand, proponents of the sensory imagery theory might hold that introspection is not like a mechanism. They could argue that we have immediate and infallible introspective access to the phenomenal character of our mental states. According to this view, one fails to recognise that a mental state does not have a perceptual phenomenal character due to some interfering conditions that goes beyond one's introspective abilities to access to the phenomenal character one's mental state. There are some possible cognitive explanations of this subjective failure. For example, one is that Sophie has direct introspective access to the sensory imagery phenomenal character of her visual mental state, but then, due to a cognitive mistake, she wrongly judges that her mental state is a veridical perceptual experience of Neko.

I think that the sensory imagery theory of hallucination seems better accommodated with the theory that introspection is like a mechanism prone to breakdown or improper use. Sophie mistakes her own mental state—sensory imagery episode of Neko—for a veridical perceptual experience of Neko because a cognitive error of a certain nature causes her introspective abilities to fail in

that particular occasion. On this view, when Sophie has a hallucination, she does not get introspective access to the phenomenal character of her own experience, and she wrongly judges that she is veridically perceiving rather than sensory imagining. In chapter 6 I will examine this possible explanation in more detail. For now, I will let the reader decide what account of the nature of introspection suits better with the sensory imagery theory of hallucination. My aim here was to show that these two alternative accounts of the nature of introspection are in principle compatible with sensory disjunctivism and common-kind theories of perception.

Once the differences between these two accounts of the nature of introspection are clear, we can go back to reflective disjunctivism and Martin's account of introspection. As we have seen, according to reflective disjunctivists, causally matching hallucinations have a cognitive phenomenal nature that is constituted solely by the property of being impersonally introspectively indiscriminable from a veridical perceptual episode. According to Martin, one has immediate introspective access to the phenomenal character of one's causally matching hallucination. If that if so, how it is possible that Sophie, who is hallucinating, cannot know by introspection alone that she is not perceiving if the phenomenal character of her causally matching hallucination is different from the phenomenal character of its corresponding veridical perceptual experience?

Let me explain this through an example. Imagine that Daniel has a causally matching visual hallucination of Lucky. According to reflective disjunctivism, Daniel is not only wrong about his environment, but also wrong about the constituents of his own visual state—since it is for Daniel as if he were having a veridical visual experience that is constituted by Lucky and his properties, when in fact, the mental state not only is not constituted by Lucky and his properties, in addition, it lacks sensory (visual) phenomenal nature. As Martin claims:

> In having a hallucination one is not only deceived with respect to the environment, that it seems as if certain kinds of objects are present in one's environment, but also with respect to one's experience, that seemingly one is in a position of experiencing this objects [sic] (2006:54).

Even though Daniel is wrong about the constituents of his own mental state, according to Martin (2006), Daniel has immediate and infallible introspective

access to the phenomenal character of his causally matching hallucination of Lucky—it is as if Daniel were perceptually related to Lucky. Why does Daniel not know by introspection alone that he is hallucinating if he has immediate and infallible introspective access to the phenomenal character of the causally matching hallucination of Lucky that is different from the phenomenal character of its corresponding veridical perceptual experience of Lucky? Because, according to Martin, introspection has its limits. Daniel cannot know by introspection alone that the phenomenal nature of his causally matching hallucination lacks Lucky as constituent. In short, Daniel does not have introspective access to what the phenomenal nature of his causally matching hallucination lacks.

As we have seen, according to Martin (2006), Daniel has introspective access to the phenomenal character of his experience—the (merely) seeming presence of Lucky—which is explained by the phenomenal nature of the experience—the negative epistemic property: the impossibility to know by introspection alone that such mental state is not a veridical perceptual experience of Lucky. Therefore, Daniel does not know that he is hallucinating not because his introspective ability fails, but due to the limits of his introspective abilities.

It is important to note that, according to reflective disjunctivism, Daniel's introspective limitations that prevent him to know that his experience of Lucky lacks sensory properties is not a subjective contingent inability. It is impossible, regardless of the subject's abilities and external conditions, to have introspective access to that negative aspect of the experience—the fact that it lacks sensory properties. The fact that the phenomenal nature of the causally matching hallucination lacks sensory properties is not an aspect of the phenomenal nature of the experience that the subject can have introspective access to.

Martin proposes an analogy to understand this conception of introspection and its limitations: "to say that something is invisible is not to indicate some specific lack in certain viewers, but rather to indicate something about it, that it cannot be seen" (Martin, 2004:75). In the same way, it is not the case that those who have causally matching hallucinations cannot know by introspection alone that the mental state does not have a sensory phenomenal nature due to their subjective capacities. According to Martin, our introspective limitations to

characterise the nature of causally matching hallucinations must be taken in an objective sense.

Thus, reflective disjunctivists distinguish an explanation of the metaphysical constituents (and the lack of constituents) of causally matching hallucinations from an explanation of the phenomenal character of causally matching hallucinations. As Martin claims: "describing how things seem or are from the subject's point of view characterises his phenomenal consciousness one way; attending to how things really are, requires that we describe it another way" (2006:37). The phenomenal nature of Daniel's causally matching hallucination of Lucky is not constituted by sensory properties, the constitution of the phenomenal nature of Daniel's causally matching hallucination is cognitive in nature—the negative epistemic property. However, the negative epistemic property makes Daniel to be in a situation that is impersonally introspective indiscriminable from a veridical perceptual experience of Lucky. The negative epistemic property explains the phenomenal character of Daniel's causally matching hallucination.

In summary, Martin (2006) criticises immodest views—sensory disjunctivism and the traditional common-kind theory—for being too restrictive when characterising the nature of causally matching hallucinations. According to these immodest views, there could not be causally matching hallucinations that lack sensory properties. In contrast to immodest views, reflective disjunctivism holds that one's introspective abilities are so limited that one can end up in a drastic situation in which it seems to one that one has an experience whose phenomenal nature is constituted by external objects and properties when, in fact, the phenomenal nature of one's mental state does not instantiate sensory properties. Reflective disjunctivists claim that this is what occurs when one has a causally matching hallucination. On reflective disjunctivism, veridical perceptual experiences and causally matching hallucinations have different phenomenal character, even though the latter is only constituted by the negative epistemic property—the impossibility to know by introspection alone that the causally matching hallucination is not a veridical perceptual experience of a certain kind.

### 3.3 The impersonal indistinguishability condition of hallucination

In this section I will examine how reflective disjunctivists characterise the indistinguishability condition of causally matching hallucination. First, I will explain the difference between a personal and an impersonal notion of indistinguishability. Second, I will explain how reflective disjunctivists account for the indistinguishability condition of cognitively unsophisticated creatures' causally matching hallucinations. Third, I will explain that the indiscriminability condition of veridical perceptual experiences is reflexive—a veridical perceptual state of a certain type is impersonally introspectively indiscriminable from itself.

A way to describe the indistinguishability condition of two objects, properties or events in epistemic terms is as follows:

> *a* is indiscriminable from *b* for a subject at a time if and only if at that time the subject is not able to discriminate between *a* and *b*, that is, if and only if at that time the subject is not able to activate (acquire or employ) the relevant kind of knowledge that *a* and *b* are distinct (Williamson, 1990:8).

Williamson's characterisation of the indistinguishability condition is relative to a subject and relative to a time, therefore, it is not an impersonal characterisation of the indistinguishability condition of hallucination. This characterisation is then not appropriate for perfect hallucination—hallucinations that are impersonally introspectively indiscriminable from veridical perceptual experiences. The subject relativity is there to account for the fact that a subject $S_1$ might be able to distinguish between two events while a subject $S_2$ cannot. The temporal relativity is there to account for the possibility that a subject $S_1$ might be unable to distinguish between two events at one time, yet be able to discriminate between them at a different time (Fish, 2008:146). The fact that *a* is indistinguishable from *b* for a subject $S_1$ at a time $T_1$ is not tantamount to the fact that *a* and *b* are qualitatively identical.

Martin aims to offer a characterisation of the indistinguishability condition of causally matching hallucination without claiming that causally matching hallucinations are qualitatively identical to veridical perceptual experiences. For that purpose, unlike Williamson, Martin (2004, 2006) does not offer a

characterisation of the notion of indiscriminability that is relative to a subject and relative to a time. On reflective disjunctivism, a causally matching hallucination could never be introspectively distinguishable from its causally matching veridical perceptual experience. According to reflective disjunctivists, the notion of indistinguishability should be understood in an impersonal sense: it is just impossible—regardless of the subject's cognitive capacities—to distinguish a causally matching hallucination from its corresponding veridical perceptual state.

Martin (2004, 2006) presents the following example to illustrate his conception of indistinguishability. Imagine John, a subject who has normal sensory sensitivity, but who does not do well at telling apart visual experiences of scarlet from visual experiences of vermilion. He could be in a position in which he does not know that a certain experience of vermilion is not an experience of scarlet. But he is in that situation because John is not attentive enough to distinguish between two different sensory experiences. Another subject in John's situation could have told apart by introspection alone an episode of scarlet from an episode of vermilion. As Martin points out, that a subject could not distinguish two mental states in a particular occasion does not mean that he could not do it on some other occasion, or that others could not make such distinction (2006:28).

John's indiscriminable situation is not the sort of indistinguishability condition that Martin has in mind when addressing the nature of causally matching hallucinations. As Martin states: "saying that for John there is no discriminable difference between these things is surely not to say that he experiences them all the same. So here indiscriminability would seem to be insufficient for sameness of experience" (2004:38). On Martin's view, a subject cannot tell apart a causally matching hallucination from a certain veridical perceptual experience because it is impossible simpliciter to do so, and not just impossible for certain subject at a certain time. A causally matching hallucination is a perfect hallucination.

Let us consider a further example to illustrate Martin's conception of the indiscriminability condition of perfect hallucinations. Imagine a possible world—say, in 2090—in which Amka was born, an Inuit who is capable of discriminating multiple shades of white. Amka is the first human being who can discriminate by introspection alone a visual experience of shade of white $W_{15}$ from a visual

experience of shade of white $W_{16}$. Before Amka was born, no one could distinguish by reflection alone a visual episode of $W_{15}$ from a visual episode of $W_{16}$.

Before Amka was born, people could see these two different shades of white, but they could not distinguish them by reflection alone. For those subjects, a visual state of $W_{15}$ was introspectively indiscriminable from a visual state of $W_{16}$ and vice versa. Those individuals would judge that they are perceiving the same shade of white when seeing $W_{15}$ and $W_{16}$. It was after 2090 when a subject—Amka—could introspectively distinguish for first time a visual experience of $W_{15}$ from a visual experience of $W_{16}$, and vice versa.

Today no human being could distinguish by introspection alone a visual experience of $W_{15}$ from a visual experience of $W_{16}$. However, on reflective disjunctivism, a visual state of $W_{16}$ would not count as impersonally introspectively indiscriminable from the visual state of $W_{15}$. This is so because, in principle, a subject as Amka could distinguish by introspection alone a visual episode of $W_{16}$ from a visual episode of $W_{15}$, and vice versa, even though no one in the world has been able to do so yet.

The notion of indistinguishability that Martin has in mind is structured in modal terms. If a subject of nowadays—Sophie—had a veridical visual experience of $W_{16}$, we can say that she would be in a situation in which it is impossible to know by introspection alone that she is not perceiving $W_{15}$. However, this is compatible with the idea that another subject (even if the subject is hypothetical)—say, Amka—could distinguish by introspection alone a veridical visual experience of $W_{16}$ from a veridical visual experience of $W_{15}$. Thus, saying that a subject is in a situation in which it is impossible to distinguish by introspection alone *a* from *b* is not enough to capture Martin's characterisation of indistinguishability, unless the impossible clause of such characterisation is understood in an impersonal sense.

To understand the impossible clause in an impersonal sense, we should extrapolate the current subject who has the causally matching hallucination for a hypothetical ideal introspector who can discriminate through introspection alone all sensory experiences that are metaphysically possible to distinguish. In our hypothetical scenario, a visual episode of $W_{15}$ is metaphysically possible to

distinguish by introspection alone from a visual episode of $W_{16.}$ Hence, although Sophie could be in a situation in which it is impossible (for Sophie) to distinguish by introspection alone a causally matching hallucination of $W_{15}$ from a veridical perceptual experience of $W_{16,}$ she would not be in a situation in which it is just impossible simpliciter to distinguish both mental states by introspection alone. However, if Sophie had a causally matching hallucination of $W_{16,}$ she would be in a situation in which it is impossible simpliciter to distinguish such mental state from a veridical perceptual experience of $W_{16.}$ On Reflective disjunctivism, no one could distinguish by introspection alone a causally matching hallucination of $W_{16}$ from a veridical perceptual experience of $W_{16.}$

Martin (2004, 2006) claims that to appeal to an ideal introspector to explain the impersonal indistinguishability condition of causally matching hallucination can solve the problem that cognitively unsophisticated animals' causally matching hallucination pose to reflective disjunctivism.

It is widely accepted that cognitively unsophisticated animals can have hallucinations. If one accepts the metaphysical possibility of causally matching hallucination, then it would be incongruous to deny the claim that cognitively unsophisticated animals can have causally matching hallucinations. After all, those who accept the metaphysical possibility of causally matching hallucination hold that one just need to activate the relevant set of neural states in a non-standard way to produce a causally matching hallucination. If a cognitively unsophisticated creature, say Discovery, my chameleon, is capable of perceiving, then he should be able to have causally matching hallucinations.

Siegel (2008:210) argues that the idea that cognitively unsophisticated creatures can have causally matching hallucinations poses a problem for reflective disjunctivism. Let me explain it through an example. The idea is that if one stimulates the neural state underlying a veridical perceptual experience of Neko in Discovery's brain in a non-standard way, then Discovery would have a casually matching hallucination of Neko. According to Reflective disjunctivism, a causally matching hallucination of Neko does not have a sensory phenomenal nature. The phenomenal nature of a causally matching hallucination of Neko is constituted solely by the property of being impersonally introspectively indiscriminable from

a veridical perceptual experience of Neko. However, Discovery cannot distinguish through introspection alone an experience of Neko from an experience of any other kind. He lacks the cognitive equipment needed to form introspective judgements. If Discovery's visual episode of Neko were a veridical perceptual experience, then we could point out the naïve aspects of perception—Neko and his properties—as elements that allow Discovery to distinguish his mental state from another possible type of veridical perceptual experience. But, if Discovery's visual experience is a causally matching hallucination of Neko, we cannot point out any sensory feature that is distinctive of such mental state. Then, any kind of causally matching hallucination had by Discovery would count as indistinguishable (for Discovery) from any kind of veridical perceptual experience.

Reflective disjunctivists hold that, although Discovery lacks the abilities to distinguish by introspection alone different sorts of sensory experiences, this does not mean that those sensory episodes are impersonally introspectively indistinguishable from each other. As we have seen, on reflective disjunctivism, the indistinguishability condition of causally matching hallucination should not be taken as a subjective failure or limitation. Rather, it is an epistemic limitation that is justified not by the subject's cognitive incapacities, but by the metaphysical structure of the mental state—an episode whose primitive property is the property of being impersonally introspectively indistinguishable from a veridical perceptual state of a certain type. Nudds (2013) follows Martin's notion of impersonal indistinguishability to solve the problem that cognitively unsophisticated creatures might pose to reflective disjunctivism. He claims that this problem is easily solved by idealising the cognitively unsophisticated creature's situation: were Discovery to have the introspective abilities necessary to make introspective judgements, then he would not know by introspection alone that he is not seeing Neko. Therefore, Discovery's causally matching hallucination can be also accounted in negative epistemic modal terms. As Sturgeon claims:

> Reflective Disjunctivism tries to pin down the nature of visual experience in epistemic terms. When those terms are said to involve epistemic idealization, the resulting view entails that the nature of visual experience is an impersonal matter, one unfixed by capacities of those who visually experience. The resulting view de-couples the nature of visual experience from the capacities of those who enjoy it; and for this reason, the resulting view is not threatened by visual experiencers of diminished capacity.

> Proponents of Reflective Disjunctivism are well advised to see their resources to involve idealization. That is the lesson of children, puppies, and the like (2008:129).

As we will see in the next chapter, Siegel (2008) is not satisfied with this response to the problem that cognitively unsophisticated creatures' causally matching hallucinations poses to reflective disjunctivism. She claims that idealising the situation detaches the experience from the subject who enjoys it. For now, we will set Siegel's criticism aside and we will continue exploring Martin's conception of impersonal indistinguishability.

It is worth noting that we can also find the impersonal indistinguishability notion when naïve realists account for the indiscriminability condition of veridical perceptual states. There can be a situation in which a subject cannot discriminate through reflection a visual experience of a lemon from a visual experience of a bar soap not due to the individual's cognitive inabilities, but because both objects are qualitatively identical—they have the same phenomenal character. The visual episodes of those objects are impersonally introspectively indiscriminable from each other. The fact that these two visual experiences introspectively seem identical for a subject has nothing to do with the subject's capacities. Of course, if there is not a subject to reflect on these experiences, they could not look the same *for the subject*. Naïve realists do not get rid of the subject to explain the indiscriminability condition. The key point to grasp to understand this notion of impersonal indistinguishability is that the subject's introspective abilities do not determine the indiscriminability condition of the mental state.

We do not have to appeal to different external objects to show that veridical visual experiences can be impersonally introspectively indistinguishable from each other. We can appeal to veridical visual episodes of the same type. The indiscriminability condition of veridical perceptual experiences is reflexive. A veridical perceptual experience of a certain type is impersonally introspectively indistinguishable from itself.

Consider the following example to understand that the indiscriminability condition of veridical perceptual experiences is reflexive. A veridical visual state of Neko, say, $V_1$, is not impersonally introspectively indiscriminable from a

veridical visual episode of Neko of a different type, for instance $V_2$. Both visual experiences have different qualities, and they are, in principle, introspectively discriminable from each other. However, a veridical visual state of Neko $V_1$ is impersonally introspectively indiscriminable from another visual experience of the same type $V_1$. Both visual experiences have the same qualities—they have the same type of phenomenal character. This could occur if, for example, Sophie sees Neko from a certain perspective, and then, she has another visual experience of Neko from the same perspective in which the scene before her eyes is identical to the scene that she was perceptually related to when she had $V_1$ for first time.

The fact that a veridical perceptual sate of a certain type is impersonally indistinguishable from itself is fundamental to fully understand that, on reflective disjunctivism, veridical perceptual states and casually matching hallucinations have an element in common—the impersonal indistinguishability property.

Reflective disjunctivism gives priority to veridical perceptual episodes over causally matching hallucination when characterising the phenomenal nature of such experiences. As we have seen, the phenomenal nature of a causally matching hallucination is constituted solely by the property of being impersonally introspectively indistinguishable from a veridical perceptual experience of a certain kind, while the phenomenal nature of a veridical perceptual episode is also constituted by the perceived external objects and properties. As I just said, a veridical perceptual state is also impersonally introspectively indistinguishable from itself. However, unlike causally matching hallucinations, veridical perceptual experiences are impersonally introspectively indiscriminable from veridical perceptual experiences of the same type in virtue of having external objects and properties as constituents. Unlike causally matching hallucinations, the impersonal indistinguishability property is not a fundamental phenomenal property of the phenomenal nature of veridical perceptual experiences. According to Martin, if veridical perceptual episodes would not have a phenomenal nature that is constituted by external objects and properties, then they could not be impersonally introspectively indistinguishable from other veridical perceptual episodes of the same kind—that is, veridical perceptual experiences that have the same phenomenal character. It is for that reason that the naïve realist aspects of perception—the perceived external objects and properties—are more fundamental

properties than the impersonal indistinguishability property—a property that is common to veridical perceptual experiences and causally matching hallucinations. But more importantly, Martin claims that if there would not be mental states with such naïve phenomenal nature—that is, the phenomenal nature that is constituted by the perceived external objects and properties—, there could not be causally matching hallucinations either, since the explanation of their phenomenal character fully depends on the fact that they are impersonally introspectively indiscriminable from experiences with naïve phenomenal nature (Martin, 2004:69). As we will see in the next section, Martin argues that this relation of explanatory dependency that veridical perceptual experiences have over causally matching hallucinations saves naïve realism from the screening-off problem.

### 3.4 The SC/SE principle and the screening-off worry

Reflective disjunctivists (Martin, 2004, 2006; Brewer, 2011; Nudds, 2013) hold that the idea that the phenomenal nature of causally matching hallucinations has positive properties (such as sensory properties) that explain the phenomenal character of such experiences turns out to be inimical to the naïve realist project (Kennedy, 2013:11). As we have seen in chapter 2, the metaphysical possibility of causally matching hallucinations poses a problem to naïve realism, since it gives rise to the screening-off problem. The positive properties that are common to the phenomenal nature of causally matching hallucinations and veridical perceptual states are sufficient to explain the phenomenal character of both experiences, and therefore, the naïve realist aspects of perception are not required to explain the phenomenal character of veridical perceptual experiences.

Martin aims to defend naïve realism from the screening-off worry while respecting experiential naturalism, namely, the idea that conscious experiences are part of the natural realm of causes and effects (2004:39). He aims to reconcile naïve realism with the SC/SE principle. As we have seen in the previous chapter, this is the principle that the same proximate cause (neural state) entails the same effect. For that purpose, he argues that the claim that veridical perceptual experiences and their causally matching hallucinations have the same phenomenal nature does not follow from this principle. The only claim that follows is that a

non-standard stimulation of the neural states involved in perception—e.g., by direct stimulation of the retina—would cause the same effect as if those neural states were stimulated in a standard way—that is, the causal process involving the light transmitted from the external world to the subject's retina and events involving the subject's nervous system. Reflective disjunctivists deny the idea that veridical perceptual experiences and their causally matching hallucinations share the same sort of phenomenal nature because they deny the traditional assumption that the phenomenal nature of veridical perceptual experiences fully supervenes on brain's states. Martin (2004) claims that there are non-casual conditions—the constitution of worldly objects and properties—that are present in the veridical perceptual case but absent in the hallucinatory case.

As we have seen in Chapter 2, rejecting the SC/SE principle demands accepting a view that contrasts with the predictions of current neuroscience. According to these predictions, a subject *S* could be in the same neural state as when *S* sees, say, a kangaroo, even if *S* is not seeing a kangaroo. The stimulation of the common neural state would produce the same effects, regardless of whether the subject is seeing a kangaroo. The alternative view that rejects the SC/SE principle denies the claim that the common neural state underlying a veridical perceptual state of a Kangaroo would produce the same effect if it was stimulated in a non-standard way—for example by direct stimulation of the retina. But all the empirical evidence would suggest that there could be nothing to stop the stimulation of certain neural states in the absence of perception and that those neural states would produce the same effect—the effect that makes the subject to mistake a causally matching hallucination for a veridical perceptual experience. According to Martin (2004:55), there is no empirical evidence to suggest that we reject this possibility; hence, it would be philosophically irresponsible to overlook the possibility of causally matching hallucinations.

Martin goes further and claims that, even if one rejects the possibility of causally matching hallucinations and the SC/SE principle, other types of hallucinations could give rise to the screening-off problem. As he claims: "the concerns about explanatory exclusion or screening off do not derive solely from the 'Same Cause, Same Effect' principle, and so cannot be ignored simply by rejecting it" (Martin, 2006:18). The sort of non-casually matching hallucination

that can give rise to the screening-off worry is a hallucination whose proximate causal antecedents (neural states) are not the same as the proximate causal antecedents (neural states) of a causally matching hallucination, yet they produce the same effect. I will call this sort of hallucinatory state: 'parallel hallucination'. As the proximate causal antecedents (neural states) of causally matching hallucinations are the same as the proximate causal antecedents (neural states) of veridical perceptual experiences and both have the same effect, then the proximate causal antecedents (neural states) of the parallel hallucination should also have the same effects as the proximate causal antecedents (neural states) of veridical perceptual experiences. Therefore, the effect of the neural states underlying a parallel hallucination is a common factor of the veridical perceptual experience and the parallel hallucination.

Parallel hallucinations are the same sort of mental state as a causally matching hallucination, namely, according to reflective disjunctivism, both are perfect hallucinations—they are impersonally introspectively indistinguishable from veridical perceptual episodes. The only difference between them lies on extra-mental conditions, namely, the neural states underlying such experiences: their proximate causal antecedents are different.

To illustrate the metaphysical possibility of parallel hallucinations, imagine that when Sophie sees Neko, a neural state, say, $N_{23,}$ is stimulated. On reflective disjunctivism, it is metaphysically possible to stimulate $N_{23}$ in a non-standard way to produce a causally matching visual hallucination of Neko. Martin claims that $N_{23}$ would produce the same effects in both situations: when Sophie is seeing Neko and when Sophie has a causally matching visual hallucination of Neko. Martin (2006) goes further and claims that nothing rules out the possibility that a neural state that does not underpin any kind of veridical perceptual experience, say, $N_{72}$, could produce the same effects as $N_{23}$—neural state that is stimulated when Sophie seeing Neko. The stimulation of $N_{72}$ would produce a visual parallel hallucination of Neko. Hence, not only the neural states underlying possible veridical visual experiences of Neko, but also the neural states underpinning the visual parallel hallucination of Neko could produce the same effects as the neural states underlying a veridical visual experience of Neko. Therefore, causally matching hallucinations and parallel hallucinations give rise to the screening-off problem.

It is worth pointing out that on reflective disjunctivism, there are also non-casually matching hallucinations that are not impersonally introspectively indistinguishable from veridical perceptual episodes. As we have seen in chapter 2, this type of hallucination does not give rise to the screening-off problem because their neural states do not produce the same effects as the neural states underpinning veridical perceptual states. Although a subject could introspectively mistake a non-causally matching hallucination of this type from a veridical perceptual experience, this does not mean that this sort of non-causally matching hallucination is metaphysically impossible to tell apart through introspection alone from a veridical perceptual experience of a certain kind. As the phenomenal nature of this type of non-casually matching hallucinations does not fully explain the phenomenal character of veridical perceptual experiences, worldly objects and properties play a non-redundant role in explaining the phenomenal character of veridical perceptual experiences. In other words, the phenomenal nature of this type of non-causally matching hallucinations (imperfect hallucinations) does not screen off the phenomenal character of veridical perceptual experiences.

As reflective disjunctivists accept the metaphysical possibility of causally matching hallucinations, let us focus on this type of hallucination as a possible threat to naïve realism. On reflective disjunctivism, there is a common factor of causally matching hallucinations and veridical perceptual experiences that is brought by the neural states: the property of being impersonally introspectively indiscriminable from a veridical perceptual experience of a certain kind. This is the only characterisation that reflective disjunctivists give to the phenomenal nature of causally matching hallucination. This means that there are not non-causal factors that constitute the phenomenal nature of a causally matching hallucination. According to reflective disjunctivism, a causally matching hallucination is an inner mental state (Martin, 2004:58). The phenomenal nature of a causally matching hallucination is fully constituted by the effects brought by those neural states. As causally matching hallucinations and veridical perceptual experiences have the same neural state, Martin claims that the sort of event that occurs in the hallucinatory case is one that also occurs in the veridical perceptual case. However, the sort of event that occurs in the veridical perceptual case is not the same as the one that occurs in the hallucinatory case because there are

extra elements—the naïve realist aspects of perception—that constitute the phenomenal nature of the veridical perceptual experience. As Martin claims:

> The most that [SC/SE principle] could show is that whatever is the most specific kind of effect produced when having a causally matching hallucination, that same kind of effect occurs when one has a veridical perception. But that is the most specific kind of effect that occurs when one has an hallucination does not entail that this is the most specific kind of effect that occurs when one is veridically perceiving (2006:16).

On reflective disjunctivism, the veridical perceptual episode is identical to a causally matching hallucination—both share the impersonal indistinguishability property—save for the fact that veridical perceptual experiences have a naïve phenomenal nature—that is, their phenomenal nature is also constituted by external objects and properties. According to reflective disjunctivism, a casually matching hallucination is an internal state that does not present any distinctive constitutive element that is absent in the veridical perceptual experience. As Martin puts it: "to deny that what is present in perception is present in hallucination is quite consistent with admitting that what is present in hallucination is also present in perception" (2004:58). On reflective disjunctivism, the metaphysically structure of the veridical perceptual experience is as follows:

> Veridical perceptual experience = causally matching hallucination + distinctive feature (constitution of worldly objects and properties).

One should be careful here when analysing what 'the constitution of worldly objects and properties' entails. On naïve realism, it is not sufficient with the stimulation of the relevant neural state and the fact that the external objects and properties that the subject seems to perceive are present in the subject's environment to characterise the mental state as a veridical perceptual episode. Imagine that Sophie has a veridical causally matching hallucination of Lucky, that is, according to reflective disjunctivists, she has an impersonally introspectively indiscriminable hallucination in which it seems to Sophie that she is seeing Lucky in front of her, when in fact, Lucky is in front of her. Sophie would be in a situation in which it is metaphysically impossible to know by introspection alone that she is not seeing Lucky. Given Sophie's situation, it would be reasonable for Sophie to claim that Lucky is in front of her. Sophie would be right if she reports that Lucky

is in front of her, but it would not be true if she says that she is seeing Lucky. Despite the fact that Lucky is present in Sophie's environment, he does not constitute the phenomenal nature of Sophie's visual experience. Lucky is not part of the casual chain that gives rise to the stimulation of the neural state underling Sophie's mental state. Sophie's visual experience does not causally depend (in the right way) on the scene before her eyes (see Lewis 2008:247).

There might be some questions with regards to what exactly the conditions are for an external object to be a constituent of a veridical perceptual experience. For example, there could be some exceptional cases in which Sophie has a veridical causally matching hallucination of Lucky, and Lucky has an impact on the relevant set of neural states underpinning Sophie's mental state, yet she does not see Lucky. The question of what the required physical casual conditions for perception are goes beyond the sort of philosophical problems that reflective disjunctivists must deal with (see Arstila & Pihlainen, 2009). Reflective disjunctivists are committed to phenomenological and ontological enquiries concerning the nature of such episodes and the cognitive effects that they might have. On naïve realism, a visual episode of Lucky would be a veridical perceptual experience of Lucky iff Lucky constitutes (at least partly) the phenomenal nature of such visual state. The fact that Lucky is present in the subject's environment does not determine the phenomenal nature of the sensory experience.

Martin claims that causally matching hallucinations and veridical perceptual episodes could have common cognitive effects. For example, if one has a veridical visual state of a kangaroo, a common possible cognitive effect would be the belief that there is a kangaroo in front of the perceiver. Martin states that the cognitive effects that veridical perceptual experiences and causally matching hallucinations share are derivable from the negative epistemic condition that characterises the phenomenal nature of the causally matching hallucination. As he points out:

> No [causally matching] hallucination can lack the effects of perception whose presence or absence is detectible consistent with the non-knowability condition. And correspondingly no [causally matching] hallucination can possess an effect whose occurrence is detectible and which no veridical perception could possess (Martin, 2013:43).

The kind of cognitive effects that a causally matching hallucination might produce is the same kind of cognitive effects that its corresponding veridical perceptual episode would produce. For instance, the belief that certain external object is in front of the perceiver is a cognitive effect that might be common to a veridical perceptual state and its causally matching hallucination. It is important to note that those cognitive effects are contingent. They might or might not occur. For example, if Sophie has a veridical perceptual episode of Lucky, she will be inclined to believe that Lucky is in front of her, but this cognitive effect is not necessary for there to be a veridical perceptual experience of that type. The same occurs in the hallucinatory case. If Sophie has a causally matching hallucination of Lucky, she will be inclined to believe that Lucky is in front of her, but this cognitive effect is not necessary for there to be a causally matching hallucination of that type. According to reflective disjunctivism, the phenomenal nature of the causally matching hallucination is not affected by their possible cognitive effects. The phenomenal nature of the causally matching hallucination would remain the same regardless of whether the subject believes that she is perceiving. Although the hallucinator does not form the belief that she is perceiving, she would be in a situation that is impersonally introspectively indistinguishable from a veridical perceptual experience. A situation that, according to reflective disjunctivists, can be fully explained in negative epistemic terms: it is metaphysically impossible to know by introspection alone that the subject is perceiving Lucky.

Thus, for example, if Sophie has a causally matching hallucination of a zebra in her room, but she remembers taking a hallucinatory drug, then she might come to think that she is hallucinating rather than perceiving because she thinks that it is far more likely that she is hallucinating than perceiving a zebra in that given context. However, this is compatible with the idea that both mental states—the causally matching hallucination and the veridical perceptual state of a zebra—would produce the same sort of cognitive effects if Sophie would not consider countervailing considerations. If Sophie does not take into account countervailing considerations, such as the belief that she is prone to hallucinations in this kind of context (Fish, 2008:163), she would think that she is perceiving a zebra in her room because that is what introspectively seems to be the case.

It is worth noting that a similar situation could be given in the veridical perceptual case—a situation in which the sort of beliefs that the veridical perceptual state usually produces do not match the kind of beliefs that the subject has when perceiving in that given context. Thus, for example, imagine that Sophie is totally convinced that her dog Lucky died long time ago. However, one night our sleepy Sophie sees Lucky. Given this type of context, it is reasonable to say that Sophie might think that she is hallucinating Lucky, when in fact, she is seeing him. However, if Sophie focuses only on her mental state from the first-person point of view, then Sophie is liable to coerce the same sort of belief as when having a causally matching hallucination of Lucky: 'I am seeing Lucky'.

As Kennedy (2013:227) notes, causally matching hallucinations no less than veridical perceptual experiences are liable to coerce our beliefs and move us to action. Causally matching hallucinations also provide some sort of epistemic justification for beliefs about one's environment—as veridical perceptual experiences do. And finally, introspection of the causally matching hallucination will lead to the same judgments as to how the external world looks. This is so because causally matching hallucinations, like veridical perceptual experiences, purport to present worldly objects and properties (Nudds, 2013). However, causally matching hallucinations purport to relate us with such objects and properties while failing to do so (Martin, 2006:372).

Thus, on reflective disjunctivism, veridical perceptual experiences and causally matching hallucinations purport to relate us with external objects and properties, they share the impersonally indistinguishable property, and they are prone to produce the same sort of cognitive effects. At this point, the reader might question whether reflective disjunctivism falls into the screening-off problem. Why does not the property of being impersonally introspectively indiscriminable from a veridical perceptual experience screen off the naïve realist aspects of perception? Although this property is not a sensory property, it is still a common property of the causally matching hallucination and the veridical perceptual experience—recall that the indiscriminability condition of veridical perceptual experiences is reflexive. Therefore, this common property should be sufficient to fully explain both, the phenomenal character of the causally

matching hallucination and the phenomenal character of the veridical perceptual experience. As Martin claims:

> If the common element is sufficient to explain all the relevant phenomena in various cases of illusion and hallucination, one may also worry that it must be sufficient in the case of perception as well. In that case, disjunctivism is threatened with viewing its favoured conception of perception as explanatorily redundant (2004:10).

Martin (2004, 2006, 2013) argues that reflective disjunctivism overcomes the screening-off worry because, according to this view, the explanation of what it is like to have a causally matching hallucination fully depends on the naïve phenomenal nature of veridical perceptual experiences. As Martin states, "cases of inherited or dependent explanatory potential offer us exceptions to the general model of common-properties screening-off special ones" (2004:70). According to reflective disjunctivism, one cannot explain the phenomenal character of causally matching hallucinations if they do not appeal to the external world. The external world plays a role in explaining what it is like to perceive and hallucinate.

Note that other theories of perception can also appeal to the naïve realist aspects of perception to explain what it is like to hallucinate. Thus, for example, when Johnston (2004) gives an account of the constitutive elements of the common phenomenal nature of causally matching hallucinations and veridical perceptual experiences in terms of sensible profiles, he could also appeal to the naïve realist aspects of perception to explain what it is like to hallucinate. On Johnston's view, when Sophie has a causally matching hallucination, it is, for Sophie, as if she were perceiving the external world. However, according to Martin, this is not a case of dependent explanatory potential that offers naïve realist's exceptions to avoid the screening-off problem (2004:70). Although it is true that we can explain several of the features of Sophie's causally matching hallucination appealing to the veridical perceptual case, this is not sufficient, on Johnston's account, to fully explain the phenomenal nature of Sophie's causally matching hallucination. According to Johnston, the sensible profile that constitutes the phenomenal nature of the causally matching hallucination is required to explain the impersonal indistinguishability condition of such mental state. The sensible profile is a common sensory element of the phenomenal nature

of a veridical perceptual experience and its causally matching hallucination that is explanatory independent of the naïve realist aspects of perception.

As Martin (2004, 2006, 2013) claims, when naïve realists offer a characterisation of the phenomenal nature of causally matching hallucinations in substantive terms independent of the naïve phenomenal nature of veridical perceptual experiences, then they are faced with the problems of explanatory exclusion or screening off (2006:19). Those substantive terms that are independent of naïve realist aspects of perception are sufficient to fully explain the phenomenal character of a causally matching hallucination and any other mental state that is impersonally introspectively indistinguishable from it—e.g., its corresponding veridical perceptual experience.

As we already known, on reflective disjunctivism, the phenomenal nature of a causally matching hallucination does not instantiate any property but the property of being impersonally introspectively indistinguishable from a veridical perceptual experience of a certain type. This property is explained in negative epistemic terms and by reference to the naïve realist aspects of perception—the naïve realist aspects of perception play a fundamental role in explaining the nature of such negative epistemic property. Martin claims that the impersonally indistinguishable property does not screen off the naïve realist aspects of perception because the explanation of this property fully depends on the naïve phenomenal nature of veridical perceptual experiences. According to Martin, the naïve realist aspects of perception are the only phenomenal properties that explain the phenomenal character of causally matching hallucinations because the phenomenal nature of causally matching hallucination is explanatory dependent of the naïve realist aspects of perception. As Martin states:

> We have seen a range of properties which causally matching hallucinations can share with veridical perceptions without threatening the explanatory role of being a veridical perception: namely properties of being indiscriminable from the veridical perception. (2004:35).

In the next chapter I will argue that, even though the explanation of the phenomenal nature of causally matching hallucinations fully depends on the naïve

phenomenal nature of veridical perceptual experiences, the common property of both mental states screens off the naïve realist aspects of perception.

## 3.5 Conclusion

Reflective disjunctivists offer a novel disjunctivist theory of perception to account for the phenomenal nature of causally matching hallucinations solely in negative epistemic terms. As we have seen, reflective disjunctivists aim to preserve naïve realism from the screening-off problem without giving up the metaphysical possibility of impersonally introspectively indiscriminable causally matching hallucinations. For that purpose, they argue that when it comes to a mental characterisation of causally matching hallucinations, nothing more can be said that they are impersonally introspectively indiscriminable from veridical perceptual experiences (Martin, 2004:72).

Reflective disjunctivists argue that a causally matching hallucination is not impersonally introspectively indiscriminable from a veridical perceptual experience of a certain kind in virtue of common sensory properties. According to reflective disjunctivism, the property of being impersonally introspectively indiscriminable from a veridical perceptual state is a primitive property that fully constitutes the phenomenal nature of causally matching hallucinations.

According to reflective disjunctivists, this common property does not screen off the naïve realist aspects of perception from playing a role in explaining what it is like to perceive. They argue that the external world plays a fundamental role in explaining the phenomenal character of veridical perceptual experiences. Martin (2004, 2006) and Nudds (2013) hold that the property of being impersonally introspectively indiscriminable from a veridical perceptual state does not screen off the naïve realist aspects of perception because the explanation of this property fully depends on the existence of those naïve realist aspects of perception.

In the next chapter I will explore some objections against Martin's characterisation of sensory experience and reflective disjunctivism. I will present problems for reflective disjunctivism that stem from the analysis of cognitive

unsophisticated creatures' causally matching hallucinations, the notion of introspection, the positive epistemic facts of causally matching hallucinations, the possibility of philosophical zombies and the screening-off problem. I will argue that, although reflective disjunctivists appeal to the naïve realist aspects of perception to explain the phenomenal nature of causally matching hallucinations, this is not sufficient to avoid the screening-off problem.

# CHAPTER 4: REFLECTING DISJUNCTIVISM (II)

In the preceding chapter I have provided a detailed analysis of reflective disjunctivism (Martin, 2004, 2006; Brewer, 2011, 2015; Nudds, 2013). Reflective disjunctivists hold that casually matching hallucination does not have sensory properties. Instead, they claim that the only property that causally matching hallucination has is the property of being impersonally introspectively indiscriminable from a veridical perceptual experience of a certain kind.

Martin claims that that the property of being impersonally introspectively indiscriminable from a certain veridical perceptual episode is necessary and sufficient to qualify a mental state as a sensory episode (Martin, 2004:48). Martin characterises sensory experience in this modest way because he does not want to deny the claim that causally matching hallucinations—mental states that, according to him, lack sensory properties—are sensory episodes. Martin's conception of sensory experience has been the target of two objections. Smith (2002) argues that Martin's characterisation of sensory experience is not sufficient to characterise a mental state as a sensory episode. Siegel (2004) argues that Martin's conception of sensory experience is not necessary to characterise a mental episode as a sensory episode. I will argue that Martin offers a suitable response to Smith's objection, but Siegel's objection shows that Martin's conception of sensory experience is a counter-intuitive stance.

In the first section of this chapter, I will analyse Martin's characterisation of sensory experience. In the subsequent sections, I will set aside Martin's characterisation of sensory episode and I will present objections against reflective disjunctivism. In the second section, I will defend reflective disjunctivism from Sturgeon's (2006, 2008) and Siegel's (2008) objections. They claim that the phenomenal character of causally matching hallucination cannot be fully explained in negative epistemic terms. In the third section, I will argue that reflective disjunctivists lack the theoretical resources required to account for the phenomenal nature of cognitively unsophisticated creatures' causally matching hallucination. In the fourth section, I will show that Martin's characterisation of the nature of causally matching hallucinations can lead to the problem that

philosophical zombies are not logically possible. I will argue that reflective disjunctivism is compatible with the logical possibility of limited philosophical zombies. In the fifth section, I will argue that reflective disjunctivism does not avoid the screening-off problem—the negative epistemic property screens off the naïve realist aspects of perception from playing a role in explaining the phenomenal character of veridical perceptual experiences.

### 4.1 Martin's characterization of sensory experience

Reflective disjunctivists are not committed to endorsing the claim that causally matching hallucinations are sensory experiences. After all, if the phenomenal nature of a causally matching hallucination is fully explained in negative epistemic terms, one might think that there is no motivation to hold that this mental state is a sensory episode, even though it is impersonally introspectively indistinguishable from a veridical perceptual episode.

Martin (2004, 2006) and Nudds (2013) state that veridical perceptual experiences and causally matching hallucinations are both sensory experiences. On Martin's characterization of sensory experience (also endorsed by Nudds), a mental state does not need to have sensory properties to be characterised as a sensory experience. On Martin's view, a mental state is qualified as a sensory experience as long as *it seems* to have naïve realist aspects of perception as constituents. Thus, for example, if a total causally matching hallucination of a landscape—a mental state that does not involve the perception of any kind—does not instantiate any sensory property, yet it introspectively seems to instantiate the same sensory properties as its corresponding veridical perceptual episode, then that mental state is qualified as a sensory episode of a landscape. According to Martin (2004, 2006), there are mental states without sensory phenomenal nature that are sensory experiences, namely, causally matching hallucinations.

This characterisation of sensory experience is related to Martin's modest account of the nature of causally matching hallucination. A mental state does not need to have a sensory phenomenal nature to be qualified as a causally matching hallucination or a sensory experience. It is worth noting that different theories of

perception might accept one of these commitments, but not necessarily both. On the one hand, there could be immodest theories of the nature of causally matching hallucination that reject reflective disjunctivism, but they accept Martin's modest conception of sensory experience. For example, a theory of perception that characterises the phenomenal nature of causally matching hallucination in terms of sense data could hold that there are sensory experiences that do not have a sensory phenomenal nature. On the other hand, there might be reflective disjunctivists that support an immodest approach to the nature of sensory state[14]. The difference between these reflective disjunctivists and Martin is that, according to the former, causally matching hallucinations are not sensory states.

On Martin's view, it is a conceptual truth that a sensory episode is impersonally introspectively indistinguishable from a veridical perceptual experience (Siegel, 2004:3). As he states: "being indiscriminable from veridical perception is the most inclusive conception we have of what a sensory experience is" (Martin, 2004:32). According to Martin, there is a constitutive connection between sensory experience and introspective awareness: if it is true that it introspectively seems to Sophie as if she has a veridical perceptual experience of my dog Lucky, then she is thereby having a sensory experience of Lucky that is impersonally introspectively indistinguishable from the veridical perceptual episode that she seems to have (Martin, 2006:397). In such circumstances, the sensory experience that Sophie has might be a veridical perceptual experience or a causally matching hallucination of my dog Lucky.

Martin's conception of sensory experience is at odds with the traditional conception of sensory experience, according to which, sensory episodes have a sensory phenomenal nature. According to the traditional conception of sensory experience, sensory episodes include, but are not limited to veridical perceptual states, illusions, hallucinations, sensory imagery episodes and dream experiences.

[14] Brewer (2011, 2015) is a reflective disjunctivist who is not committed to Martin's conception of sensory experience. He does not take part of the discussion whether causally matching hallucinations are sensory experiences. He limits his account of the nature of causally matching hallucination to the claim that these are mental states without sensory phenomenal nature that are constituted solely by the negative epistemic property.

The sensory properties that constitute the phenomenal nature of such mental states are commonly classified according to their sensory modality: sight, sound, smell, touch and taste. For instance, the phenomenal nature of an auditory experience of an orchestra is constituted by auditory properties, but not visual ones. Of course, one might have a multimodal experience, for example, a sensory episode of an orchestra that combines both types of sensory properties: visual and auditory ones. According to the traditional conception of sensory experience, we can differentiate this sort of mental state from mental states that are not sensory in nature and are frequently named as cognitive states. Thus, for example, if Sophie's belief is 'this orchestra sounds pretty amazing', that mental state—the belief—is not a sensory experience because it does not have a sensory phenomenal nature. In short, according to the traditional conception of sensory experience, mental states with cognitive phenomenal nature are not sensory episodes. To recall, mental states with cognitive phenomenal nature are those mental states whose phenomenal nature is not constituted by sensory properties.

In contrast to the traditional conception of sensory experience, Martin claims that the negative epistemic condition of causally matching hallucination is a necessary and sufficient condition to qualify a mental state as a sensory experience. I will present two objections against Martin's characterization of sensory experience. First, the idea that the negative epistemic condition is not sufficient to qualify a mental state as a sensory experience (Smith, 2002). Second, the idea that the negative epistemic condition is not necessary to characterise a mental state as a sensory episode (Siegel, 2004).

### 4.1.1 Smith's objection against Martin's conception of sensory state

Smith (2002:224-225) argues that reflective disjunctivists who endorse Martin's conception of sensory experience cannot distinguish between cases of delusion and cases of hallucination. Smith claims that those theories of perception that do not offer an account of the distinction between delusions and hallucinatory episodes are in a disadvantage position. According to Smith, while hallucinations are clearly sensory episodes, delusions are nothing but cognitive mental states—such as the belief 'this orchestra sounds pretty amazing'.

To illustrate Smith's objection, imagine a subject who does not know that she is not perceiving, for instance, Julia, a subject who suffers from Anton's syndrome. Anton's syndrome is a condition in which people who are cortical blind claim that they can see (Maddula et al. 2009; Macpherson, 2010). Those who suffer from Anton's syndrome do not just fail to describe how the external world is, they are also wrong when describing the nature of their own mental states, since they hold that they have veridical perceptual episodes, when in fact, they cannot.

There are at least two different explanations to account for the nature of the mental states of those people who suffer from Anton's syndrome—let us call them Anton's mental states. One explanation is that the subject is undergoing experiences with sensory (visual) phenomenal nature. Another explanation is that the subject does not have experiences with sensory (visual) phenomenal nature, they just merely judge wrongly that they can see. Macpherson endorses this latter explanation (see, Macpherson, 2010).

Let us suppose that the latter explanation is the most plausible account of the nature Anton's mental states. Macpherson (2010) does not claim that Anton's mental states are sensory experiences. The reason is clear, it would be counter-intuitive to characterise such mental states as sensory experiences because they do not have a sensory phenomenal nature. Rather, Macpherson states that these mental states are delusions (cognitive mental states).

Smith (2002:224-225) argues that, if we accept Martin's characterization of sensory experience, we are forced to claim that delusions that are introspectively indiscriminable from veridical perceptual states—such as Anton's mental states—are sensory experiences. According to Smith, this is so because those mental states are introspectively indiscriminable from veridical perceptual episodes, and Martin states that this is the most inclusive conception that we have of what sensory experience is (Martin, 2004:32). Smith states that if we accept Martin's characterization of sensory state, then we could not make a distinction between Anton's mental states and causally matching hallucinations. Anton's mental states and causally matching hallucinations would be categorised as the same sort of experience—both are sensory experiences. Smith claims that this is an unfortunate consequence for reflective disjunctivists who endorse Martin's conception of

sensory experience because delusions are clearly not sensory experiences. As he claims: “Unless more is said, we are left without any means of distinguishing the hallucinatory cases we are interested in from such quite different states as post-hypnotic suggestion [and] gross mental confusion” (Smith, 2002:225).

To distinguish this kind of delusions from causally matching hallucinations, Smith (2002) holds that the phenomenal nature of causally matching hallucination must have some qualities that delusions lack, namely, sensory properties—a statement that reflective disjunctivists reject. The putative necessary distinction between delusions and casually matching hallucinations leads Smith to claim that the negative epistemic condition of causally matching hallucination is not sufficient to qualify this sort of mental state as a sensory episode. He claims that if causally matching hallucinations are sensory states, then they cannot be characterised only in negative epistemic terms, otherwise one would not be able to distinguish causally matching hallucinations from those delusions.

Note that reflective disjunctivists who do not support Martin’s conception of sensory experience avoid Smith’s objection. On this approach to reflective disjunctivism, both delusions that are introspectively indiscriminable from veridical perceptual experiences and causally matching hallucinations are cognitive mental states. However, even if both mental states are qualified as cognitive mental states, they are not metaphysically identical. Therefore, reflective disjunctivists should point out something to differentiate causally matching hallucinations from delusions that are introspectively indiscriminable from veridical perceptual experiences—such as Anton’s mental states.

Martin (2004) claims that there is a clear distinction between delusions and causally matching hallucinations that relies on the notion of indistinguishability, namely, delusions are *personally* introspectively indistinguishable from veridical perceptual states while causally matching hallucinations are *impersonally* introspectively indistinguishable from veridical perceptual experiences. Smith (2002) does not consider using the notion of indistinguishability in an impersonal sense to discriminate between sensory and non-sensory episodes.

As we have seen, on reflective disjunctivism the nature of causally matching hallucination must be understood in an impersonal sense: it is metaphysically impossible to know by introspection alone that a certain mental state is not a veridical perceptual experience. People who suffer delusions or from Anton's syndrome are not in that impersonal indistinguishable situation. They fail to introspectively discriminate two different mental states—the veridical perceptual experience and the delusion—due to a cognitive impairment, not because both mental states are metaphysically impossible to distinguish by introspection alone. Martin (2006) goes further and claims that, unlike causally matching hallucinations, delusions are not sensory states because they lack that property of being impersonally introspectively indistinguishable from veridical perceptual episodes. Hence, there is a distinction between delusions and causally matching hallucinations. This distinction allows Martin to characterise delusions as cognitive mental states and causally matching hallucinations as sensory states.

Thus, Martin can defend his conception of sensory experience from Smith's objection. This response bolsters Martin's claim—the property of being impersonally introspectively indiscriminable from a veridical perceptual state is sufficient to qualify a mental state as a sensory experience. On Martin's view, causally matching hallucinations differ from delusions because the former, but not the latter, has the property of being impersonally introspectively indiscriminable from a veridical perceptual experience of a certain kind.

### 4.1.2 Siegel's objection against Martin's conception of sensory state

The second objection is that the negative epistemic condition is not necessary to categorise a mental state as a sensory experience (Siegel, 2004). Before developing Siegel's objection, it is worth explaining the difference between imperfect hallucinations and perfect hallucinations that do not match veridical perceptual episodes of the actual world.

Let me explain the metaphysical possibility of this sort of perfect hallucination through an example. Imagine that Sophie undergoes a visual experience of Necky, a cat-dog—that is, a creature who has a part of its body that introspectively seems to be constituted by Neko (my cat), while the other part of

its body introspectively seems to be constituted by Lucky (my dog). We know that Sophie is not having a veridical perceptual experience of Necky because Necky does not exist. However, Lucky and Neko do exist. We could imagine a possible world (Carnap, 1947; Quine, 1953) where Necky exists—perhaps because a scientist was able to create such a chimera. According to reflective disjunctivism, Sophie could be in a situation in which it is metaphysically impossible to know by introspection alone that she is not having a veridical perceptual episode of Necky—that is, a veridical perceptual episode that is, at least, metaphysically possible, even though in the actual world could not happen at that time. This possibility leads us to think that Sophie could have a perfect hallucination of Necky that does not match any veridical perceptual experience of the actual world.

On reflective disjunctivism, it is possible to have a perfect hallucination of Necky, one that is metaphysically impossible to distinguish by introspection alone from the metaphysically possible veridical perceptual state of Necky. In contrast, an imperfect hallucination is an experience that is not metaphysically impossible to distinguish by introspection alone from a veridical perceptual state. For example, according to the sensory imagery theory of hallucination, an imperfect hallucination is an experience that has a sensory imagery phenomenal character that the subject mistakes for a veridical perceptual episode of a certain type.

The perfect hallucination of Necky could be analysed as the combination of different components that, when combined, give rise to the seeming presence of Necky. For example, Necky could seems to be constituted by Lucky's face, Neko's tail, Lucky's eyes and so on. When one has a perfect hallucination of Necky, if the phenomenal nature of a visual aspect of the experience—say, Lucky's face—is constituted by, say, sense data, then the visual aspect of the episode—Lucky's face—would also be constituted by sense-data in the veridical perceptual case. This is so because the neural state underlying the visual episode of Lucky's face is a common factor of the veridical perceptual experience of Lucky and the perfect hallucination of Necky. Hence, the sense datum that constitutes the phenomenal nature of the visual aspect of the perfect hallucination of Necky—Lucky's face—would screen off the naïve realist aspects of perception from playing a role in explaining the phenomenal character of a visual aspect of the veridical perceptual episode—Lucky's face. The same goes with the rest of Necky's components.

The problem of screening-off in this hypothetical scenario is essentially the same as when we consider the experiences as a whole. The only difference is that we are focusing on some aspects of those experiences, not in the experiences as a whole. Martin (2004) is concerned with this sort of possible perfect hallucination. To avoid the screening-off worry, Martin's strategy consists of applying the indiscriminability criterion not only to the perfect hallucination as a whole, but to various aspects of the perfect hallucination. As Martin claims:

> One may seek to explain certain impossible experiences not by direct appeal to the idea of a veridical perception of that scene, but rather by explaining how an experience with each of the constituent elements is indiscriminable in that respect from a perception of that element (Martin, 2004:45).

In the Necky perfect hallucinatory case, Sophie would be in a situation in which it is metaphysically impossible to know by introspection alone that she is not perceiving some parts of Lucky and some parts of Neko respectively. Martin claims that, to avoid the screening-off problem, one should not give any positive characterisation of phenomenal nature of the perfect hallucination of Necky.

The hypothetical perfect hallucinatory experience of Necky does not pose a problem for Martin's conception of sensory experience. Martin (2004) would claim that this sort of hallucination is a sensory episode because it is impersonally introspectively indistinguishable from the metaphysically possible veridical perceptual experience of Necky. However, an imperfect hallucination poses a problem for Martin's conception of sensory experience. An imperfect hallucination cannot be impersonally introspectively indistinguishable from any metaphysically possible veridical perceptual experience. Hence, on Martin's view, an imperfect hallucination is not a sensory experience.

On Martin's view, imperfect hallucinations are not sensory experiences because they do not have the property of being impersonally introspectively indiscriminable from a veridical perceptual experience of a certain kind. It would be highly counterintuitive to claim that imperfect hallucinations, whose phenomenal nature has sensory properties, are not sensory experiences; while perfect hallucinations, whose phenomenal nature does not have sensory

properties, are sensory experiences. Martin bites the bullet and claims that all hallucinations have a cognitive phenomenal nature, in other words, according to Martin, there are not hallucinatory experiences with sensory phenomenal nature.

This possible response leads to an additional problem. If imperfect hallucinations do not have sensory properties, there is not any mental characterisation that one could appeal to distinguishing an imperfect hallucination from a delusion that is introspectively indiscriminable from a veridical perceptual state. As we have seen in the previous subsection, Smith (2002:224-225) argues that if we accept Martin's characterization of sensory experience, then we could not make a distinction between this kind of delusion and causally matching hallucination because both are experiences with a cognitive phenomenal nature that are introspectively indiscriminable from veridical perceptual episodes. Martin's response is that there is a difference between these two sorts of mental states: a causally matching hallucination has the property of being impersonally introspectively indiscriminable from a veridical perceptual state, while a delusion lacks this property. However, imperfect hallucinations also lack the property of being impersonally introspectively indiscriminable from a veridical perceptual experience. Hence, there is not any mental characterisation that one could appeal to discriminate an imperfect hallucination from this type of delusion.

Reflective disjunctivists who support Martin's conception of sensory experience might be comfortable with this analysis. They might hold that there are different types of delusions and imperfect hallucinations is a specific type of delusion: a mental state with cognitive phenomenal nature that is introspectively indiscriminable (in a personal sense) from a veridical perceptual experience.

However, Siegel's objection (2008) is more pressing when we consider other possible sorts of mental states, such as sensory imagery episodes. Martin holds that sensory imagery states are not impersonally indistinguishable from veridical perceptual states. As he claims: "when one reflects on one's [veridical perceptual] experience it seems to one as if one is thereby presented with some experience-independent elements of the scene before one as constituents of one's experience *and not merely as represented to one in imagination*" (my italics, 2004:13). Hence, On Martin's view, sensory imagery episodes are not sensory experiences.

The claim that sensory imagery episodes are not sensory experiences might be confusing. On Martin's view (2002), only perceptual experiences and those experiences that are impersonally introspectively indiscriminable from perceptual experiences are sensory experiences. Martin acknowledges that there is something called sensory imagination; however, he distinguishes sensory experiences from sensory imagination. Martin asserts that to imagine sensorily, that is, to have a sensory imagery episode of *F* is to imagine a veridical perceptual experience of *F* (2002:402-403). On Martin's view, sensory imagery episodes do not have a sensory phenomenal nature—that is, their phenomenal nature is not constituted by sensory properties. According to Martin, when one has a sensory imagery experience, one is in a mental state through which she imagines that she is having a veridical perceptual episode—that is, a mental state with sensory phenomenal nature. In short, according to Martin, the only sensory properties that exist are external properties. According to Martin, when one has a veridical perceptual experience, one has a mental state with sensory properties because one is perceptually related to properties of the external world, such as colours, sizes, and shapes.

Martin's conception of sensory imagination is compatible with his modest conception of sensory experience: being a sensory experience of *F* is identical to being in a mental state that is impersonally indistinguishable from being a sensory experience of *F*. In other words, a mental state is a sensory experience of *F* when it is metaphysically impossible to know by introspection alone that it is not a sensory experience of *F* (Sturgeon, 2008:124). When one has a sensory imagery experience of, say, an apple, she is not in such impersonally indistinguishable situation, and therefore, she is not having a sensory experience.

Martin's characterisation of the nature of sensory imagination is a view that many scholars reject. Many philosophers (Kant, 1787/1997; Strawson, 1970; Sellars 1978; Pendlebury, 1996; Lennon, 2010; Nanay, 2010; Macpherson, 2012) hold that perceptual experiences are infused with sensory imaginings. Those scholars do not set up a distinction between perceptual experiences and sensory imaginary episodes as Martin does. In contrast to Martin's conception of sensory experience, the view suggests that the division between perceptual episodes and sensory imagery states is far blurrier than what Martin supposes (Brown, 2018).

The details of whether Martin's conception of sensory experience and sensory imagination is plausible lies beyond the scope of this thesis. It is, however, undoubted that Martin's view is not absent of objections. Siegel's objection—the idea that the indistinguishability property is not necessary to characterise a mental state as a sensory experience—is pressing. We have seen that Martin's conception of sensory experience leads to the claim that sensory imaginings and imperfect hallucinations are not sensory experiences.

Although some scholars worry (e.g., Smith, 2002; Siegel, 2004) about Martin's conception of sensory experience, the problems that stem from Martin's non-standard usage of the concept of sensory experience seem to be terminological issues rather than substantive philosophical problems. I contend that the real action is about whether certain mental states—causally matching hallucinations—have sensory properties or not.

As I have noted, reflective disjunctivists are not committed to Martin's conception of sensory experience. They might accept a traditional conception of sensory experience which holds that sensory imagery episodes are sensory experiences, while causally matching hallucinations are not. In the next sections, I will set aside Martin's conceptions of sensory experience and sensory imagination and I will focus only on objections against reflective disjunctivism.

## 4.2 Positive epistemic facts of hallucination

In this section, I will present two objections against reflective disjunctivism that stem from the fact that hallucinations give rise to positive epistemic facts, such as the belief 'I know that I am not perceiving *G*' when hallucinating *F*. In the first subsection, I will present Sturgeon's objection (2006, 2008). He claims that, when one has a causally matching hallucination of *F*, there are a vast array of positive epistemic facts—such as the true belief 'I know that I am not perceiving *G*'—that are in principle available through introspection. Sturgeon argues that reflective disjunctivists do not offer a clear explanation of the 'through reflection' restriction to account for the phenomenal nature of causally matching hallucinations that is compatible with the knowability of positive epistemic facts.

I will defend reflective disjunctivism from Sturgeon's objection. I will do so by offering an explanation of the 'through reflection' restriction. In the second subsection, I will present Siegel's objection (2008). She claims that the negative epistemic characterisation is not sufficient to ground those positive epistemic facts that are required to identify the 'datum' of the causally matching hallucination—that is, whether the episode is of, say, a fly rather than a cricket. I will defend reflective disjunctivism from this Siegel's objection. I will argue that the negative epistemic property grounds those positive epistemic facts.

### 4.2.1 Positive epistemic facts: Sturgeon's objection

Sturgeon (2006, 2008) asserts that some positive epistemic facts that are available through reflection are required to account for the impersonal indiscriminability condition of causally matching hallucinations. When one has a causally matching visual hallucination of, say, Neko, one has a mental state that is impersonally introspectively indiscriminable from a veridical visual state of Neko. In order to fully explain such a situation, it is necessary to explain what kind of knowledge the subject of the causally matching visual hallucination has introspective access to. The subject can know by introspection alone the 'datum' of the visual experience, that is, the subject can know by reflection that it is a visual experience of Neko rather than a visual experience of Lucky.

Sturgeon acknowledges that when one has a causally matching hallucination of, say, Neko, one is thereby in a position to know a vast array of things through introspection—for example, that one is not perceiving Lucky. He claims that this huge amount of knowledge could only be acquired if background beliefs were available through introspection (2006:210).

Sturgeon (2006, 2008) argues that the problem with this approach is that reflective disjunctivists do not give an adequate account of the 'through introspection' restriction. As we have seen in the previous chapter, reflective disjunctivists set aside testimony and background knowledge to explain the impersonal indistinguishability condition of causally matching hallucination. Thus, for example, if Sophie has a causally matching hallucination of a crocodile in her bedroom, she could know by introspection alone that she is not perceiving a

crocodile if she remembers that she took a hallucinatory drug. To avoid this possibility, reflective disjunctivists claim that we have to set background knowledge aside to account for the phenomenal nature of the causally matching hallucination in negative epistemic terms. However, as we have seen, one cannot set all background knowledge aside that is accessible through introspection, since Sophie must be in a position that is in principle possible to know through introspection alone that she is not perceiving, say, a zebra or a cathedral.

To solve this issue, reflective disjunctivists have to make explicit what sort of background knowledge could be accessible through introspection to account for the phenomenal nature of the causally matching hallucination—recall that, when a subject has a causally matching hallucination, it is as if the subject were in perceptual relation with a particular.

I contend that Sturgeon's objection is easily solved as follows. The background knowledge that is introspectively accessible to the hallucinator must be one which presence is compatible with the non-knowability condition. Thus, for example, If Sophie has a causally matching visual hallucination of Neko, she could know by introspection alone a vast array of things, for example that she does not have a visual experience of Lucky. However, she could not have introspective access to the fact that her visual experience is not a veridical visual episode of Neko. Thus, reflective disjunctivists can make explicit what sort of background knowledge one could access to by introspection alone when one has a causally matching hallucination of a certain type.

### 4.2.2 Positive epistemic facts: Siegel's objection

Like Sturgeon (2006, 2008), Siegel (2008) points out that, when one has a causally matching hallucination, there are some positive epistemic facts that are derived from such a mental state. For instance, if Sophie has a causally matching visual hallucination of Neko, then some positive epistemic facts are derived from Sophie's causally matching visual hallucination of Neko, such as the belief that she is not seeing something different, say, my dog Lucky. Thus, Sophie has some sort of positive introspective knowledge about the phenomenal character of her visual experience.

Siegel (2008) argues that one cannot derive such positive introspective knowledge from the negative epistemic property of causally matching hallucination. According to Siegel, the negative epistemic property only prevents one from knowing through reflection alone that the mental state is not a veridical perceptual episode of a certain kind. She claims that a causally matching hallucination must instantiate some distinctive sensory positive elements that make it different from other types of causally matching hallucinations. According to Siegel, reflective disjunctivists do not provide an exhaustive explanation of the phenomenal nature of causally matching hallucination because the positive epistemic facts cannot be grounded in the negative epistemic property—the metaphysical impossibility to know by introspection alone that the causally matching hallucination is not a veridical perceptual experience of a certain kind.

Imagine that Sophie cannot know by introspection alone that she is not seeing Neko. Then, according to Siegel (2008:219), it is an open possibility for Sophie, for all introspection tells her, that she is seeing Lucky. On Siegel's stance, the positive introspective knowledge that Sophie could obtain when visually hallucinating Neko—she knows that she is not seeing Lucky—is not derivable from the negative epistemic property because this property does not rule out the possibility that she is seeing Lucky. Hence, the positive introspective knowledge that Sophie obtains cannot be grounded by the negative epistemic property. Thus, Siegel's argument is that positive introspective knowledge is not derivable from the negative epistemic property because this condition does not rule out the possibility that the hallucinator is seeing something else. As Siegel claims:

> All that follows from the Negative Epistemic Fact is that is an open possibility that I am veridically perceiving a sausage as such, but it is compatible with the openness of that possibility that I am instead veridically perceiving (say) a pyramid as such (2008:219).

However, as we have already seen, according to reflective disjunctivists a subject could not have a causally matching hallucination whose phenomenal nature is constituted by an external object and the negative epistemic property. The mental state must be constituted solely by the negative epistemic property. Hence, Siegel (2008) is not posing a real objection against reflective disjunctivism.

Sophie could not be seeing something else when she has a causally matching visual hallucination of Neko.

Nevertheless, one can question whether the positive introspective knowledge that Sophie obtains is grounded in the negative epistemic condition. Nudds (2013) states that this putative problem of grounding positive epistemic facts disappears once we understand that the impersonal indistinguishable condition of causally matching hallucinations goes hand in hand with the fact that one has an experience that seems to be a veridical perceptual experience. After all, Nudds claims that all sensory experiences (hallucinations included) purport to present external objects and properties. Hence, the positive epistemic facts—such as Sophie's belief 'I know that I am not seeing Lucky'—when she has a causally matching hallucination of Neko, is derivable from the fact that the causally matching hallucination purports to present some sort of external object: Neko.

I hold that positive epistemic facts can be grounded in the negative epistemic property—that is, the property of being impersonally introspectively indiscriminable from a veridical perceptual state of a certain kind. This property constitutes the phenomenal nature of causally matching hallucination. However, it is worth pointing out that positive epistemic facts that are derivable from that property are contingent facts. In a nutshell, I hold that reflective disjunctivists should give the following response: positive epistemic facts are introspective contingent facts that are grounded in the negative epistemic condition.

### 4.3 Cognitively unsophisticated creatures and the ideal introspector

As we have seen in the previous chapter, the metaphysical possibility of cognitively unsophisticated creatures' causally matching hallucinations poses a problem for reflective disjunctivism. To recall, cognitively unsophisticated creatures are those creatures that lack "the cognitive sophistication to entertain thoughts about their own experiences and the similarities and differences among them" (Martin, 2006:25). The problem stems from the fact that reflective disjunctivists characterise the phenomenal nature of causally matching hallucination solely in negative epistemic terms.

Martin assumes that some creatures lack the cognitive sophistication to discriminate mental states by introspection, yet they can have causally matching hallucinations (2006:27)[15]. Thus, for example, let us suppose that a cognitively unsophisticated creature—say, Discovery, my chameleon—is not capable of introspecting his mental states. As Discovery is not capable of reflecting on his causally matching hallucination, then it is not clear how reflective disjunctivists can account for the phenomenal nature of Discovery's causally matching hallucination, which is definable only in negative epistemic terms—as the impossibility to know by introspection alone that a certain mental state is not a veridical perceptual experience of a certain kind.

Once we accept the SC/SE principle, nothing rules out the possibility that Discovery could have a causally matching hallucination of a fly—experience that, according to reflective disjunctivists, does not have sensory properties. How can reflective disjunctivists explain that Discovery's causally matching hallucination of a fly is impersonally introspectively indiscriminable from a veridical perceptual state of a fly if Discovery lacks the cognitive sophistication to make introspective judgements?

Reflective disjunctivists hold that there are at least two different ways to explain this phenomenon in negative epistemic modal terms (Siegel, 2008:212):

1. If Discovery could introspect his causally matching hallucination, he would not be able to know by reflection that he is not seeing a fly.

2. If an ideal introspector were in Discovery's situation, such an introspector would not be able to know by reflection that she was not seeing a fly.

On reflective disjunctivism, it does not matter whether the hallucinator—say, a human or a cognitively unsophisticated creature—is not able to discriminate different experiences by introspection. A causally matching hallucination is

[15] I am assuming for the sake of the argument that there are creatures that lack those introspective abilities, yet they can have causally matching hallucinations. However, there are two open questions: first, whether cognitively unsophisticated creatures could have causally matching hallucinations. Second, whether cognitively unsophisticated creatures lack the abilities to make introspective judgments. For more info about this second question see Bayne (2012).

metaphysically impossible—in an objective (impersonal) sense—to distinguish by introspection alone from a veridical perceptual experience of a certain kind.

Nudds (2013) follows Martin's notion of impersonal indistinguishability (2004, 2006) and holds that the problem of cognitively unsophisticated creatures' causally matching hallucinations is easily solved by idealising the situation: if were Discovery to have the cognitive abilities necessary to make introspective judgements, then he would not know by introspection alone that he is not seeing a fly. Therefore, the phenomenal nature of Discovery's causally matching hallucination can be also explained solely in negative epistemic terms.

I will follow Siegel's (2008) line of reasoning to argue that there are at least two problems with this response. The first problem is that reflective disjunctivists do not offer an explanation to identify a cognitively unsophisticated creature's causally matching hallucination as an experience of a certain kind—for instance and episode of *F* rather than an episode of *G*. The second problem is that reflective disjunctivists do not offer an account of what explains the phenomenal character of cognitively unsophisticated creature's causally matching hallucinations.

### 4.3.1 Is it an experience of a fly or a cricket?

The first problem is that reflective disjunctivists do not provide theoretical resources to identify the sort of mental state that Discovery has (Fish, 2009:101). In Siegel words, they cannot identify the 'datum' of the experience—for example, the fact that the experience is of a fly rather than a cricket (Siegel, 2008:118). If Discovery's causally matching hallucination does not have sensory properties that allow us to identify Discovery's mental state as an episode of a fly and if Discovery cannot reflect on his causally matching hallucination to identify this sort of mental state as an episode of a fly, then how could one know that Discovery's causally matching hallucination is of a fly rather than, say, a cricket? According to reflective disjunctivism, once one knows that Discovery's causally matching hallucination is an experience of a fly, one can appeal to an ideal introspector to explain the impersonal indistinguishability condition of Discovery's causally matching hallucination in negative epistemic terms. The issue here is not that the impersonal indistinguishability condition of Discovery's causally matching

hallucination cannot be explained in negative epistemic terms. Rather, the problem is that reflective disjunctivists do not explain how one could identify the sort of hallucination that Discovery has, namely, it is an experience of a fly.

As I have said, Nudds (2013) states that causally matching hallucinations are experiences that purport to present objects and features. Let us assume that the sort of object that Discovery's causally matching hallucination purports to present is a fly. When Discovery has that causally matching hallucination, it is as if he were perceptually related to a fly. However, the fact that the experience is of a fly is just taken for granted. Reflective disjunctivists put the cart before the horse. Other theories of perception, say, sense data theories of perception, account for the impersonal indistinguishability condition of causally matching hallucination by pointing out a positive sensory element that allow us to identify such an experience as an experience of a certain kind—for example, an episode of a fly rather than an episode of a cricket. However, reflective disjunctivists do not point out any positive sensory element that allow us to identify such an experience as an experience of a certain kind. They just take for granted the impersonal indistinguishability condition of the causally matching hallucination and offer a characterisation of such condition solely in negative epistemic terms.

To illustrate this problem, imagine that we see Discovery sticking out his tongue like he is trying to hunt something when there is nothing in front of him. Discovery might stick out his tongue for many reasons, but let us assume for the sake of the argument that he sticks his tongue out because he has a causally matching visual hallucination. In order to idealise the situation and explain the phenomenal nature of Discovery's causally matching hallucination in negative epistemic terms, reflective disjunctivists have to know first what sort of mental state Discovery has. Discovery could have an experience of a fly or of a cricket.

A possible response to this problem is that, although there is not a mental property in virtue of which Discovery's causally matching hallucination could be identified as an experience of a fly, there are physical causal conditions—proximate causal antecedents—that do the job. One might hold that the proximate causal conditions of an experience—neural states—could be used to identify the sort of experience that Discovery has (Martin, 2006:44).

Imagine that one conducts a neuroimaging experiment on Discovery. When he sees a fly from a certain perspective, the neural state $N_1$ is activated. When he sees a cricket from a certain point of view, the neural state $N_2$ is activated. If one stimulates $N_1$ in Discovery's brain when he is not seeing, one could assume that he would have a visual experience of a fly because this is sufficient to produce a causally matching visual hallucination of a fly. As Fish claims: "given what we know about the causal etiology of states such as hallucinations and dreams, it appears that they can be the result of neural activity alone" (2018:124). The same sort of explanation goes if one stimulates $N_2$. If one stimulates $N_2$ in Discovery's brain when he is not seeing, one could assume that Discovery would have a visual experience of a cricket because this is sufficient to produce a causally matching visual hallucination of a cricket.

I contend that this possible response is satisfactory as long as one denies the claim that it is metaphysically possible that two different sorts of sensory states—for instance, a visual episode of a fly and a visual episode of a cricket—can be underpinned by the same neural state. If $N_1$ underlies both, a visual experience of a cricket and a visual experience of a fly, then reflective disjunctivists could not appeal to causal conditions to identify the sort of sensory experience that Discovery has—for example, a visual experience of a fly.

Reflective disjunctivists have further reasons to reject the claim that it is metaphysically possible that two different types of veridical perceptual episodes could have the same neural state. If a veridical perceptual experience of a fly has the same neural state as a veridical perceptual experience of a cricket, say, $N_1$, then a causally matching hallucination whose neural state is $N_1$ would be a causally matching hallucination of two incompatible scenes—a veridical perceptual state of a fly and a veridical perceptual state of a cricket. This is metaphysically impossible. No one can have a causally matching hallucination that matches two incompatible scenes—different types of veridical perceptual episode. A causally matching hallucination cannot be impersonally introspectively indiscriminable from two different sorts of veridical perceptual episodes that have different phenomenal character—a veridical perceptual experience of a fly and a veridical perceptual experience of a cricket. Therefore, reflective disjunctivists cannot

accept the claim that it is metaphysically possible that different sorts of veridical perceptual experiences could have the same neural state.

Note that claiming that two different types of veridical perceptual experience could have the same neural state is completely different than asserting that two different neural states could underlie the same kind of veridical perceptual experience. The assumption that Discovery's causally matching hallucination of a fly could be caused either by stimulating $N_1$ or $N_2$ does not pose a problem for reflective disjunctivism. So long as it is metaphysically possible to correlate different neural states with different types of veridical perceptual experience, one should be able to identify the sort of experience that Discovery has by examining Discovery's neural states.

However, if we allow for the metaphysical possibility of parallel hallucinations, reflective disjunctivists cannot appeal to the proximate causal conditions to identify such mental state as an experience of a certain kind, for example an experience of a fly. To recall, parallel hallucinations are perfect hallucinations that do not have the same neural states as veridical perceptual experiences, yet their neural states produce the same effects as the neural states underlaying veridical perceptual experiences. As we have seen in the previous chapter, Martin (2006:18) does not rule out the metaphysical possibility of parallel hallucinations, as he claims that other sort of hallucinations that do not match veridical perceptual experiences could give rise to the screening-off worry. According to Martin, those hallucinatory episodes are also perfect hallucinations—like causally matching hallucinations, parallel hallucinations are impersonally introspectively indiscriminable from veridical perceptual experiences.

Thus, if Discovery sticks his tongue out like he is trying to hunt something when there is nothing in front of Discovery, one could think that Discovery was hallucinating. However, if Discovery's mental state is not a causally matching hallucination, but a parallel hallucination, reflective disjunctivists lack the theoretical resources to identify the sort of experience that Discovery has. There is not any veridical perceptual state that has the same neural state as Discovery's parallel hallucination. So, we cannot appeal to the proximate causal conditions to identify the sort of mental state that Discovery has. Hence, I conclude that

reflective disjunctivists lack the theoretical resources to identify the sort of parallel hallucination that a cognitively unsophisticated creature might have.

### 4.3.2 The negative epistemic property is missing

The second problem is that reflective disjunctivists do not offer a plausible explanation of the metaphysical structure of the phenomenal nature of cognitively unsophisticated creatures' causally matching hallucination.

As Nudds claims, there is something it is like for a cognitively unsophisticated creature, say, Discovery, when he has a causally matching hallucination: "it is *as if* an object is presented and *as if* there is something there to attend to" (Nudds, 2013:286). This explains Discovery's behaviour—he sticks his tongue out like he is trying to grab something. Discovery's causally matching hallucination is not an unconscious mental state, it has phenomenal character. To recall, an experience has the phenomenal character it has in virtue of its phenomenal nature. In the veridical perceptual case, the fly that Discovery is seeing is a component of the phenomenal nature of the experience that explains the phenomenal character of that mental state. However, in the causally matching hallucinatory case, Discovery is not seeing a fly. Furthermore, Discovery lacks the cognitive sophistication to introspect his experience and judge that it is as if he were seeing a fly. The negative epistemic property does not constitute the phenomenal nature of Discovery's causally matching hallucination.

Siegel (2008) claims that on reflective disjunctivism there is no mental property that characterises Discovery's indistinguishable situation non-trivially: Discovery's causally matching hallucination is impersonally introspectively indiscriminable from a veridical perceptual episode of a certain kind. Reflective disjunctivists lack the theoretical resources to explain the metaphysical structure of the phenomenal nature of Discovery's causally matching hallucination. They just say that it is impersonal introspectively indiscriminable from a veridical perceptual episode of a fly. But for whom is it an introspectively indiscriminable mental state? Discovery, who has the causally matching hallucination, lacks cognitive sophistication to make introspective judgements.

Martin claims that the notion of impersonal indistinguishability solves the problem: Discovery and the ideal introspector have something in common, namely, the fact that this mental state is metaphysically impossible to be told apart by introspection alone from a veridical perceptual experience of a certain kind (2006:45). However, it is far from clear that this is a common fact of both, Discovery's episode and the ideal introspector's episode, since Discovery lacks cognitive sophistication to make introspective judgements. I hold that appealing to an ideal introspector might at best explain what we take, from a third-person perspective, to be the phenomenal nature of a causally matching hallucination of a fly for an ideal introspector—the ideal introspector cannot tell apart by introspection alone such experience from a veridical perceptual experience.

Although it might be true that Discovery could be in such impersonal indistinguishable situation, the characterisation of such situation in an impersonal sense is not sufficient to explain the metaphysical structure of the phenomenal nature of Discovery's causally matching hallucination. Inasmuch as Discovery lacks the ability to make introspective judgements, Discovery's situation is different from the one of an ideal introspector. Both cannot have the same sort of mental state, Discovery's causally matching hallucination is not constituted by the negative epistemic property, while the ideal introspector's causally matching hallucination is constituted by the negative epistemic property. Claiming that the ideal introspector could not know by introspection alone that she is not seeing a fly does not help to grasp what explains the phenomenal character of Discovery's causally matching hallucination. One cannot use Martin's characterization of the phenomenal nature of causally matching hallucination, which is "fully explicable in terms of certain limitations of our *first-person* knowledge of our own mental states" (*my italics*, MacGregor, 2015:99), to account for the cognitively unsophisticated creature's causally matching hallucination. As Siegel claims:

> If the claim here is that two of the dog's experiences are discriminable by someone other than the dog, that seems correct. But it does not seem correct to say that they are discriminable by reflection, if the reflection is supposed to be on the part of the subject whose states are in question. After all, by hypothesis it is not the dog doing the reflecting, and it is not clear what it would be for us to reflect on the dog's experiences, without doing some empirical investigating of a sort that the dog would be incapable of carrying out. If the relevant sort of (in)discriminability is

> (in)discriminability for a subject on the basis of that subject's reflection and introspection, then the appeal to the impersonal notion won't work in this case (Siegel, 2004:98).

After this analysis, I conclude that reflective disjunctivism is very modest when characterising the nature of sensory experiences, but very demanding when accounting for the cognitive phenomenal nature of causally matching hallucination. Disjunctivists could appeal to cognitive states that are less sophisticated than introspective judgements to characterise the phenomenal nature of causally matching hallucination. In the next chapter, I will explore in detail cognitive disjunctivism, the view that causally matching hallucinations have a cognitive phenomenal nature that is explained in terms of cognitive effects (Fish, 2008, 2009; Martin and Dokic, 2014, 2017). I will argue that cognitive disjunctivism solves these two problems without giving up the idea that causally matching hallucinations do not have a sensory phenomenal nature.

In what remains of this chapter, I will assume that the negative epistemic property is sufficient to account for the phenomenal nature of causally matching hallucinations. I will focus on some problems that stems from this claim: the zombie objection and the screening-off worry.

## 4.4 Reflective disjunctivism and philosophical zombies

By the end of this chapter, I hope to persuade the reader to think that reflective disjunctivism does not avoid the screening-off problem. To that effect, in this section we will explore another problem for reflective disjunctivism known as the zombie objection (Sturgeon, 2008). The response that reflective disjunctivists provide to the zombie objection will help us to fully understand why this view falls into the screening-off problem.

The zombie objection is that reflective disjunctivism falls prey of the following dilemma: either causally matching hallucinations are ersatz states, and therefore there is nothing it is like to have a causally matching hallucination; or philosophical zombies are logically impossible (Sturgeon, 2008:134; Nudds, 2013:284). As Sturgeon claims, the possibility of zombies seems to be conceptually

coherent. It might be the case that they are not ontologically possible, but at least it does not look as their impossibility is a conceptual truth (Sturgeon, 2008:135).

Ersatz states are states that have the same functional role as mental states with phenomenal character, but which themselves lack phenomenal character entirely (Macpherson, 2010:228). For instance, an ersatz visual experience of a lizard would be one that has the same functional role as a veridical visual experience of a lizard, but which lacks phenomenal character. Philosophical zombies are replete with ersatz states. A philosophical zombie is a creature who is functionally identical to a human being, but it lacks phenomenal consciousness (Shoemaker, 1975; Sturgeon, 2008; Macpherson, 2010).

Proponents of the zombie objection claim that a philosophical zombie could in principle satisfy the negative epistemic condition that, according to reflective disjunctivists, is necessary and sufficient to constitute the phenomenal nature of a causally matching hallucination. The idea is that a philosophical zombie, say, Zophie, could be in a situation in which she does not know through introspection alone that she is not perceiving a certain object or property. Therefore, advocates of the zombie objection argue that reflective disjunctivists are forced to choose between two undesirable claims: either causally matching hallucinations are ersatz states or ersatz states are conceptually impossible.

As we have seen, reflective disjunctivists hold that causally matching hallucinations have phenomenal character— when one has a causally matching hallucination, it is as if one were perceiving the external world. According to Martin (2013), unlike ersatz states, causally matching hallucinations are not unconscious mental states. Therefore, reflective disjunctivists deny the first undesirable claim—casually matching hallucinations are ersatz states. Martin supports the claim that causally matching hallucinations have phenomenal character, and therefore they are not ersatz states, in the following lines:

> I shall suggest that the disjunctivist needs to stress the connection between phenomenal consciousness and having a point of view or perspective on the world. The 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. In that way we can say of the subject of causally matching hallucination that they must indeed possess phenomenal consciousness precisely because, in meeting the relevant condition for the negative epistemological property, they thereby possess a point of view on the world (2006:26).

If on reflective disjunctivism causally matching hallucinations are not ersatz states, then proponents of the zombie objection claim that reflective disjunctivists are forced to reject the conceptual possibility of philosophical zombies, and therefore, ersatz states. Proponents of the zombie objection argue that if one endorses reflective disjunctivism, then a philosophical zombie that satisfies the negative epistemic condition—for example, Zophie does not know by introspection alone that she is not perceiving Neko—would have a causally matching hallucination of Neko, and therefore, an experience with phenomenal character. Zophie cannot have an ersatz state of Neko that satisfies the negative epistemic condition because in doing so it acquires phenomenal character.

As I have said, an ersatz state is functionally identical to a mental state that has phenomenal character, for example, a veridical perceptual experience of Neko, save for the fact that the ersatz state does not have phenomenal character. The key point is that an ersatz state would also be functionally identical to a causally matching hallucination as well. Reflective disjunctivists claim that causally matching hallucinations have phenomenal character. Hence, proponents of the zombie objection argue that ersatz states would have phenomenal character too because they are functionally identical to causally matching hallucinations. After all, there are not causal conditions that make a difference between ersatz states and causally matching hallucinations. Both internal states are physically and functionally identical, and both are accounted in the same way: it is impossible to tell apart through introspection alone such state—a causally matching hallucination or an ersatz state—from a veridical perceptual experience. Therefore, it is conceptually impossible that there could be such ersatz states, since according to the proponent of the zombie objection, they would have the same sort of phenomenal character as causally matching hallucinations.

In order to accommodate reflective disjunctivism with the conceptual possibility of philosophical zombies, reflective disjunctivists should explain what

makes that the causally matching hallucination, but not the ersatz state, has phenomenal character. If causally matching hallucinations and ersatz states have the same proximate conditions, then the difference must lie in something else than the neural states. What does make the subject to have a mental state with phenomenal character in the causally matching hallucinatory case?

Nudds (2013) claims that the difference lies in a sort of positive introspective knowledge that subjects have when hallucinating, namely, the fact that hallucinators know that they are in a state in which it seems that they are perceptually related to the external world. According to Martin (2006) and Nudds (2013), subjects do not have this kind of positive introspective knowledge when they have an ersatz state. The positive introspective knowledge that subjects have of their own mental states when hallucinating is a sufficient non-causal condition to make such a mental state to be an episode with phenomenal character.

Nudds (2013:228) holds that this sort of positive introspective knowledge can be acquired if and only if the subject has been perceptually related to the external world. In other words, this positive introspective knowledge can be acquired if and only if the subject has had experiences with perceptual phenomenal character. Philosophical zombies do not meet this condition to have experiences with phenomenal character, such as casually matching hallucinations. Martin claims (2004:47) that what one does in the causally matching hallucinatory case is to exploit their self-conscious awareness and memory of experience in conceiving of how it would be to be presented with the external world.

Consider the following example to illustrate Martin and Nudds' response to the zombie objection. Imagine a subject, Michael, who is born blind due to a malfunction in his eyes. Michael could not have causally matching hallucinations, because in order to have those experiences, he has to had experiences with perceptual phenomenal character. Veridical perceptual experiences provide some sort of introspective knowledge that can be obtained if and only if the subject has been in perceptual relation to the external world. Once a subject has had experiences with perceptual phenomenal character, then he could be in a situation that is impersonally introspectively indistinguishable from having a

veridical perceptual episode of a certain kind—a situation in which it seems from the first-person perspective that one is veridically perceiving the external world.

This response to the zombie objection leads to the following problem. It is widely accepted that subjects could have causally matching hallucinations of things that they have never perceived. This contrasts with the claim that subjects could not have causally matching hallucinations if they have never perceived.

To illustrate this problem, imagine Sophie, a sighted person who has never seen a kangaroo or something similar to a kangaroo in her entirely life. One day, a crazy scientist stimulates Sophie's brain to produce a causally matching visual hallucination of a kangaroo. In such a case, Sophie has a causally matching visual hallucination of a Kangaroo that does not depend on the sort of phenomenal character that is obtained when one sees a kangaroo—since Sophie has never seen a kangaroo. Sophie could not exploit her memory of experience, as Martin puts it, in conceiving how it would be to be presented with a kangaroo (Martin, 2004:47). Hence, if the explanation of the phenomenal character of Sophie's hallucination depends on the phenomenal character of a veridical perceptual experience, then it would not be the phenomenal character of a veridical perceptual experience of a kangaroo. Given this possibility, we should ask reflective disjunctivists whether the veridical visual episode of an object that is qualitatively very different from a kangaroo suffices to produce this sort of introspective knowledge that is necessary to have a causally matching visual hallucination of a kangaroo.

Reflective disjunctivism fall into the following dilemma. On the one hand, if any sort of veridical perceptual experience, for example, a simple visual experience of a white wall, is sufficient for a subject to have a causally matching hallucination of any type, for instance, a causally matching visual hallucination of a Kangaroo, then reflective disjunctivists should convince us of the truth of an incoherent claim, namely, all metaphysically possible causally matching hallucinations ultimately depend on the veridical perceptual experience of an object that is radically different in phenomenal character from countless metaphysically possible causally matching hallucinations. On the other hand, if reflective disjunctivists deny the idea that any sort of veridical perceptual episode is sufficient for a subject to have a causally matching hallucination of any type,

then reflective disjunctivists owe us an explanation of what kind of veridical perceptual experience is necessary for a subject to have a causally matching hallucination of a certain type. For example, is the perception of my cat Neko sufficient to have a causally matching hallucination of my dog Lucky?

It is conceivable, and likely ontologically possible, that subjects might hallucinate objects and properties that they have never perceived. Reflective disjunctivists should explain how this phenomenon is compatible with the claim that causally matching hallucinations depend on the sort of positive introspective knowledge that is acquired solely when the subject is in perceptual contact with the external world. I hold that if reflective disjunctivists do not give a plausible response to this problem, one has sufficient reasons to question the claim that the phenomenal character of causally matching hallucinations depends on the naïve phenomenal nature of veridical perceptual experiences.

Reflective disjunctivists might reply that the question whether Sophie could have a causally matching visual hallucination of a kangaroo is an empirical issue that goes beyond their commitments. As we have seen, on reflective disjunctivism, causally matching hallucinations depend on a sort of introspective knowledge that is acquired only by perceiving the external world. This sort of introspective knowledge is necessary for the subject to be in an impersonal indistinguishable situation, and hence, to enjoy causally matching hallucinations. The question whether the visual presence of *F* is sufficient to produce the seeming visual presence of *G* is an empirical project that goes beyond their theoretical commitments. According to reflective disjunctivists, what matters is that the seeming visual presence of *G* depends on the sort of introspective knowledge that is acquired once the subject has been in perceptual contact with the world. Reflective disjunctivism is compatible with the idea that the phenomenal nature of some causally matching hallucinations depends on the phenomenal nature of veridical perceptual experiences that do not match those hallucinations.

Once we understand the distinction between causally matching hallucinations and ersatz states, Nudds claims that the naïve realist is not committed to denying the possibility of philosophical zombies. Rather, the naïve realist is committed to denying the claim that philosophical zombies can acquire

that sort of introspective knowledge (Nudds, 2013:228). As philosophical zombies cannot acquire that sort of introspective knowledge by perceiving external objects and properties, then they cannot have causally matching hallucinations. Therefore, Martin and Nudds leave room for the possibility of limited philosophical zombies—creatures that are functionally identical to human beings, but they lack phenomenal consciousness, and, in addition, they cannot have the sort of introspective knowledge that human beings have when perceiving the external world and that is required to have causally matching hallucinations.

Martin and Nudds' response to the zombie objection might work well if their theoretical scope is narrowed to those creatures who are capable of obtaining introspective knowledge. However, this response does not offer a solution to the zombie objection if we deal with cognitively unsophisticated creatures. In fact, it leaves reflective disjunctivism in a worse theoretical position with respect to cognitively unsophisticated creatures. If reflective disjunctivists offer this response to the zombie objection, then cognitively unsophisticated creatures could not have causally matching hallucinations. Discovery, my chameleon, could not have a causally matching hallucination because he lacks the ability to acquire introspective knowledge—a condition that, according to Martin and Nudds, is necessary to have causally matching hallucinations. Martin and Nudds' response to the zombie objection contrast with Martin's claim (2006:27): certain creatures lack introspective abilities, yet they can have causally matching hallucinations.

I do not see any option left for reflective disjunctivists to solve the zombie objection without giving rise to further problems concerning cognitively unsophisticated creatures' causally matching hallucinations. As I will argue in the next chapter, this problem is solved if disjunctivists explain the phenomenal nature of causally matching hallucinations in cognitive terms that do not require introspective abilities (e.g., Fish 2008, 2009; Martin and Dokic, 2014, 2017).

In the next section, I will set the problem of cognitively unsophisticated creatures aside and I will deal only with cognitively sophisticated creatures' causally matching hallucinations. I will argue that the property of being impersonally introspectively indiscriminable from a veridical perceptual episode

of a certain kind—property that is characterised only in negative epistemic terms—screens off the naïve phenomenal nature of veridical perceptual episodes.

### 4.5 Reflective disjunctivism and the screening-off problem

As we have seen in the previous section, reflective disjunctivists assert that unlike ersatz states, causally matching hallucinations have phenomenal character. As Martin claims, "having a conscious experience involves having a point of view on the world" (2006:42). He states that having a point of view on the world does not require the subject to apprehend anything at all: neither the external world, nor an internal mental object or a representation. According to reflective disjunctivists, the point of view on the world that the subject of the causally matching hallucination has is fully explained in negative epistemic terms—it is metaphysically impossible to tell apart by introspection alone such a mental state from a veridical perceptual experience of a certain kind.

I will argue that, like sensory disjunctivism (see chapter 2), reflective disjunctivism also falls prey of the screening-off problem. The common factor of the causally matching hallucination and the veridical perceptual experience, that is, the property of being impersonally introspectively indiscriminable from a veridical perceptual experience of a certain kind, screens off the naïve realist aspects of the perception. As Robinson puts it: "if simple indiscriminability is enough to constitute the phenomenology of hallucination, how could it fail to do the same job for a perception indiscriminable from the hallucination?" (2013:327).

As we have seen in the previous chapter, Martin holds that reflective disjunctivism overcomes the screening-off problem because the explanation of the phenomenal nature of causally matching hallucinations fully depends on the naïve phenomenal nature of veridical perceptual experiences (Martin, 2004:70). Martin presents the following example to explain how reflective disjunctivism avoids the screening-off worry. Imagine a subject, say, Sophie, who has a veridical visual experience of a tree and then a causally matching visual hallucination of a tree that is impersonally introspectively indiscriminable from the veridical visual experience of a tree. Recall that the indiscriminability property of veridical

perceptual experiences is reflexive—a veridical perceptual episode of a tree is impersonally introspectively indiscriminable from itself. Martin argues that the property of being impersonally introspectively indiscriminable from a veridical visual episode of a tree is a common factor of both experiences—the veridical visual episode of a tree and the causally matching visual hallucination of a tree. However, Martin claims that this property cannot screen off the property of being a veridical visual experience of a tree because, if so, one cannot longer show that the property of being impersonally introspectively indistinguishable from a veridical visual episode of a tree has explanatory properties which would screen off the property of being a veridical visual experience of a tree. As he claims:

> The indiscriminability property is, therefore, a common property across the situations with the potential to explain common consequences, while the property of being a veridical perception is unique to the one case. If we should just apply the principle of screening off universally without restriction, then we should conclude that being indiscriminable from a veridical perception of a tree screens off the property of being a veridical perception of a tree. But if that is so, then the property of being a veridical perception of a tree never has an explanatory role, since it is never instantiated without the property of being indiscriminable from such a perception being instantiated as well. But 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, 2004:69)

Martin's argument is that if the property of being a veridical perceptual state does not have any explanatory role, then the property of being impersonally introspectively indiscriminable from a veridical perceptual state could have never been instantiated because the existence of this property fully depends on the explanatory role that veridical perceptual experiences has. My goal is twofold, first, I will show that Martin does not present a clear solution to the problem, second, I will argue that he does not avoid the screening-off worry.

Martin claims that if we apply the principle of screening-off universally without restriction, then the common property screens off the property of being a veridical perceptual experience of a tree. However, this is not the best way to present the screening-off problem. As Martin holds, a veridical perceptual episode of a tree is constituted by the naïve realist aspects of perception—the tree itself—

and the common property—the property of being impersonally introspectively indiscriminable from a veridical perceptual experience of a tree. The common property screens off the naïve realist aspects of perception. The common property does not screen off the naïve realist aspects of perception and the common property, as Martin seems to suggest (2004:69). In other words, the common property does not screen off the property of being a veridical perceptual experience of a tree, but the naïve realist aspects of perception. The common property plays a role in explaining the phenomenal character of the veridical perceptual experience of a tree and its matching hallucinatory episode.

To elaborate Martin's strategy more clearly, the idea is that if the naïve realist aspects of perception—a tree—does not explain the phenomenal character of the veridical perceptual experience of a tree, then one cannot longer show that the property of being impersonally introspectively indistinguishable from a veridical visual episode of a tree has explanatory properties which would screen off the naïve realist aspects of perception—the tree—from playing a role in explaining the phenomenal character of the veridical perceptual state of a tree.

However, I do not think that Martin's strategy work. Instead, I hold that the common property of a veridical perceptual experience of a tree and its causally matching hallucination—that is, the property of being impersonally introspectively indistinguishable from a veridical perceptual episode of a tree—does have explanatory properties that screen off the naïve realist aspects of perception, namely, negative epistemic properties—the impossibility to know by introspection alone that the mental state is not a veridical perceptual experience of a tree. Once the subject has had experiences with naïve phenomenal nature, that common property—the negative epistemic property—screens off the naïve realist aspects of perception. Let me explain it in more detail.

Reflective disjunctivists hold that if the naïve realist aspects of perception do not constitute the phenomenal nature of veridical perceptual experiences, then one could not have a causally matching hallucination in first place. As we have seen in the previous section, a sort of introspective knowledge that can be obtained if and only if the subject has perceived the external world is required to have a causally matching hallucination. Therefore, the naïve realist aspects of

perception are a prerequisite for having experiences with the negative epistemic property—the impossibility to know by introspection alone that the mental state is not a veridical perceptual experience of a certain kind.

Reflective disjunctivists take for granted that veridical perceptual experiences have a naïve phenomenal nature, as they endorse naïve realism. They hold that the naïve realist aspects of perception are not superfluous constitutive elements because they explain the phenomenal character of veridical perceptual experiences and they are also required for having experiences that are impersonally introspectively indistinguishable from such mental states.

However, once a subject has a veridical perceptual experience of a tree, then the negative epistemic property will come into play. This property suffices in itself to fully explain both, the phenomenal character of the causally matching hallucination of a tree and the phenomenal character of the veridical perceptual experience of a tree. Therefore, the negative epistemic property screens off the naïve realist aspects of perception. So, even if we accept that the naïve realist aspects of perception are required to obtain the negative epistemic property, on reflective disjunctivism, those naïve realist aspects of perception are doomed to be screened off by the negative epistemic property that fully explain the phenomenal character of experiences that are impersonally introspective indistinguishable from veridical perceptual episodes.

What motivations do we have to support naïve realism if one accepts the metaphysical possibility of causally matching hallucinations whose phenomenal nature is not constituted by the external world, yet they are impersonally introspectively indiscriminable from veridical perceptual experiences? After all, it is Martin himself (2004:62) who suggests that common-factor elements offer better explanation of common phenomena than those elements that are exclusive to veridical perceptual experiences.

The screening-off worry might lead us to the sensory phenomenological skepticism problem. As we have seen in chapter 1, one of the main motivations to endorse naïve realism is the idea that this view offers the best articulation of how our veridical perceptual experiences strike us as being to introspective reflection

on them (Martin, 2004:42). However, according to reflective disjunctivism, casually matching hallucination strike us as being to introspective reflection on them in the same way as veridical perceptual experiences and they are not constituted by the external world. Once we accept that the phenomenal nature of causally matching hallucination is fully constituted by a negative epistemic property, and this property is sufficient to explain the phenomenal character of any experience that is impersonally introspectively indiscriminable from such causally matching hallucination, then we do not have any motivation to claim that veridical perceptual experiences have a sensory phenomenal nature. Sensory phenomenological skepticism is motivated by the following idea: if one accepts that introspection is not a reliable source to realise that a causally matching hallucination lacks sensory properties, then one should not rely on introspection to claim that veridical perceptual states have sensory properties (Logue, 2012:19). The negative epistemic property should be sufficient to constitute the phenomenal nature of causally matching hallucinations and perceptual episodes.

Note that sensory phenomenological skepticism is not tantamount to the claim that all sensory episodes are ersatz states. The view is that all sensory experiences have phenomenal character—that is, there is something it is like to perceive or hallucinate. However, the phenomenal nature that explains the phenomenal character of all sensory experiences is not constituted by sensory properties. On this view, all mental states have a cognitive phenomenal nature.

Logue (2012:197) offers a response to the sensory phenomenological skepticism problem. She claims that introspection in unfavourable context deprives the subject of introspective knowledge about the phenomenal nature of their mental states—as it occurs in the total causally matching hallucinatory case. However, when one has a veridical perceptual experience, one is in perceptual contact with the external world. This is a condition that does not occur in the total causally matching hallucinatory case. According to Logue, a favourable context takes place when the subject is in perceptual relation to the external world, and it is in this context when the subject gets introspective knowledge of the phenomenal nature of our sensory episode. As Logue states:

> If introspection of perceptual experience involves attending to its objects, then it can be argued that total hallucination is an *unfavourable* context for introspection of perceptual experience—which would mean that its unreliability in the case of total hallucination doesn't impugn its reliability in the case of veridical experience (2012:198).

Although Logue offers a plausible response to the sensory phenomenological skeptical problem, this does not solve the screening-off worry. They might be instantiated in favourable contexts, but they do not play any role in shaping the contours of the experience. The negative epistemic property does the job.

As I said in chapter 1, I hold that a key point to defend naïve realism from the argument from hallucination is to support the claim that the indistinguishability condition of hallucination is asymmetrical. Martin claims in a footnote that the indistinguishability condition is asymmetrical: "that hallucinating is not discriminable through reflection from perceiving does not entail that perceiving is indiscriminable from hallucinating" (2006:10). However, Martin does not explain how that it could be possible. The impersonal indiscriminability condition of causally matching hallucination seems to suggest the contrary: a mental state that is metaphysically impossible to tell apart by introspection alone from another mental state suggests that both mental states are introspectively indiscriminable from each other. After all, on reflective disjunctivism, the indiscriminability condition of causally matching hallucination is not relative to a subject and relative to a time, the causally matching hallucination is introspectively indiscriminable from a veridical perceptual experience in an impersonal sense.

Furthermore, the way that Martin and other reflective disjunctivists (Brewer, 2011, 2015; Nudds, 2015) deal with the screening-off problem also suggest that the indistinguishability condition of causally matching hallucination is symmetrical: if a positive sensory common element of the causally matching hallucination and the veridical perceptual experience is sufficient to explain the phenomenal character of both experiences, then it is because both mental states are after all introspectively indiscriminable from each other.

I conclude that reflective disjunctivism does not offer a clear and plausible explanation of the nature of causally matching hallucinations that is compatible with naïve realism. In the next chapter I will present cognitive disjunctivism—a view that offers a clearer account of the nature of hallucination than reflective disjunctivism. According to cognitive disjunctivism, the indistinguishability condition of hallucination is asymmetrical. Hallucinations are not introspectively indiscriminable from veridical perceptual experiences in an impersonal sense, their indiscriminability condition is relative to a subject and relative to a time.

## 4.6 Conclusion

In this chapter I have presented two objections against Martin's conception of sensory experience. The first one (Smith, 2002) is that the indiscriminability property of causally matching hallucination is not sufficient to characterise a mental state as a sensory experience. Smith claims that some delusions also have the indiscriminability property and they are clearly non-sensory mental states. The second objection (Siegel, 2004) is that the indiscriminability property of causally matching hallucination is not necessary to characterise a mental state as a sensory experience. I have argued that Martin's response to Smith's objection solves the problem: we should understand the indiscriminability property of causally matching hallucination in an impersonal sense. According to reflective disjunctivism, there is not any delusion that has the property of being impersonally introspectively indiscriminable from a veridical perceptual episode. Hence, we can make a distinction between causally matching hallucinations—sensory experiences—and delusions—non-sensory experiences. I have argued that Siegel's objection shows that Martin's notion of sensory experience contrast with the standard conception of sensory experience that include sensory imagery episodes, dream experiences and imperfect hallucinations. On Martin's view, sensory imagery episodes, dream experiences and imperfect hallucinations are not sensory experiences because they do not have the property of being impersonally introspectively indistinguishable from a veridical perceptual experience. I hold that Martin's conception of sensory episode is counterintuitive, however, I have pointed out that the problem should be qualified as a terminological issue rather than a substantive philosophical problem.

After exploring Martin's conception of sensory experience, I have presented some objections against reflective disjunctivism. First, I defended reflective disjunctivism from Sturgeon's (2006, 2008) and Siegel's (2008) objections. Sturgeon claims that some background knowledge is required to fully explain the phenomenal character of causally matching hallucination. However, he argues that reflective disjunctivism does not explain what sort of background knowledge the hallucinator can have introspective access to. I have argued that the sort of background knowledge that the hallucinator can have introspective access to is the one that is compatible with impersonally indistinguishability condition—the metaphysical impossibility to know by reflection alone that the mental state is not a veridical perceptual experience. Siegel claims that there are some positive epistemic facts that need to be accounted for to provide an exhaustive explanation of the phenomenal character of causally matching hallucination. She argues that those positive epistemic facts—such as the belief 'I know that I am not perceiving *G*' when one has a causally matching hallucination of *F*—are not derivable from the negative epistemic property. In contrast to Siegel, I hold that those positive epistemic facts could be derived from the negative epistemic property. When one has a causally matching hallucination of *F*, it seems to one that one is perceptually related to *F,* and one could, therefore, know that the mental state is not an experience of *G*.

Second, I have argued that reflective disjunctivism does not provide the theoretical resources to account for the phenomenal nature of cognitive unsophisticated creatures' causally matching hallucinations. Reflective disjunctivists appeal to an ideal introspector to solve this problem, however, I have argued that this response does not solve the problem. The ideal introspector and the cognitively unsophisticated creature have different mental states. The former has a mental state with the negative epistemic property, while the latter has a mental state that does not have the negative epistemic property. Therefore, appealing to an ideal introspector does not explain what it is like, for a cognitively unsophisticated creature, to have a causally matching hallucination.

Third, I have explained that the reflective disjunctivism's characterisation of the nature of causally matching hallucination can lead to the philosophical zombie objection. This is the objection that causally matching hallucinations and

ersatz states that are introspectively indiscriminable from veridical perceptual experiences are the same sort of mental state. However, on reflective disjunctivism that is not possible because causally matching hallucinations have phenomenal character, while ersatz states lack phenomenal character. I have pointed out that this problem is solved by limiting the possibility of philosophical zombies. According to this view, philosophical zombies cannot have the sort of introspective knowledge that is necessary to have causally matching hallucinations—when one has a causally matching hallucination, one knows that one is in a mental state in which it seems to one that one is perceptually related to the external world. Philosophical zombies cannot have that sort of introspective knowledge; therefore, they cannot have causally matching hallucinations. Thus, reflective disjunctivists make a distinction between causally matching hallucinations and ersatz states, in addition, they leave room for the logically possibility of limited philosophical zombies.

Finally, I have argued that reflective disjunctivism does not avoid the screening-off problem—which is the main motivation of this disjunctivist theory of perception. Although the property of being impersonally introspectively indiscriminable from a veridical perceptual experience could only exist if there are veridical perceptual episodes, this does not entail that this common factor cannot screen off the naïve realist aspects of perception from playing a role in explaining what it is like to perceive. Therefore, the naïve realist aspects of perception are not required to explain the phenomenal character of veridical perceptual experiences because the common factor—the property of being introspectively indiscriminable from a veridical perceptual episode—does the job.

# CHAPTER 5: COGNITIVE THEORIES OF HALLUCINATION

Reflective disjunctivism has been considered an unattractive view for some authors (Sturgeon 2000, Smith, 2002; Siegel, 2004, 2008; Fish, 2008, 2009) because it takes the indistinguishability condition of causally matching hallucination for granted. As we have seen in the previous chapter, according to reflective disjunctivists, there is nothing in virtue of which a causally matching hallucination is introspectively indiscriminable from a veridical perceptual episode.

Detractors of reflective disjunctivism who support a different disjunctivist theory of perception (e.g., Johnston, 2004; Fish, 2008, 2009) hold that disjunctivists should provide a positive story to explain what makes a hallucination introspectively indistinguishable from a veridical perceptual state. As reflective disjunctivists do not provide such a positive story, then one might assert that reflective disjunctivism's starting point rest on a counterintuitive claim—a mental state could be impersonally introspectively indiscriminable from another even when there is nothing that explains such indistinguishability condition. The claim is counterintuitive because it is commonly thought that an entity is introspectively indiscriminable from another entity in virtue of something. In other words, there is something that explains the fact that two (or more) objects, properties or states are introspectively indistinguishable from each other for a subject. For example, my cat Neko is introspectively indiscriminable from Sophie's cat Deko because both cats are physically identical. Thus, we can appeal to the fact that both cats are physical identical to explain that both cats are introspectively indiscriminable from each other. This sort of positive explanation is missing when reflective disjunctivists account for the nature of causally matching hallucinations—experiences that, according to reflective disjunctivists, are impersonally introspectively indiscriminable from veridical perceptual episodes.

Cognitive disjunctivists (e.g., Fish, 2008, 2009; Dokic & Martin, 2012, 2017) are concerned about this lack of explanation. They aim to offer a positive explanation of the indistinguishability condition of hallucination that is compatible with naïve realism. For that purpose, they offer a cognitive explanation of the indistinguishability condition of hallucination, namely,

hallucinations are introspectively indiscriminable from veridical perceptual experiences due to a cognitive error. Like reflective disjunctivists, cognitive disjunctivists claim that causally matching hallucinations have a cognitive phenomenal nature, that is, they are not constituted by sensory properties.

The structure of this chapter is as follows. In section 1, I will explore three versions of cognitive disjunctivism: Fish's view (2008, 2009, 2013, 2018), Armstrong's stance (1961) and the monitoring view (Dokic & Martin, 2012, 2017). In section 2, I will explain how cognitive disjunctivism deals with the causal argument and the same proximate cause same effect principle. In section 3, I will present a nuanced analysis of the differences between cognitive disjunctivism and reflective disjunctivism.

In the last chapter of this thesis, I will defend cognitive disjunctivism from some objections. Then, I will present my own disjunctivist account—pluralist cognitive disjunctivism. This view explains the phenomenal character of hallucination in terms of cognitive errors. However, unlike standard cognitive disjunctivism, pluralist cognitive disjunctivism recognises that there could be hallucinations that have sensory phenomenal nature. I will argue that this stance provides a suitable refuge for naïve realists because it avoids the screening-off problem and offers a plausible account of multiple types of hallucinations.

## 5.1 Three versions of cognitive disjunctivism

As I sketched in chapter 2, cognitive disjunctivists deny the claim that the phenomenal nature of hallucination is constituted by sensory properties. Instead, they hold that hallucinations have a cognitive phenomenal nature. On this view, veridical perceptual experiences and hallucination have different phenomenal character. The phenomenal character of veridical perceptual episodes is obtained in virtue of being in perceptual contact with the external world, while the phenomenal character of hallucination is obtained in virtue of having some sort of cognitive states. As we shall see in this section, the nature of those cognitive states depends on the sort of cognitive disjunctivism that one supports.

### 5.1.1 Fish's theory of hallucination

Fish (2008, 2009, 2018) is a naïve realist. He endorses both claims, the naïve ontological claim and the naïve phenomenological claim. To recall, the naïve ontological claim is that veridical perceptual experiences are at least partly constituted by the perceived external objects and properties. The naïve phenomenological claim is that the phenomenal character of a veridical perceptual episode metaphysically depends on the existence of a certain perceptual relation between the subject and the external world. As Fish points out: "if the phenomenal character of Pauline's apple experience were apple *involving* in this way, then if the apple (or any of its properties) were different, or absent, then things would be *different* for Pauline in the realm of her subjectivity" (Fish, 2018:121).

To defend naïve realism from the argument from hallucination, the casual argument and the screening-off worry, Fish supports cognitive disjunctivism. According to Fish (2008, 2009, 2018), hallucinations lack phenomenal character. He holds that a subject fails to introspectively discriminate a mental state without phenomenal character from an experience with perceptual phenomenal character due to a cognitive error. Fish argues that this cognitive error emerges when a mental state without phenomenal character produces the same relevant set of cognitive effects that a veridical perceptual experience would have produced (Fish, 2009:94). The relevant set of cognitive effects are those cognitive effects that make the subject to introspectively mistake a mental state without phenomenal character for a veridical perceptual episode of a certain kind.

According to Fish, once the mental state without phenomenal character is introspectively mistaken as a veridical perceptual episode due to the relevant set of cognitive effects that it instantiates, then that mental state acquires the status of a hallucination (Fish, 2009:100). On Fish's view, the fact that both mental states have the same relevant set of cognitive effects is a sufficient condition to explain the indiscriminability condition of hallucination.

Consider the following example to understand Fish's stance. If Sophie has a veridical visual episode of my cat Neko, this visual experience could produce

some cognitive effects—e.g., the higher-order belief 'I am seeing Neko'. If Sophie has a mental state without phenomenal character whose cognitive effect is the higher-order belief 'I am seeing Neko', then Sophie would not be able to tell apart by introspection alone such mental state from a veridical visual episode of Neko. The mental state without phenomenal character would be qualified as a visual hallucination of Neko.

It is important to note that Fish does not explain the indistinguishability condition of hallucination by appealing to all cognitive effects that the mental states could have. Rather, He explains the indistinguishability condition by appealing to a relevant set of cognitive effects that the mental state produces. The relevant set of cognitive effects are those which make the subject mistake a mental state without phenomenal character for a veridical perceptual experience. Consider the following example to illustrate this claim. A relevant cognitive effect of a visual hallucination of my dog Lucky is the belief that I am seeing Lucky in front of my door. Note that, if I visually hallucinate Lucky in front of my door, this mental state without phenomenal character could also have an additional cognitive effect that is not relevant to my mistaking the visual hallucination for a veridical visual episode of Lucky—a cognitive effect that a veridical visual experience of Lucky could also produces. For instance, I may have the belief that my father is about to come home when I see Lucky in front of the door. The fact that I believe that my father is about to come home is not a necessary (relevant) cognitive effect to mistake my mental state without phenomenal character for a veridical visual episode of Lucky. Hence, on Fish's view, there is no need for a mental state without phenomenal character to share all possible cognitive effects with a certain veridical perceptual experience in order to be qualified as a hallucination. The relevant set of cognitive effects that is necessary to qualify a mental state without phenomenal character as a hallucination is one that explains the indistinguishability condition of hallucination, namely, it explains the fact that the subject cannot distinguish by introspection alone such a mental state from a veridical perceptual experience of a certain kind.

As we have seen in chapter 2, Fish is not the first one who offers a cognitive account of the nature of hallucination. There are theories of hallucination that explain the nature of those mental states in terms of cognitive mistakes. In fact,

it is common in the psychology literature to explain the indistinguishability condition of hallucination as the result of a cognitive error. One of the most popular views about hallucination in schizophrenia in the last two decades explains the nature of auditory hallucinations in terms of misattribution of internally generated mental states for events in the external world (Bentall, 1990, 2013; Frith, 1992; Laroi & Woodward, 2007; Allen et.al., 2007; Fernyhough & McCarthy-Jones, 2013). According to this view, the schizophrenic has a mental state that is phenomenally different from a veridical auditory experience. However, due to some interfering internal conditions, the subject mistakes such internally generated mental state for a veridical auditory episode.

This cognitive account has been also adopted in the philosophy literature by Currie (2000) and Allen (2015). However, unlike Fish, Currie and Allen do not deny the claim that those internally generated mental states lack phenomenal character. In fact, they attribute the status of sensory imaginations to such mental states, which have a sensory phenomenal nature. Fish's view is more radical, as he claims that all hallucinations lack phenomenal character entirely. At this point, it is essential to note that Fish does not claim that there is nothing it is like to hallucinate (Fish, 2013:63). Rather, he claims that the hallucination itself has no property that makes it a phenomenal mental state. On Fish´s view, there is something it is like to hallucinate; however, what it is like to hallucinate is not explained by any mental property of the hallucination, but by its cognitive effects.

One of the most crucial aspects of Fish's view is that he does not accept the metaphysical possibility of perfect hallucination—that is, hallucinations that are *impersonal*ly introspectively indiscriminable from veridical perceptual experiences. According to Fish, the indistinguishability condition of hallucination is always relative to a subject and relative to a time (Fish, 2009:95). Of course, this does not mean that Fish does not accept the metaphysical possibility of causally matching hallucinations—hallucinations that have the same neural states as veridical perceptual episodes. I will explain how Fish address the phenomenal nature of such type of hallucination in the next section.

Fish is inspired by those authors who debate about higher-order theories of consciousness (Rosenthal, 1990, 1997; Lycan 1996, 1997). Rosenthal holds that a

first-order mental state (e.g., a veridical visual experience of Neko on a mat) that goes along with certain higher-order belief (e.g., the belief that one is seeing Neko on a mat) can be introspectively indistinguishable from a case in which the higher-order belief occurs without being accompanied by a first-order mental state. Following a similar line of thought, Fish claims that a mental state without phenomenal character can produce the same cognitive effects as the cognitive effects that a veridical visual experience of Neko on a mat would have produced. If that occurs, then the subject would be in a situation that is introspectively indiscriminable from seeing Neko on a mat (Fish, 2009:13).

Note that Rosenthal's theory of consciousness (1900, 1997) might lead to the screening-off worry. Does not the higher-order belief that usually goes along with a sensory experience screen off the sensory qualities of such an experience? The higher-order belief would be sufficient to explain what it is like to perceive. Thus, the sensory qualities of the experience would explanatory redundant.

Although Fish is inspired in Rosenthal's theory of consciousness, there is something distinctive about Fish's view to rebut the screening-off problem, namely, the indistinguishability condition is relative to a time and relative to a subject. The subject is not able to distinguish by introspection alone a certain mental state without phenomenal nature for a veridical perceptual experience of a certain kind due to a cognitive error. I will explain in more detail how cognitive disjunctivists as Fish do avoid the screening-off problem in the next chapter.

Consider the following reasoning to understand Fish's account of the indistinguishability condition of hallucination. Two objects, events or states might be introspectively indistinguishable from each other for a subject due to two different factors. One factor lies in the similarities of the entities to be distinguished. For instance, two clones are introspectively indistinguishable from each other because they are physically identical. We can say that two clones are qualitatively identical in an objective sense, and for this reason, they are introspectively indiscriminable from each other for the subject. Another factor lies in the subjective capacities to discriminate different entities. For example, one could fail to discriminate two qualitatively different objects due to some sort of cognitive impairment. These two objects could be very similar, or they might

be very different. Although they might be very different, nothing rules out the possibility that the subject could mistake one for the other. For instance, it is possible that a cognitive error makes the subject believe that my cat Neko is instead my dog Lucky, despite the fact that Lucky and Neko are very different from each other. It is also possible that the cognitive error occurs when it comes to identifying the natural kind of the subject's own mental state. This possibility could precipitate a conviction in the subject that their current mental state can be attributed to a completely different type of mental state, by virtue of the kind of cognitive effects it produces. For example, Sophie might believe that she has a mental state with the visual phenomenal character of Lucky just because she believes that she is seeing Lucky—when Sophie is not seeing Lucky. The reader might think that it is quite unusual for a subject to have such a belief when Lucky (or a similar dog) is not perceived. However, as strange as it might be, it is ontologically possible for such cognitive error to occur.

This explanation of the indistinguishability condition of hallucination, which lies in the subjective cognitive capacities, is known as a 'top-down account'. This type of explanation has also been offered when addressing delusions. To understand it, Fish (2013:59) asks us to consider the Capgras delusion, where one falsely believes that their partner has been replaced by an imposter (Ratcliffe, 2008). There are two possible explanations of this phenomenon. A bottom-up account of this delusion locates the problem at the level of the visual phenomenal character of the sensory experience. Perhaps the subject suffers some sort of visual illusion when seeing her partner, illusion that makes her believe that the person who is seeing is not her partner. A top-down account of this delusion locates the problem at the level of the cognitive processes involving the visual experience. On such a theory, the subject forms erroneous beliefs about what she is seeing, even though her visual experience instantiates an accurate visual phenomenal character of her partner.

Fish appeals to this sort of top-down explanation when addressing the nature of hallucination. As it occurs in the case of delusion, the problem is located at the level of cognition. The subject of hallucination is victim of a cognitive error, as she takes a mental state without phenomenal character to be a veridical

perceptual experience of a certain kind because the former has the same relevant set of cognitive effects as the latter.

As I said, Fish is not the first one who offers a cognitive account of the nature of hallucination. In the next subsection, I will analyse Armstrong's stance (1961). I will point out the similarities and differences between Fish's view and Armstrong's theory of hallucination.

### 5.1.2 Armstrong's theory of hallucination

Fish's view (2008, 2009) is similar to Armstrong's stance (1961). Although Armstrong does not present his theory of hallucination to defend naïve realism, one could endorse Armstrong's view for that purpose. Like Fish, Armstrong explains the indistinguishability condition of hallucination in terms of cognitive states. However, Armstrong only appeals to higher-order beliefs to explain the indiscriminability condition of hallucination. Thus, for example, if one falsely believes that one is seeing Neko on a mat, then it would be for one as if one were seeing Neko on a mat. The false belief explains the indistinguishability condition of the subject's situation. However, unlike Fish, Armstrong claims that the false belief constitutes the hallucinatory state. The false belief is not a cognitive effect of the hallucination, as Fish suggests, but the hallucination itself (Fish, 2008:153).

Let us compare both theories of hallucination through an example. Imagine that Cortex, a crazy neuroscientist, stimulates the neural state underlying a veridical visual episode of Neko in Sophie's brain in a non-standard way. According to Fish, the neural state could produce a mental state without phenomenal character whose cognitive effects explain the fact that Sophie is in a situation that is introspectively indistinguishable from a veridical visual episode of Neko. According to Armstrong, the neural state could give rise to a cognitive state—the hallucination itself—that explains the fact that Sophie is in a situation that is introspectively indiscriminable from a veridical perceptual experience of Neko. The cognitive effects on Fish's view and the cognitive state on Armstrong's view are exactly the same sort of mental state. In this particular case, it would be a false higher-order belief of the following sort: 'I see Neko'.

It is worth noting that Fish does not account for the ontological structure of the mental state that is later qualified as a causally matching hallucination. Fish only focuses on the possible cognitive effects of that mental state to explain the indistinguishability condition of the causally matching hallucination. The only thing that Fish says about that *unknown* mental state is that it lacks phenomenal character. As he claims, "the mental state will therefore qualify as indistinguishable from such a veridical perception which in turns elevates the mental state to the status of hallucination" (Fish, 2008:156).

I find Armstrong's cognitive account of the nature of hallucination more attractive than Fish's view because it does not leave entities unexplained—the mental state without phenomenal character that is later qualified as a hallucination does not come into play in Armstrong's theory of hallucination. We can bring Ockham's razor as a motivation to prefer Armstrong's view over Fish's stance: entities should not be multiplied without necessity.

There is, however, something that Fish takes into account when accounting for the nature of hallucination that Armstrong overlooks, namely, the fact that cognitively unsophisticated creatures can have hallucinations. Armstrong explains the indiscriminability condition of hallucination in terms of false higher-order beliefs. However, it is widely accepted that cognitively unsophisticated animals cannot entertain higher-order beliefs, yet they can hallucinate. Hence, cognitive disjunctivists cannot explain the indistinguishability condition of cognitively unsophisticated creatures' hallucinations in terms of higher-order beliefs, they are forced to appeal to lower-level cognitive states to explain it.

I find Fish's view more attractive than Armstrong's stance for some reasons, whereas I think that Armstrong's stance is more attractive than Fish's view for other reasons. On Fish's view, if the subject is cognitively sophisticated enough, the hallucination might have cognitive effects in form of higher-order beliefs; otherwise, the relevant set of cognitive effects would be lower-level cognitive processes that underlie behavioural effects (Fish, 2008:155). On Armstrong's stance, there are not mental entities that are left unexplained—the mental state without phenomenal character. Naïve realists could combine both theories of hallucination to present a new approach to cognitive disjunctivism to defend naïve

realism from the argument from hallucination. In the last chapter, I will combine different disjunctivist theories—included these two—to propose what I think is the most plausible disjunctivist theory of perception to defend naïve realism from the argument from hallucination, the causal argument and the screening-off worry. However, there is still much to be said about cognitive disjunctivism.

### 5.1.3 The monitoring view

In this subsection, I will analyse another version of cognitive disjunctivism that is worth taking into consideration, namely, the monitoring view (Dokic & Martin, 2012, 1017). This disjunctivist account also characterises the nature of hallucination in terms of cognitive errors. Like Fish and Armstrong, Dokic and Martin—proponents of the monitoring view—claim that, when one has a hallucination, one mistakes a hallucinatory state—a state without sensory phenomenal character—for a veridical perceptual experience of a certain kind.

Dokic and Martin hold that veridical perceptual experiences are usually accompanied by a feeling of reality—the feeling that one is perceptually related to a certain object, property or event. According to the monitoring view, the feeling of reality is a cognitive state that has phenomenal character. However, the phenomenal character of the feeling of reality is different from the perceptual phenomenal character of a veridical perceptual episode. The feeling of reality does not have sensory properties as constituents, while the phenomenal nature of veridical perceptual experiences has sensory properties as constituents.

As Dokic and Martin states: “feelings of reality result from implicit mechanisms that monitor the quality of first-order perceptual processes” (2012:9). When that mechanism tags a first-order mental state as being genuinely perceptual, then the subject has a first-order mental state with feeling of reality. Dokic and Martin claim that these mechanisms could fail, and therefore, they might tag a first-order state as being genuinely perceptual, when, in fact, that first-order state is not generated from the external world (Dokic & Martin, 2012:9). This explains that there could be mental states without perceptual phenomenal character that has feeling of reality. The subject of hallucination mistakes this sort of mental state for a veridical perceptual experience.

According to the monitoring view, the perceptual phenomenal character of a veridical perceptual experience—that is obtained in virtue of being perceptually related to the external world—does not constitute the feeling of reality. Veridical perceptual experiences usually instantiate the feeling of reality, but it is not always the case. For example, one might enjoy a veridical visual experience of my cat Neko without having the feeling that one is seeing Neko. This is what occurs when one has a derealization episode. As Dokic and Martin point out, "derealized patients experience an affective detachment from the world in the sense that the world does not feel actual anymore" (Dokic and Martin, 2017:301). When a veridical perceptual state lacks this feeling of reality, one does not feel like one is in perceptual contact with the external world, and then the sensory experience seems to be different from the first-person point of view. As an illustration, a derealized patient states that "people and things around you seem as unreal to you as if you were only dreaming about them" (Shorvon et al. 1946:784).

Thus, according to the monitoring view, the phenomenal nature of an ordinary veridical perceptual episode—that is, a veridical perceptual experience that has feeling of reality—is constituted by both, the external world and the cognitive feeling that the external world is present. As Dokic and Martin claim: "what it is like to perceive the world around us would be essentially different if our experience were not accompanied by [a feeling of reality]" (2012:11). This feeling of reality is independent of the sensory phenomenal nature of the veridical perceptual episode. A subject could have a mental state that lacks perceptual phenomenal character, yet it has feeling of reality.

Unlike Fish and Armstrong, Dokic and Martin never appeal to higher-order beliefs to explain the nature of hallucination. As they claim:

> [The monitoring view] eschews reference to higher-order beliefs. The hallucinating subject feels like she is perceptually open to the world itself. However, her feeling of reality results from a kind of confusion, more precisely from the fact that low-level mechanisms have mistakenly tagged non-perceptual first-order processes as genuinely perceptual processes (Dokic & Martin, 2012:9-10).

Like Fish and Armstrong, proponents of the monitoring version also point out a common element to veridical perceptual experiences and hallucinations that

explains the indiscriminability condition of hallucinatory experiences. According to Armstrong, this common element is a higher-order belief. According to Fish, this common element is a set of cognitive effect that might involve higher-order beliefs or low-level cognitive processess. According to the monitoring view, this common element is a feeling of reality, which emerges from a metacognitive mechanism that tags cognitive processes as being genuinely perceptual.

In what follows, I will present an objection against the monitoring view. I will argue that the feeling of reality is not necessary to hallucinate, and therefore, it does not explain the indiscriminability condition of, at least, some hallucinatory experiences. This objection stems from the common-sense idea that derealized patients could, in principle, hallucinate. As I said, Dokic and Martin claim that if the veridical perceptual episode lacks this feeling of reality, one does not feel like one is in perceptual contact with the external world (2017:301). Derealized patients have veridical perceptual episodes without feeling of reality. It is then metaphysically possible that a derealized patient could have a hallucination that is introspectively indiscriminable from a veridical perceptual experience of a certain kind that lacks this feeling of reality. For example, when Mike, a derealized patient, sees my dog Lucky, he has a veridical visual episode without feeling of reality. As his mental state lacks feeling of reality, he does not feel like he is in perceptual contact with Lucky. I hold that it is possible that Mike could have a visual hallucination that is introspectively indiscriminable from a veridical visual experience of Lucky that also lacks feeling of reality. In such a case, Mike does not feel like he is in perceptual contact with Lucky, yet he has a visual hallucination of Lucky. Mike is not seeing Lucky, but he has an experience that is introspectively indiscriminable from a veridical visual experience of Lucky that lacks feeling of reality.

Advocates of the monitoring view might insist that hallucinations cannot lack feeling of reality. Instead, I hold that one should be open to the possibility that there could be hallucinations that are introspectively indiscriminable from veridical perceptual episodes that lack feeling of reality. Other disjunctivist theories can accommodate this sort of hallucinatory experience—henceforth, derealized hallucination. For example, Fish (2008, 2009) would say that a derealized hallucination has the same relevant set of cognitive effects as a

veridical perceptual experience that lacks feeling of reality—such as Mike's visual veridical experience of my dog Lucky. The question whether Mike could have hallucinations that lack feeling of reality is hostage to empirical investigation.

I hold that this problem leaves the monitoring version in a worse theoretical position than Fish's view. Fish's theory of hallucination is less demanding than the monitoring version when it comes to explaining the indiscriminability condition of hallucination. According to Fish, it is a set of cognitive effects that explains the indistinguishability condition of hallucination. Fish does not specify what the nature of that relevant set of cognitive effects is. This might be seen as an advantage since it leaves open the possibility that cognitive effects of very different nature can be suitable candidates to explain the indiscriminability condition of hallucination.

In the next section, I will explain how cognitive disjunctivism—in particular, Fish's view—characterises the nature of causally matching hallucination and deals with the causal argument and the same proximate cause same effect principle.

## 5.2 Cognitive disjunctivism and the causal argument

To fully understand cognitive disjunctivism, it is important to know what role the neural state plays when the subject perceives the external world. In this section, I will give an answer to that question, in addition, I will explain how cognitive disjunctivism faces the SC/SE principle and the causal argument.

As I said in the previous section, proponents of cognitive disjunctivism support naïve realism. They claim that it is metaphysically impossible to have a mental state with perceptual phenomenal character in the cases of hallucination, since the necessary sort of perceptual relation between the subject and the external world does not take place in the hallucinatory case.

According to Fish, the neural processes underlying a veridical perceptual experience do not ground the phenomenal nature of that mental state. Instead, neural processes select the features of the external world that constitute the

phenomenal nature of the veridical perceptual experience (Fish, 2013:58). These neural processes are necessary for having experiences with perceptual phenomenal character, but they do not explain the perceptual phenomenal character of such mental states. Fish states that the perceptual phenomenal character of veridical perceptual episodes does not emerge from the stimulation of neural states alone. Rather, the perceptual phenomenal character is obtained in virtue of a perceptual relation between the subject and the external world.

Fish holds that when the perceptual process takes place[16], then one is open, so to speak, to the external world. In such a condition, one has immediate perceptual access to the perceived external objects and properties. Those external objects and properties constitute the phenomenal nature of the veridical perceptual experience, which should not be understood as a mental state that emerges from those neural states, but as an event that involves the external world, the subject and a perceptual relation between both. As the subject is not perceptually related to the external world in the hallucinatory case, Fish holds that the subject is not perceptually aware of anything.

On Fish's view, if one stimulates the neural states underlying a veridical perceptual experience in a non-standard way, the resulting mental state that emerges from that neural state lacks phenomenal character. It is worth noting that Fish is assuming that the stimulation of the neural states in a non-standard way—for example, by direct stimulation of the retina—will produce a mental state. However, one might argue that if the neural state does not give rise to a set of cognitive effects, then the neural state will not produce any mental state at all. After all, what reasons do we have to hold that the neural state will produce a mental state without phenomenal character? If one follows Armstrong's path, it is an open possibility that the neural state will not produce any sort of mental state, unless it produces a mental state with cognitive phenomenal nature—a higher-order belief. I will address such a possibility in more detail in the next chapter.

[16] The perceptual process is the physical causal process involving light reflecting from the object, impacting on the retina, the chemical changes inside the optical nerve and the brain. In other words, the physical causal process that is required for a veridical visual experience to occur.

According to Fish, the mental state without phenomenal character that supervenes from the non-standard simulation of the neural state could have some cognitive effects. If those cognitive effects are the same as the relevant set of cognitive effects that a certain veridical perceptual experience could have, then one would have an experience that it is as if one were perceiving something, when the thing one takes one's to perceive is not, in fact, perceived (Fish, 2010:3). In short, the mental state without phenomenal character will acquire the status of hallucination due to the cognitive effects that it produces.

At this point, the attentive reading might formulate the following question: could one be perceptually aware of the external world if one's brain state produces at the same time a mental state that has no phenomenal character and no cognitive effects? Consider the following example to illustrate this problem. Imagine that Cortex stimulates in Sophie's brain the neural state underlying a visual experience of the deep ocean, while she is seeing a kangaroo. According to Fish, the mental state that emerges from this non-standard stimulation of Sophie's brain does not have phenomenal character. Let us assume that this mental state does not produce any sort of cognitive effects either. In such a circumstance, the question is whether Sophie would still see the kangaroo. Does not the mental state without phenomenal character prevents her from perceiving her external environment? What it would be like, from Sophie's point of view, to be in these two mental states at the same time? Fish does not give a response to this problem.

To fully understand Fish's neurological and phenomenological commitments with regards to perception, he should offer a response to the question detailed above. However, the response to this interesting issue will not determine whether Fish's view offers a disjunctivist account that is compatible with naïve realism. I hold that the nub of the problem is whether Fish's view is compatible with the SC/SE principle—the principle that the same proximate cause (neural states) entails the same effect. One might appeal to the following argument to defend that Fish's stance is incompatible with the SC/SE principle.

1. According to Fish's view, hallucinations lack phenomenal character.
2. Veridical perceptual experiences have perceptual phenomenal character.

3. Causally matching hallucinations and veridical perceptual experiences have the same neural state.
4. If veridical perceptual episodes and causally matching hallucinations do not have the same type of phenomenal character, then the common neural state of veridical perceptual episodes and causally matching hallucinations could have different effects. In the hallucinatory case, it produces an episode without phenomenal character, while in the veridical perceptual case, it produces an episode with perceptual phenomenal character.

C. Therefore, Fish rejects the SC/SE principle.

I contend that this argument is not sound because premise 4 is false. Those who supports premise 4 are assuming the truth of the following statement: the phenomenal character of the experience is fully obtained in virtue of the neural process. In other words, they support the local supervenience thesis. If we assume the local supervenience thesis, then the argument is valid and sound. However, an externalist about the phenomenal nature of veridical perceptual experience—that is, one who claims that the phenomenal nature of the experience is constituted by something that goes beyond the neural process—would not assume the truth of premise 4. For example, a naïve realist holds that the phenomenal nature of veridical perceptual experience is (at least party) constituted by the external world. On this view, the common neural states could still do the same job, while the difference in phenomenal character rest on something else—namely, the fact that in the veridical perceptual case the subject is perceptually related to the external world and in the hallucinatory case the subject is not.

Fish rejects the supervenience thesis, but he supports the SC/SE principle. On Fish's view, the neural state that is common to the veridical perceptual episode and the causally matching hallucination produce the same effect in both cases. The effect consists in selecting some part of the external world to shape the contours of the subjective experience. The difference between the veridical perceptual experience and the causally matching hallucination lies in a non-causal condition. As we have seen in chapter 3 when addressing reflective disjunctivism, the non-causal condition is the constitution of external objects and properties that are present in the veridical perceptual case but absent in the hallucinatory case. According to Fish, causally matching hallucinations do not lack phenomenal

character because the common neural state has a different effect. Rather, they lack phenomenal character because the bit of the external world that is perceived when those neural states are stimulated in a standard way is missing.

To illustrate this explanation, consider the following analogy. Imagine a machine constituted by a complex electrical circuit full of batteries, switches and bulbs. When one flips switch $S_1$ with a finger, energy flows through an electric wire from battery $B_1$ to bulb $Z_1$. When one flips $S_1$ with a pencil, the same effect takes place: energy flows through the same electric wire from $B_1$ to $Z_1$. It does not matter how one activates $S_1$, the effect is the same. Of course, if one flips $S_1$ with a pencil, energy will never reach $Z_1$ if $Z_1$ is not connected to the circuit. However, this result does not mean that the activation of $S_1$ has a different effect. The effect that the activation $S_1$ produces is the same: it allows energy to flow from the electric wire to the place where $Z_1$ is missing.

Let us now extrapolate this analogy to Fish's theory of perception. The common neural state plays a similar role to $S_1$, which is to connect by some sort of relation two different entities: a subject and a certain external object. If the external object is missing, then it is impossible to connect the subject with that external object, even though the means to do that are still operative and they play the same role as when the external object is present.

As we have seen in chapter 2, common-kind theorists appeal to the SC/SE principle to support the claim that causally matching hallucinations have the same phenomenal nature as veridical perceptual experiences (Broad 1951:39; Robinson 1994:152). In contrast to Fish's view, they explain the indistinguishability condition of causally matching hallucinations in phenomenological terms. They take the local supervenience thesis for granted.

Fish (2008, 2009) indicates that there is not empirical evidence to support the local supervenience thesis. The fact that a mental state is introspectively indistinguishable from a veridical perceptual experience does not entail that both mental states share phenomenal nature. In fact, it does not entail that both mental states have the same phenomenal character either. On Fish's stance, in the hallucinatory case there is a cognitive error that prevents the subject from

introspectively discriminating the mental state in question—which lacks phenomenal character—from a veridical perceptual experience of a certain kind. If that error does not occur, then the subject could in principle know by introspection alone that such mental state lacks phenomenal character, and therefore, it is not a veridical perceptual experience.

It is worth noting that the empirical results from neuroscience do not demonstrate that the phenomenal character of veridical perceptual episodes is fully obtained in virtue of the presence of the neural state. As Noë (2004) points out, there is a lack of any compelling empirical evidence that the full phenomenal character of the veridical perceptual experience could be produced artificially. Fish asks us to take as an example Penfield and Perot's experiment (1963) to argue that the result of such experiment does not demonstrate the truth of the local supervenience thesis. Penfield and Perot conduct an experiment in which epileptic patients receive direct electrical stimulation in their brains. Those patients report to have detailed and even multi-modal experiences. However, according to Fish (2008:148), this finding does not prove that (1) either these mental states are perfect hallucinations or (2) they have sensory phenomenal character. Their result leaves room for the possibility to offer an alternative account of the phenomenal nature of hallucination. Fish offers one that contemplates the neural states underlying the veridical perceptual experience as an enabling condition of the direct awareness of the external world, rather than the source that generates the phenomenal nature of the veridical perceptual episode.

Once we understand the role that the neural states play in perception according to Fish, we can ask how cognitive disjunctivists deal with the causal argument and the argument from hallucination. To recall, the casual argument is as follows (Fish, 2010:89-10):

1. It is possible to activate a component of the causal chain involved in standard perception in a nonstandard manner, for instance by direct stimulation of the retina.
2. If a component of the causal chain involved in standard perception was to be activated in a nonstandard manner, this would not alter the latter stage of the causal chain.

3. If the latter stage of the causal chain is the same as that involved in perception, then the same kind of episode would result.

C. Therefore, the same kind of experience can be caused by an external object or by direct stimulation of the retina.

Cognitive disjunctivists reject premise 3 of the casual argument. According to them, the resulting experience is not only different from the corresponding veridical perceptual episode, in addition, they hold that it is an experience without sensory phenomenal character. Furthermore, as I pointed out in chapter 2, premise 3 of the causal argument is related to premise 2 of the argument from hallucination. To recall, the argument from hallucination is as follows:

1. Hallucinations are not constituted by the external world.
2. For every veridical perceptual experience there could be a hallucination that is introspectively indistinguishable from such veridical perceptual experience.
3. Introspectively indistinguishable experiences have the same nature.

C. Therefore, veridical perceptual experiences are not constituted by the external world.

As any other disjunctivist, cognitive disjunctivists reject premise 3 of the argument from hallucination. More interestingly, it is worth nothing that cognitive disjunctivists do not necessary accept premise 2. Advocates of the truth of premise 2 accept the metaphysical possibility of causally matching hallucinations, which is motivated by the causal argument; but not only that, they also assume that there could be a causally matching hallucination for every veridical perceptual experience. However, as I noted above, it is an open possibility for cognitive disjunctivists that the neural state underlying a veridical perceptual experience will not produce a mental state that is introspectively indiscriminable from such veridical perceptual experience when it is stimulated in a non-standard way. For example, this might occur if a creature could have a sort of veridical visual episode that does not produce any sort of cognitive effect at all.

This does not mean that cognitive disjunctivists reject the metaphysical possibility of causally matching hallucinations. They hold that there could be

hallucinations that have the same neural states as veridical perceptual episodes. As we have already seen, according to Fish a causally matching hallucination lacks phenomenal character, this mental state will be introspectively indiscriminable from a veridical perceptual episode of a certain kind if it produces the same relevant set of cognitive effects. The reader might find difficult to believe that a mental state without phenomenal character could produce the same cognitive effects as veridical perceptual experiences could produce. Why would this unconscious mental state produce those cognitive effects? As Martin points out: "Fish offers no explanation whatsoever of why the same cognitive effects are present in hallucination as veridical perception" (2013:46).

As MacGregor (2015:105) points out, Fish could appeal to the proximate causal conditions to explain the fact that the resulting mental state without phenomenal character could produce the same cognitive effects as a certain veridical perceptual experience would have produced. Consider the following example to illustrate this response. When Sophie sees my dog Lucky, Sophie's veridical visual episode of Lucky is usually accompanied by the higher-order belief that she is seeing Lucky. If the neural state underlying such veridical visual state of Lucky is stimulated in a non-standard manner, it would be reasonable to believe that this common neural state could lead to a mental state that produces the higher-order belief 'I am seeing Lucky'. After all, that is what commonly occurs when the neural state underlying the veridical visual experience of Lucky is stimulated in a standard manner—when Sophie is perceptually related to Lucky.

However, if Sophie's has a non-causally matching visual hallucination of Lucky, then one cannot appeal to the proximate causal conditions to explain that the resulting mental state without phenomenal character could produce the same cognitive effects as a certain veridical perceptual episode would have produced. Why Sophie has that particular relevant set of cognitive effects in the non-causally matching hallucinatory case, for example, the belief that she is seeing Lucky?

According to cognitive disjunctivists, a hallucinatory experience is the result of a cognitive error. It should not surprise us that a subject who suffers from a psychological disorder or chemical intoxication could have a false higher-order belief—such as the belief 'I see Lucky'—in the absence of sensory experience. In

such circumstances, those subjects might not be wrong only about the external world, but also about the nature of their own episodes. In abnormal conditions, Sophie's metacognitive system could wrongly tag a first-order neural process as a veridical perceptual experience. This first-order neural process could, due to that metacognitive error, produce the relevant set of cognitive effects that makes it, for Sophie, as if she were perceptually related to Lucky, even when Sophie does not have any sort of sensory experience of Lucky.

I contend that cognitive disjunctivists could offer a plausible explanation of why veridical perceptual experiences and hallucinations have the same relevant set of cognitive effects. However, one might find it hard to swallow the claim that all hallucinatory experiences lack sensory properties—a claim that I will reject in the next chapter. In the next section, I will explain in detail the differences between cognitive disjunctivism and reflective disjunctivism.

### 5.3 Cognitive disjunctivism and reflective disjunctivism

Both, reflective disjunctivism and cognitive disjunctivism deny the claim that causally matching hallucinations have a sensory phenomenal nature. These two disjunctivist theories of perception aim to preserve naïve realism from the screening-off problem. However, there are substantial differences between these two views. In this section, I will present two differences between reflective disjunctivism and cognitive disjunctivism in general, and one difference between cognitive disjunctivism and Martin's view in particular.

The first difference between reflective disjunctivism and cognitive disjunctivism is that the former accepts the metaphysical possibility of perfect hallucinations, while the latter denies this metaphysical possibility. According to reflective disjunctivism, but not cognitive disjunctivism, causally matching hallucinations are impersonally introspectively indistinguishable from veridical perceptual experiences. Unlike Martin (2004, 2006, 2013), Fish (2008, 2009) does not consider the impersonal notion of indiscriminability. Instead, he follows Williamson's definition of indiscriminability: "*a* is indiscriminable from *b* for a

subject at a time if and only if at that time the subject is not able to discriminate between *a* and *b*" (Williamson, 1990:8).

As Fish points out, the indiscriminability condition of causally matching hallucination is relative to a subject and relative to a time (2008:146). Cognitive disjunctivists aim to explain what makes a casually matching hallucination introspectively indistinguishable from a veridical perceptual experience on a particular occasion, rather than indistinguishable per se. As Fish claims:

> [Cognitive disjunctivism] states the conditions that need to be met for a mental event to be indiscriminable from a veridical perception at a *particular time* rather than indiscriminable per se. This is because I suspect the intuition that there could be a hallucination that could not be discriminated from a veridical perception in any possible circumstances itself derives from the intuition that hallucinations share phenomenal character with veridical perceptions—a view that the naïve realist is committed to rejecting (Fish, 2009:95).

On reflective disjunctivism, causally matching hallucinations and veridical perceptual experiences have a property in common: the property of being impersonally introspectively indiscriminable from a veridical perceptual state of a certain kind. This property is a common factor that constitutes the phenomenal nature of the casually matching hallucination and partly constitutes the phenomenal nature of the veridical perceptual state. On cognitive disjunctivism, no hallucination has the property of being impersonally introspectively indiscriminable from a veridical perceptual episode of a certain kind. According to cognitive disjunctivists, when Sophie has a hallucination, she is in a situation in which she cannot know by introspection alone that she is not perceiving. She is in such a situation due to a cognitive error. If that cognitive error had not occurred, then Sophie could have known by introspection alone that she was not perceiving.

The second difference between cognitive disjunctivism and reflective disjunctivism is that the former provides a positive story of what makes a mental state introspectively indiscriminable from a veridical perceptual experience, while the latter does not. According to reflective disjunctivism, there is not a sensory or cognitive element in virtue of which a hallucination is impersonally introspectively indistinguishable from a veridical perceptual episode. Proponents

of reflective disjunctivism explain the indistinguishability condition of perfect hallucination in terms of being in a situation in which it is metaphysically impossible to tell apart by introspection alone a mental state without sensory phenomenal character from a veridical perceptual experience of a certain kind.

As I have argued in the previous chapter, reflective disjunctivism's characterisation of hallucination falls short as there are some creatures that lack introspective abilities, and therefore, they cannot be in such a situation. Reflective disjunctivists are forced to idealise the situation of those creatures to explain this phenomenon. The explanation goes as follow: if were Discovery, my chameleon, to have the introspection abilities to distinguish different episodes, then he would not know by introspection alone that he is not perceiving.

However, I have argued that idealising the situation does not solve the problem for two reasons. First, if Discovery has a non-causally matching perfect hallucination, then we cannot identify the datum of the episode—there is no way to know that Discovery's parallel hallucination is an experience of a fly rather than a cricket. Second, Discovery's perfect hallucination is different from the ideal introspector's perfect hallucination, as the former is an experience whose phenomenal nature is not constituted by the negative epistemic property, while the ideal introspector's hallucination is constituted by the negative epistemic property—the property of being impersonally introspectively indiscriminable from a veridical perceptual experience of a certain kind. It would be incongruous to hold that Discovery's perfect hallucination has such property if Discovery lacks the cognitive sophistication to discriminate mental states by introspection. It would be as inappropriate as saying that a baby's visual veridical perceptual experience of a computer has the concept of a computer.

The sort of cognitive state that cognitive disjunctivists appeal to explaining the indiscriminability condition of cognitive Discovery's hallucination do not require of sophisticated cognitive skills, such as introspective abilities. The cognitive processes that make Discovery, my chameleon, to be in a situation as if he were perceiving (when he is not) could be as simple as cognitive processes that underlie behavioural effects (Fish, 2008:155). The difference between reflective disjunctivism and cognitive disjunctivism is that the former appeals to a property

that Discovery's mental state does not have or produces to explain the indiscriminability condition of Discovery's hallucination, while the latter appeals to a property that Discovery's mental state has or produces to explain the indiscriminability condition of Discovery's hallucination. Moreover, the cognitive effect that Discovery's state produces will determine the datum of Discovery's hallucination—for example, whether the experience is of a fly or a cricket.

A difference between cognitive disjunctivism and Martin's view is that, according to cognitive disjunctivists, causally matching hallucinations are not sensory episodes, however, as we have seen, Martin claims that causally matching hallucinations are sensory experiences—despite the fact that, according to Martin, they lack sensory properties. As Martin claims: "being indiscriminable from veridical perception is the most inclusive conception we have of what a sensory experience is" (Martin, 2004:32). On cognitive disjunctivism, causally matching hallucinations are cognitive states because they do not have sensory properties. Cognitive disjunctivists endorse the traditional conception of sensory experience: if the mental state has a sensory phenomenal nature, then it is a sensory state; if the mental state has a cognitive phenomenal nature, then it is not a sensory state.

As we have seen in the previous chapter, Smith (2002) argues that reflective disjunctivists cannot point out a positive element to distinguish a sort of delusion—those delusions that are introspectively indistinguishable from veridical perceptual experiences—from causally matching hallucinations. Martin (2004) holds that there is a difference between these two types of mental state: causally matching hallucinations have a property that delusions lack, namely, the property of being impersonally introspectively indiscriminable from a veridical perceptual state. However, according to cognitive disjunctivists, hallucinations do not have such a property. Hence, it seems that there is no mental feature left to explain the distinction between this type of delusion and causally matching hallucination.

Cognitive disjunctivists might bite the bullet and claim that this sort of delusion is, after all, a hallucination. If Smith (2002) insists on the idea that there must be a metaphysical distinction between this sort of delusion and causally matching hallucination it is because he is assuming the claim that the stimulation

of the neural state underlying a veridical perceptual experience in a non-standard way will lead to a mental state with sensory phenomenal nature. As he claims:

> It is surely not open to serious question that […] if the activity of your optic nerve when you are genuinely perceiving something green is precisely replicated artificially, you will, other things about you being normal, seem to see something green *in a genuinely sensory manner* (Smith 2002: 203).

However, as we have seen, the same proximate cause same effect principle does not entail the claim that causally matching hallucinations must have a sensory phenomenal nature. Cognitive disjunctivists could discriminate hallucinations from common delusions as follows. Sophie will have a visual hallucination if she has an experience that is introspectively indiscriminable from a veridical visual episode. Sophie will have an auditory hallucination if she has an experience that is introspectively indistinguishable from a veridical auditory state. Sophie will have a common delusion if she believes that her brother is going to kill her when Sophie's brother has no intention of killing her. All those mental states could be characterised as delusions that lack sensory phenomenal character. However, the first two experiences are introspectively indiscriminable from veridical perceptual episodes, while the last one is not. Thus, cognitive disjunctivists could hold that the first two mental states are an especial type of delusion that should be characterised as a hallucination, while the latter is not.

## 5.4. Conclusion

My aim in this chapter has been to analyse cognitive disjunctivism. Cognitive disjunctivists claim that hallucinations have a cognitive phenomenal nature. In contrast to reflective disjunctivists, cognitive disjunctivists point out what makes a causally matching hallucination introspectively indiscriminable from a veridical perceptual state, namely, a cognitive error. Different versions of cognitive disjunctivism offer different accounts of the nature of that error. I have presented three different versions: Fish's account (2008, 2009, 2013, 2018) Armstrong's stance (1961), and the monitoring view (Dokic & Martin, 2012, 2017).

According to Fish, hallucinations are mental states without phenomenal character that produces some cognitive effects that are necessary and sufficient to explain the indiscriminability condition of hallucination. On Fish's view, if Sophie has a mental state without phenomenal character whose cognitive effect is the belief that she is seeing Lucky, when in fact, she is not seeing Lucky, then that mental state without phenomenal character would be qualified as a visual hallucination of Lucky. In contrast to Fish's view, Armstrong claims that hallucinations are higher-order false beliefs, such as the belief 'I see Lucky'.

On the monitoring view, hallucinations are the result of metacognitive processes that wrongly tag a state without sensory phenomenal character as being genuinely perceptual. This metacognitive error generates a feeling of reality—the feeling that one is perceptually related to a certain object, property or event. Proponents of the monitoring view hold that this feeling of reality is necessary and sufficient to explain the indiscriminability condition of hallucination. However, I have argued that this feeling of reality is not necessary to account for derealized hallucinations—hallucinations that lack feeling of reality.

I suggest that cognitive disjunctivists would benefit from combining Armstrong's view and Fish's account to explain the nature of hallucination. My preferred version of cognitive disjunctivism goes as follows: a relevant set of cognitive states explains the fact that one is in a situation in which it seems to one that one is perceptually related to the external world. One should leave open the possibility that such a cognitive state is the cognitive effect of a mental state that lacks phenomenal character. However, one should also accept that such a cognitive state could also be produced by the direct stimulation of some neural states—the cognitive state would be then a cognitive effect of a neural state, not a cognitive effect of an unconscious mental state, as Fish suggests.

After analysing these three versions of cognitive disjunctivism, I have explained that cognitive disjunctivism, like reflective disjunctivism, accepts the same proximate cause same effect principle, and it also rejects the supervenience thesis—the idea that the phenomenal character of the veridical perceptual experience is fully obtained in virtue of the presence of the neural state. Cognitive disjunctivists, as well as any phenomenological disjunctivist, reject the causal

argument, they deny the claim that the same sort of experience could be caused by an external object or by direct simulation of the retina.

To conclude the chapter, I presented two differences between cognitive disjunctivism and reflective disjunctivism and one difference between cognitive disjunctivism and Martin's view in particular. The first difference is that reflective disjunctivists accept the metaphysical possibility of perfect hallucination, while cognitive disjunctivists deny it. In contrast to reflective disjunctivists, cognitive disjunctivists hold that the indiscriminability condition of causally matching hallucination is relative to a subject and relative to a time. They do not characterise the indiscriminability condition of hallucination in an impersonal sense. The second difference is that, unlike reflective disjunctivists, cognitive disjunctivists offer a positive explanation of the indistinguishability condition of hallucination: a hallucination is introspectively indiscriminable from a veridical perceptual experience in virtue of a relevant set of cognitive states (or effects). I also have shown that cognitive disjunctivists are in a better theoretical position than reflective disjunctivists when it comes to explaining the nature of cognitively unsophisticated creatures' hallucinations. This is so because they explain the indiscriminability condition of hallucination in a personal sense and they also point out an element (or effect) of the experience that explains such a condition, namely, a cognitive state that does not require of introspective abilities. Finally, I have presented a difference between cognitive disjunctivism and Martin's view: cognitive disjunctivists do not endorse Martin's conception of sensory experience. According to cognitive disjunctivists, causally matching hallucinations are not sensory episodes, but cognitive states, more specifically, they are delusions.

# CHAPTER 6: COGNITIVE THEORIES OF HALLUCINATION (II)

In the previous chapter I provided a detailed analysis of cognitive disjunctivism (Armstrong, 1961; Fish, 2008, 2009, 2013, 2018; Dokic & Martin, 2012, 2017). Cognitive disjunctivists claim that hallucinations lack sensory phenomenal character. They offer a cognitive explanation of the indiscriminability condition of hallucination: a hallucination is introspectively indistinguishable from a veridical perceptual experience due to a cognitive mistake. Unlike reflective disjunctivists, they explain the indiscriminability condition of hallucination in a personal sense. The hallucinator could have known by introspection alone that she was not perceiving if such cognitive error would not have occurred.

In the first section of this chapter, I will explore three objections against cognitive disjunctivism. The first objection is that a cognitive account is not sufficient to explain the nature of hallucination. The second objection is that a cognitive account is not necessary to explain the nature of hallucination. The third objection is that cognitive disjunctivism does not avoid the screening-off worry. I will argue that cognitive disjunctivists can resist the first two objections, but they do not offer a plausible response to the screening-off problem. In the second section, I will give a plausible response to the screening-off problem. I will argue that disjunctivists who rejects the metaphysical possibility of perfect hallucinations can avoid the screening-off problem, and therefore, defend naïve realism from the causal argument. Then, I will present pluralist cognitive disjunctivism. This view explains the indiscriminability condition of hallucination in terms of cognitive mistakes, however, unlike standard cognitive disjunctivism, it leaves room for the ontological possibility of hallucinations that have sensory phenomenal character. I will argue that pluralist cognitive disjunctivism is the best option that disjunctivists have to defend naïve realism from the argument from hallucination, the causal argument and the screening-off problem.

## 6.1 Objections against cognitive disjunctivism

Although I have shown that cognitive disjunctivism provides advantages over reflective disjunctivism, this disjunctivist account is not exempt from problems. In this section, I will analyse three objections that Siegel (2008) and Martin (2013) present against Fish's view. As we will see, these objections can also threat other versions of cognitive disjunctivism (e.g., Armstrong's view). Addressing these problems will help us understand what cognitive disjunctivism is committed to, as well as its possible weaknesses.

### 6.1.1 Are cognitive effects necessary?

Siegel (2008) argues that the cognitive effects are not necessary to qualify a certain mental state as a hallucinatory experience. Siegel holds that it is ontologically possible to hallucinate even when the mental state has not produced the relevant set of cognitive effects.

To illustrate Siegel's objection, consider the following example. Sophie could have a veridical visual experience or a visual hallucination of my cat Neko, and then she suddenly expires before the relevant set of cognitive effects come about (Siegel, 2008:217). According to Siegel, Sophie's visual hallucination of Neko could be introspectively indiscriminable from a veridical visual episode of Neko even if it does not produce the relevant set of cognitive effects. Siegel claims that Fish's view is not a plausible theory of hallucination because it characterises the nature of hallucination in terms of actual cognitive effects. As Siegel states:

> A subject might suddenly expire just after veridically perceiving or hallucinating a butterfly, in which case the veridical perception or hallucination would not have [cognitive effects]. So to ensure that such hallucinations are possible, the effects-based theory should not formulate the definition of hallucination in terms of actual effects (2008:217).

Fish (2009:100) states that Siegel begs the question when accounting for what makes a mental state introspectively indistinguishable from a veridical perceptual episode of a certain type. She takes for granted that hallucinations have phenomenal character. According to Siegel, it is the phenomenal character of a hallucination that explains the fact that a hallucination is introspectively

indiscriminable from a veridical perceptual state. For this reason, Siegel claims that a subject could have a hallucination even though this mental state does not produce cognitive effects. Fish's response to Siegel's objection is as follows:

> Siegel misrepresents the claim on the table when she says that a subject might *hallucinate* yet expire before the relevant effects occur. What might occur is that the subject undergoes a mental event that *would have had* the relevant effects—would have *become* a hallucination—had the subject not expired first (2009:100).

Consider the following case to illustrate Fish's view. Imagine that Cortex, the crazy neuroscientist, artificially stimulates in Sophie's brain the neural states underlying a veridical visual episode of Lucky. Then Sophie dies right after stimulating those neural states. Sophie would have had a visual hallucination of Lucky if the mental state that arises from the stimulation of those neural states had produced the relevant set of cognitive effects. The relevant set of cognitive effects makes it, for the subject, as if she were seeing Lucky. As Sophie dies before that relevant set of cognitive effects comes about, then Sophie did not have a visual hallucination of Lucky, but an unconscious mental state that lacks phenomenal character. On Fish's view, the simple stimulation of such neural states does not produce a mental state with phenomenal character.

Note that if a cognitive disjunctivist endorses Armstrong's approach (1961)—that is, the view that the higher-order belief is the hallucination itself—then it is even clearer that Sophie will not have a visual hallucination of Lucky if she expires before the higher-order belief comes about. If we stimulate Sophie's neural state underlying a veridical visual episode of Lucky in a non-standard way, and the neural state does not produce a higher-order belief of the sort 'I am seeing Lucky', then Sophie would not have a visual hallucination of Lucky.

I contend that Siegel's objection does not pose any problem for cognitive disjunctivism. For there to be a problem, one should show that a non-perceptual mental state could be introspectively indistinguishable from a veridical perceptual experience even when the right sort of cognitive effects does not occur. Siegel lacks the empirical resources to demonstrate the truth of that stipulation and she does not give us sufficient reasons to think that her view is more plausible than

cognitive disjunctivism. Hence, cognitive disjunctivists could appeal to this lack of empirical evidence to defend their view.

### 6.1.2 Are cognitive effects sufficient?

The second objection that Fish's view faces is that two different veridical perceptual experiences—that is, two veridical perceptual episodes that have different phenomenal character—might have the same cognitive effects. Hence, on Fish's view, a hallucination could be introspectively indiscriminable from two different veridical perceptual experiences. As Martin points out: "there *do* seem to be some possible cases which involve incompatible perceptions but with common cognitive effects, thereby making some hallucinations be experiences of incompatible scenes!" (Martin, 2013:39-40). Given this problem, Martin suggests that cognitive effects are not sufficient to explain the nature of hallucination, since two different hallucinations could have the same sort of cognitive effects.

Consider the following example to illustrate this problem. Imagine that Daniel has a veridical visual experience of a blue-green cross, and then, later on, a veridical visual experience of a blue-purple cross. Both visual experiences instantiate different sensory qualities. However, let assume that in both cases the cognitive effect that those visual experiences produce is just the higher-order belief: 'I see a blue cross'. If after that event Daniel has a mental state without phenomenal character whose cognitive effect is the belief 'I see a blue cross', then Fish's characterisation of hallucination would satisfy the conditions for having both, a visual hallucination of a blue-green cross and a visual hallucination of a blue-purple cross, even though no veridical perceptual experience could be of both kinds (Martin, 2013:41). Daniel would have an experience that is introspectively indiscriminable from both veridical visual experiences: a visual episode of a blue-green cross and a visual episode of a blue-purple cross. Martin claims that this is problematic because the two veridical visual experiences are not introspectively indiscriminable from each other (see Fish, 2013:62).

Note that the problem remains even if one supports Armstrong's stance instead of Fish's view. If one artificially stimulates Daniel's neural state to produce the higher-order false belief 'I see a blue cross', then Armstrong's

characterisation of hallucination would satisfy the conditions for having both, a visual hallucination of a blue-green cross and a visual hallucination of a blue-purple cross. To address this problem, I will focus on Fish's view.

Fish's reply is that Daniel did not have two different veridical visual states—one of a blue-green cross and another of a purple-green cross. Instead, he had a perceptual experience of a blue cross in both cases. As Fish states:

> If the perceptions of the cross in both trials really do have identical cognitive effects, then on what grounds do we claim that they are discriminable experiences? We should not take it for granted that differences in the things seen automatically translate into differences in seeings (Fish, 2013:62)

Fish claims that Daniel did not have two veridical visual experiences. Rather, he had two visual illusions of a blue cross. To recall, a visual illusion refers to cases in which an external object is seen inaccurately (Fish, 2010:3). Daniel is seeing a blue-green cross, but he is seeing it as it is not, namely, as a blue cross. For this reason, he has the higher-order belief that he is seeing a blue cross. The same goes for the other case, Daniel is seeing a blue-purple cross, but he is seeing it as it is not, namely, as a blue cross. For this season he believes that he is seeing a blue cross. In short, Daniel had two visual illusions of a blue cross and then a visual hallucination of a blue cross.

I hold that Fish gives a plausible response to the problem. Daniel's hallucination is not introspectively indiscriminable from a veridical visual state of a blue-green (or blue-purple) cross. Instead, it is introspectively indistinguishable from a blue cross. Daniel's hallucination is introspectively indiscriminable from his two previous experiences because Daniel had a visual illusion of a blue cross in both cases. If Daniel were attentive enough, he might have known that he was seeing a blue-green cross and a blue-purple cross respectively.

On Fish's view, when one stimulates the neural state underlying a veridical perceptual episode in a non-standard way, this neural state will produce a mental state without phenomenal character that could have certain cognitive effects. These cognitive effects might be more or less determined. For example, it could

be the higher-order belief: ‘I see a blue-purple cross’, or a less determined higher-order belief: ‘I see a blue cross’, or a much less determined higher-order belief: ‘I see a cross’. The cognitive effects determine whether the resulting mental state without phenomenal character is introspectively indiscriminable from one type of veridical perceptual experience or another. The same sort of explanation goes for Armstrong’s view, when one stimulates the neural state underlying a veridical perceptual episode in a non-standard way, this neural state could produce different cognitive states—higher-order false beliefs. The sort of higher-order false belief that she subject has will determine whether the hallucination is introspectively indiscriminable from one type of veridical perceptual experience or another. I contend that this sort of explanation can rebuff the charge that cognitive effects are not sufficient to explain the nature of hallucination.

In the next subsection, I will explore how cognitive disjunctivism, in particular Fish’s view, deals with the screening-off worry. I will argue that Fish’s strategy does not avoid the screening-off problem, and therefore, disjunctivists should propose an alternative strategy to avoid the screening-off problem.

### 6.1.3 Cognitive disjunctivism and the screening-off problem

As we have seen in previous chapters, the screening-off worry is a problem of great magnitude for naïve realism. The screening-off worry threatens the explanatory role that the external objects and properties play in explaining the phenomenal character of veridical perceptual states. To recall, the screening-off problem is if what fully constitutes the phenomenal nature of a causally matching hallucination is a non-naïve realist aspect of perception that is common to the causally matching hallucination and its corresponding veridical perceptual state, then the naïve realist aspects of perception are explanatorily idle because the common element is sufficient to explain what it is like to hallucinate and perceive.

Although cognitive disjunctivism does not accept the metaphysical possibility of perfect hallucination, Martin (2013) argues that cognitive disjunctivism does not avoid the screening-off problem. According to Martin, the extra phenomenal character that is exclusive to the veridical perceptual

experience does not actually have any phenomenal impact on the subject, and therefore, it is explanatory redundant. As Martin claims:

> Why should we think that the extra escutcheon of phenomenal character, present in cases of veridical perception but not hallucination, make any difference to what happens? Hasn't Fish preserved the distinctiveness of veridical perception at the cost of making its distinctive elements entirely causally or explanatory redundant? (Martin, 2013:43).

We can present the screening-off problem against Fish's view as follows. According to Fish, the relevant set of cognitive effects is a common factor of the veridical perceptual episode and the hallucinatory experience that explains what it is like to hallucinate. If that is the case, why is not this common factor sufficient to explain what it is like to perceive? The extra naïve phenomenal character of veridical perceptual experiences is explanatory redundant. The relevant set of cognitive effects suffices to fully explain the phenomenal character of veridical perceptual experiences. The relevant set of cognitive effects screens off the extra naïve phenomenal character of veridical perceptual episodes that is obtained in virtue of being perceptually related to the external world.

As we have seen in chapter 3, reflective disjunctivism is also threatened by the screening-off problem. The common factor of veridical perceptual episodes and causally matching hallucinations, that is, the negative epistemic property, screens off the naïve realist aspects of perception. To solve this problem, Martin argues that "cases of inherited or dependent explanatory potential offer us exceptions to the general model of common-properties screening-off special ones" (2004:70). However, I argued in chapter 4 that this strategy does not work. Even though we accept the claim that the common factor of veridical perceptual experiences and causally matching hallucinations—the negative epistemic property—metaphysically depends on the naïve realist aspects of perception, the negative epistemic property screens off the naive realist aspects of perception from playing a role in explaining what it is like to perceive. The fact that an experience could not have the negative epistemic property if there were no experiences with naïve phenomenal nature does not entail that the naïve phenomenal nature cannot be screened off by the negative epistemic property.

We have reached one of the most crucial points of the whole thesis, namely, the fact that Fish (2013) follows Martin's strategy to argue that cognitive disjunctivism overcomes the screening-off problem. I will argue that cognitive disjunctivists that take this path to overcome the screening-off worry fail to achieve their goal for the same reason as Martin does also fail to achieve his goal. The fact that the explanation of the phenomenal character of the causally matching hallucination metaphysically depends on the naïve phenomenal nature of veridical perceptual experiences does not avoid the screening-off problem.

Fish claims that a subject have to first enjoy veridical perceptual episodes to be able to hallucinate. Once a subject has enjoyed experiences with naïve phenomenal nature and, possibly, once a certain level of sophistication has been reached, other mental states—hallucinations—can then contribute to what it is like for the subject (Fish, 2013:63). Therefore, Fish claims that whatever hallucinations contribute to what it is like for the subject depends on the contribution made by veridical perceptual experience (Fish, 2013:64).

Consider the following example to illustrate the consequences of Fish's claim. If Michael were born blind, his brain could not produce a set of cognitive effects that makes it, for Michael, like it is to have a veridical visual experience of a certain kind. Michael can visually hallucinate only if he has first enjoyed experiences with naïve visual phenomenal nature. According to Fish, if veridical perceptual experiences do not have a naïve phenomenal nature, there would be nothing it is like to hallucinate. Hence, what it is like to hallucinate metaphysically depends on the naïve phenomenal nature of veridical perceptual experiences.

On Fish' view, the naïve phenomenal nature is a requisite for having those cognitive effects that explain what it is like to hallucinate. The cognitive effects that explain what it is like to hallucinate metaphysically depend on the naïve phenomenal nature of veridical perceptual experiences. However, we should note that, on Fish's view, the alleged naïve phenomenal nature does not play any role in explaining what it is like to hallucinate. On Fish's stance, it is the cognitive effects of the veridical perceptual experience, not its naïve phenomenal nature, that explains what it is like to hallucinate (Fish, 2009).

Reflective disjunctivism offers a different account of the phenomenal nature of causally matching hallucination. According to reflective disjunctivists, the naïve phenomenal nature of a veridical perceptual experience is not a requisite to have the cognitive effects that explains what it is like to hallucinate. On reflective disjunctivism, the property of being impersonally introspectively indiscriminable from a veridical perceptual experience of *F* explains what it is like to have a causally matching hallucination of *F*. On reflective disjunctivism, one can only explain what it is like to have a causally matching hallucination of *F* by reference to the naïve phenomenal nature of a veridical perceptual state of *F*.

Martin (2013) argues that on Fish's view, this naïve phenomenal nature is not essential to *explaining* what it is like to have a causally matching hallucination of *F*, it is essential to obtaining the elements that explain what it is like to have a causally matching hallucination of *F*. Hence, Martin claims that Fish's theory of hallucination does not offer cases of dependent explanatory potential to avoid the screening-off problem. The naïve phenomenal nature is a requisite to have a hallucination, but the *explanation* of what it is like to have a hallucination does not depend on the naïve phenomenal nature of veridical perceptual episodes. It rather depends on the cognitive effects that these mental states produce.

However, after Fish (2013) explains that the naïve phenomenal nature is a requisite to have the relevant set of cognitive effects that qualify a mental state as a hallucination of a certain kind, Fish (2013) adopts a similar strategy to Martin's to avoids the screening-off problem by arguing that the explanation of what it is like to hallucinate metaphysically depends on the naïve phenomenal nature of veridical perceptual states. He claims that the subject who hallucinates "takes themselves to be having a veridical perception of a certain kind and there is something it is like to have that veridical perception" (Fish, 2013:63-64; Fish, 2018:127). Therefore, According to Fish, the explanation of what it is like to hallucinate metaphysically depends on the kind of veridical perceptual experience that the subject mistakenly takes herself to be enjoying. As Fish claims:

> The explanation of the phenomenology of hallucination *requires* both that veridical perceptions will have a phenomenology and that this phenomenology must be explained in a different way to that of hallucination. What is more, it gives an intuitive account of what it is like for

> the hallucinating subject: where what it is like to perceive is determined by the elements of the environment the subject is open to in experience, what it is like to hallucinate is determined by the kind of openness one mistakenly takes oneself to be enjoying, Thus whatever hallucinations contribute to what it is like from the perspective of a conscious subject, both the very fact that they contribute at all, as well as the particular contribution they make, is entirely parasitic on the contribution made by veridical experiences (Fish, 2018 127-8).

Thus, Fish argues that, even though the relevant set of cognitive effects explains what it is like to hallucinate, the explanation of what it is like to hallucinate metaphysically depends on the existence of the naïve realist aspects of perception. If those naïve realist aspects of perception do not exist, then the cognitive effects could not explain what it is like to hallucinate. This is so because when the subject has a hallucination, she mistakenly takes herself to be enjoying an episode with naïve phenomenal character. Therefore, the naïve realist aspects of perception are not only a requisite to hallucinate, but they also play a role in explaining the phenomenal character of hallucinations.

However, As I argued in chapter 4, the fact that the explanation of what it is like to hallucinate metaphysically depends on the existence of the naïve realist aspects of perception does not entail that the naïve realist aspects of perception cannot be screened off by what explains the phenomenal character of the hallucinatory experience. If the relevant set of cognitive effects is sufficient to explain what it is like to hallucinate and perceive, then the perceived external objects and properties do not play any role in explaining the phenomenal character of veridical perceptual experiences.

In the next section, I will explain how cognitive disjunctivists should tackle the screening-off problem. I will argue that the key point to avoid the screening-off worry is to insist that cognitive effects are not sufficient to explain what it is like to perceive. I will also propose a view—pluralist cognitive disjunctivism—that is less radical and more attractive than standard cognitive disjunctivism because it rejects the claim that all hallucinations lack sensory phenomenal character.

## 6.2 Pluralist cognitive disjunctivism and the screening-off worry

In this last section, I will explain how phenomenological disjunctivists can avoid the screening-off problem. Then, I will argue that pluralist cognitive disjunctivism is the most attractive disjunctivist view that is compatible with naïve realism. Like standard cognitive disjunctivism, pluralist cognitive disjunctivism explains the indiscriminability condition of hallucination in terms of cognitive errors. A hallucination is introspectively indistinguishable from a veridical perceptual experience of a certain kind due to a cognitive mistake. However, unlike standard cognitive disjunctivism, this disjunctivist assumes that there could be hallucinations with sensory phenomenal nature.

### 6.2.1 Cognitive disjunctivism and the screening-off problem revised

I have argued in chapter 2 that Johnston's view falls into the screening-off problem. The sensible profile that is a common factor of the veridical perceptual state and causally matching hallucination fully explain the phenomenal character of the causally matching hallucination and the veridical perceptual experience. The same problem goes for Allen's view, the sensory imagery character that is a common factor of veridical perceptual experiences and causally matching hallucinations suffices in itself to fully explain the phenomenal character of the causally matching hallucination and the veridical perceptual experience.

Johnston's stance and Allen's view have something in common, namely, they accept the metaphysical possibility of perfect hallucinations—experiences that are impersonally introspectively indiscriminable from a veridical perceptual episode of a certain kind. According to these two theories of hallucination, causally matching hallucinations are perfect hallucinations.

I hold that the screening-off worry threatens the explanatory role of the naïve phenomenal nature of veridical perceptual experiences if one accepts the claim that other mental states without perceptual phenomenal character—perfect hallucinations—are *always,* because of their intrinsic nature, introspectively indiscriminable from veridical perceptual experiences. If one denies that claim, then the screening-off problem does not arise. If one insists that the

indiscriminability condition of hallucination is *always* relative to a subject and a time, then one could rebut the screening-off problem. In short, I hold that the screening-off worry does not arise if one denies the possibility of perfect hallucinations. Let me explain my argument in more details.

The key point to avoid the screening-off problem is to insist that the common factor of the veridical perceptual episode and the causally matching hallucination is not sufficient to fully explain what it is like to perceive. The naïve realist aspects of perception must play a fundamental role in explaining what it is like to perceive. For that purpose, one should explain the indiscriminability condition of hallucination in terms of factors that are external to the nature of that mental state that supervenes from the stimulation of the neural states.

Let us focus on Fish's view to explain my response to the screening-off problem. Imagine that Sophie has a veridical visual episode of Neko, when Sophie has such a veridical visual experience, neural state $N_1$ is stimulated. $N_1$ has been stimulated in a standard way—that is, the light reflected on Neko, impacted on Sophie's retina, Sophie's optical nerve transmits information from the eye to certain areas of the brain, and then $N_1$ is stimulated. Imagine that, after such an event, Cortex, the crazy neuroscientist who is toying with Sophie, stimulates $N_1$ in a non-standard way—for example, by direct simulation of the retina. In such a case, $N_1$ would not produce a mental state with perceptual phenomenal character because Sophie is not in perceptual relation with Neko. Instead, according to Fish, Sophie would have a mental state without phenomenal character. Fish assumes that this mental state would not have phenomenal character because Sophie is not in perceptual relation with Neko. Furthermore, Fish also assumes that the neural stimulation in a non-standard way will produce a mental state of some sort. The neural state plays the same role both situations—in the hallucinatory case and the veridical perceptual case: it serves as enabling condition of the visual awareness of Neko. Thus, Fish avoids rejecting the same cause same effect principle. The neural state does not have a different effect. However, in the hallucinatory case the resulting mental state lacks phenomenal character because the perceptual relation between the subject and Neko is missing.

Let us put all the cards on the table. So far, we have a mental state without phenomenal character and a mental state with perceptual phenomenal character. Both mental states are introspectively distinguishable from each other. When Sophie has the mental state without phenomenal character, she knows by introspection alone that she is not seeing Neko. In fact, there is nothing it is like for Sophie to be in such a mental state. However, if the mental state produces the relevant set of cognitive effects, then the mental state without phenomenal character will be introspectively indiscriminable from the veridical perceptual experience, and therefore, it will acquire the status of hallucination. For instance, after Cortex stimulates $N_1$ in a non-standard way, Sophie might believe that she is seeing Neko because the resulting mental state has caused a higher-order false belief of the following sort: 'I am seeing Neko'.

In such a case, Sophie's higher-order false belief is sufficient for Sophie to be in an event that is introspectively indiscriminable from a veridical visual experience of Neko. We would say that Sophie has a visual hallucination of Neko. Does this relevant set of cognitive effects that is a common factor of the veridical visual episode of Neko and the visual hallucination of Neko screen off the naïve realist aspects of perception? The answer is no. The relevant set of cognitive effects that explains the indiscriminability condition is not an intrinsic property of the hallucinatory episode, rather it is a contingent effect of the mental state without phenomenal character. The naïve realist aspects of perception are not threated by the screening-off problem because they play a role in explaining what it is like to see Neko. If Sophie's mental state without phenomenal character had not produced the relevant set of cognitive effects, then Sophie would be able to distinguish by introspection alone such mental state from a veridical visual state of Neko. Sophie cannot distinguish by introspection alone such mental state on that particular occasion from a visual veridical state of Neko because the cognitive effects prevent her to do so. These cognitive effects take place when they should not have occurred, namely, when she was not in perceptual relation with Neko.

As I said in chapter 1, proponents of the argument from hallucination assume that the indiscriminability condition of hallucination is symmetrical. If a hallucination *h* is introspectively indistinguishable from a veridical perceptual episode *p,* then *p* is also introspectively indistinguishable from *h*. Disjunctivists

deny the claim that the indiscriminability condition of hallucination is symmetrical. Hallucinations are introspectively indiscriminable from veridical perceptual states, however, veridical perceptual states are not introspectively indiscriminable from hallucinations. Disjunctivists owe us an explanation of why the indiscriminability condition of hallucination is asymmetrical.

Cognitive theories of the nature of hallucination—such as cognitive disjunctivism—explain why the indiscriminability condition of hallucination is asymmetrical. When one has a veridical perceptual experience of a certain kind, one has introspective access to the phenomenal nature of such a mental state, namely, the external world. The external world shapes the contour of the veridical perceptual episode. In other words, the external world explains the phenomenal character of the veridical perceptual state. One can distinguish by introspection alone a veridical perceptual experience from a mental state whose phenomenal nature is not constituted by the external world because both mental states are introspectively distinguishable from each other. When one has a hallucination, one has a mental state whose phenomenal character is different from the perceptual phenomenal character of a veridical perceptual experience. These two mental states are not qualitatively identical, and therefore, they are in principle introspectively discriminable from each other. However, subjects of hallucination suffer a cognitive mistake that prevents them from having introspective access to the difference in phenomenal character. The cognitive error occurs when one gets the relevant set of cognitive effects without being in perceptual contact with the external world. The relevant set of cognitive effects prevents the subject from introspectively accessing to the fact that the naïve phenomenal nature if missing—in other words, that the subject is not perceptually related to the external world.

Consider the following example to illustrate my response. if Sophie is seeing Neko, she can know by introspection alone that she is seeing Neko. She also knows by introspection alone that she is not hallucinating Neko. However, there are some events that are such that when Sophie is in them, she is not able to know by introspection alone that she is hallucinating Neko. The hallucinatory state, due to their cognitive effects, makes it, for Sophie, as if she were perceptually related to Neko. Sophie's ability to get introspective access to the fact that she is not seeing Neko is affected by the cognitive effects of the hallucination of Neko.

Sophie fails to get introspective access to the fact that she is not seeing Neko because the cognitive effects of Sophie's mental state prevent her to do so.

Thus, cognitive disjunctivists can give a plausible explanation of the asymmetric condition of hallucination that does not fall into the screening-off worry. Disjunctivists who accept the metaphysical possibility of perfect hallucination—e.g., Martin (2004, 2008) and Johnston (2004)—do not explain the asymmetric indistinguishability condition of perfect hallucination. I suspect that there is not any plausible explanation of the asymmetric indiscriminability condition of perfect hallucination, and therefore, one should accept that these mental states are introspectively indiscriminable from each other.

According to Johnston (2004) and Martin (2004, 2006), it is impossible simpliciter for a subject to notice the difference in phenomenal character between the veridical perceptual experience and its causally matching hallucination. A causally matching hallucination is introspectively indiscriminable from a veridical perceptual episode in an objective sense. It is the intrinsic nature of the hallucination that makes it introspectively indiscriminable from a veridical perceptual episode of a certain kind. The intrinsic nature of the hallucinatory experience—whatever it is—is a common element of the veridical perceptual episode and the causally matching hallucination. Therefore, the intrinsic nature of the hallucination that is also present in the veridical perceptual experience should be sufficient to explain the phenomenal character of the veridical perceptual experience. What grounds do we have then to claim that a veridical perceptual state is introspectively discriminable from a perfect causally matching hallucination? Martin and Johnston do not accept the claim that perfect causally matching hallucinations are in principle introspectively discriminable from veridical perceptual experiences. Perfect causally matching hallucinations are always (in an objective sense) introspectively indiscriminable from veridical perceptual experiences. In contrast to Martin and Johnston, cognitive disjunctivists hold that causally matching hallucinations are in principle introspectively discriminable from veridical perceptual episodes. However, the subject cannot distinguish by introspection alone the hallucination from a veridical perceptual state on that particular occasion due to a cognitive mistake.

The upshot of my analysis is that phenomenological disjunctivists can avoid the screening-off problem if they reject the metaphysical possibility of perfect hallucination, and they explain the indiscriminability condition of hallucination in a subjective sense. I argued that Fish's view offers a plausible explanation of the asymmetric condition of hallucination that does not fall into the screening-off worry. Fish does not have to (and should not) follow Martin's strategy to avoid the screening-off problem precisely because Martin's strategy does not avoid the screening-off worry. Instead, I suggest that Fish should have taken a similar path to the one I have taken in this thesis to claim that his view is not threatened by the screening-off problem. It is not the nature of the causally matching hallucination, but the fact that one assumes that causally matching hallucinations are perfect hallucinations that gives rise to the screening-off worry.

### 6.2.2 Sensory disjunctivism and the screening-off problem revised

At this point, it is important to note that sensory disjunctivists can also avoid the screening-off problem, so long as they reject the metaphysical possibility of perfect hallucinations. To recall, sensory disjunctivists claim that hallucinations have a sensory phenomenal character that is different from the perceptual phenomenal character of veridical perceptual episodes. Although some sensory disjunctivists (e.g., Johnston, 2004) claim that perfect hallucinations are metaphysically possible, sensory disjunctivism is not committed to endorsing such a claim. Consider, for example, the sensory imagery theory of hallucination, according to which, hallucinations are sensory imagery episodes. Sensory imagery episodes have a sensory phenomenal character that is different from the perceptual phenomenal character of veridical perceptual experiences. Sensory imagery episodes are in principle introspectively discriminable from veridical perceptual episodes. However, the subject of hallucination is not able to distinguish by introspection alone a sensory imagery state from a veridical perceptual experience due to a cognitive impairment (see Bentall, 1990:90).

Like cognitive disjunctivists, advocates of the sensory imagery theory can deny the claim that perfect hallucinations are metaphysically possible. This view would hold that the indistinguishability condition of hallucination is always relative to a subject and relative to a time. The screening-off problem does not

arise because the common factor of the veridical perceptual experience and the causally matching hallucination does not screen off the naïve realist aspects of perception from playing a role in explaining the phenomenal character of veridical perceptual experiences. According to this view, the sensory imagery phenomenal nature does not suffice in itself to fully explain the phenomenal character of the veridical perceptual episode. If the subject of hallucination, say, Sophie, had not had a cognitive error that prevented her from discriminating by introspection alone a sensory imagery episode from a veridical perceptual experience, she would have known that she was not perceiving.

The problem with this approach is not that it falls into the screening-off problem. Rather, the problem is that the common neural state will produce the same effect in both scenarios. Let me explain it in more detail. If Sophie has a non-causally matching hallucination of Neko, then the neural state underlying such a mental state is different from the neural state underlying a veridical perceptual episode of Neko. One could argue that these two neural states would have different effects, and therefore, there does not have to be a common mental state. As MacGregor claims: "if the hallucinating subject's brain state is different from that involved in any possible perception, then the naïve realist might speculate that this distinctively non-perceptual brain state somehow 'generates' its own phenomenology" (2015:101). If Sophie has a non-causally matching hallucination of Neko, this mental state could have its own phenomenal nature—sensory imagery phenomenal nature—that is not present in the veridical perceptual case because both mental states have different neural states.

However, If Sophie has a causally matching hallucination of Neko, then this mental state has the same neural state as a veridical perceptual episode of Neko, and hence, if we accept the same proximate cause same effect principle, this common neural state should produce the same effect in both cases. If the neural state produces a mental state with sensory imagery phenomenal nature in the hallucinatory case, then the same neural state will produce a mental state with sensory imagery phenomenal nature in the veridical perceptual case as well.

This is problematic for naïve realism since the phenomenal nature of all veridical perceptual experiences would be partly constituted by a sensory imagery

component. Many philosophers (Kant, 1787/1997; Strawson, 1970; Sellars 1978; Pendlebury, 1996; Lennon, 2010; Nanay, 2010; Macpherson, 2012, Brown, 2018) hold that perceptual experiences are often infused with imagination. However, this claim is less radical than the claim that all veridical perceptual episodes would be partly constituted by a sensory imagery component.

Consider the following example to illustrate the problem that the nature of causally matching hallucination poses to the sensory imagery view. Imagine that Cortex stimulates Sophie's neural state $N_1$ in a non-standard way. $N_1$ is a necessary causal condition to have a veridical visual episode of Neko. When $N_1$ is stimulated in a non-standard way, it produces a sensory imagery episode of Neko that has a quasi-perceptual phenomenal character—a vivid sensory imagery phenomenal character that is very similar to the perceptual phenomenal character of a veridical visual experience of Neko. As $N_1$ is also stimulated when Sophie has a veridical visual experience of Neko, then $N_1$ will also produce a sensory imagery episode of Neko that has a quasi-perceptual phenomenal character in the veridical perceptual case. We end up in a drastic situation of having two different mental states in the veridical perceptual case at the same time: one is the sensory imagery episode of Neko while other is the veridical perceptual episode of Neko.

The proponent of the sensory imagery theory of hallucination could argue that Sophie does not have two different mental states in the veridical perceptual case at the same time. Rather, she has a single mental state that has two different types of phenomenal character: one is an imagery sensory phenomenal character while other is a perceptual phenomenal character. Both types of phenomenal character constitute what it is like to see Neko. The common factor of the veridical visual experience and the casually matching visual hallucination of Neko does not screen off the naïve realist aspects of perception because these elements are necessary to explain the exclusive phenomenal character of the veridical visual experience. The naïve realist aspects of perception play a role in explaining what it is like to perceive. However, the role of the naïve realist aspects of perception will not be as significant as a naïve realist expects. If the common factor of the veridical visual experience and the causally matching visual hallucination of Neko is a quasi-perceptual phenomenal character that is obtained in virtue of the presence of the common neural state, then the phenomenal

character of the veridical perceptual episode could be almost fully explained by appealing to the common phenomenal nature of both experiences. The contribution made by the naïve realist aspects of perception in shaping the contours of the veridical perceptual experience would be almost insignificant.

Naïve realists who support a sensory imagery theory of hallucination have at least two responses to this problem. On the one hand, they can bite the bullet and claim that, although all veridical perceptual episodes are infused by sensory imaginings, the naïve realist aspects of perception play a fundamental role in explaining the exclusive phenomenal character of veridical perceptual episodes. This is enough to rebut the causal argument: the same kind of experience cannot be caused by an external object or by direct stimulation of the retina. The naïve realist aspects of perception are not screened off by the common factor of veridical perceptual episodes and causally matching hallucinations because they play a role in explaining what it is like to perceive. Both mental states are in principle introspectively discriminable from each other. The subject fails to discriminate through introspection alone a causally matching hallucination from a veridical perceptual episode because the subject is victim of a cognitive error.

On the other hand, they can argue that not all veridical perceptual episodes are infused by sensory imaginings. For example, one could argue that creatures that lack sensory imagery skills could have veridical perceptual episodes. These veridical perceptual experiences would not be infused with imaginations. On this view, there are some veridical perceptual experiences whose neural state does not produce any sensory imagery phenomenal character. Hence, if one stimulates the neural state underlying one of those veridical perceptual experiences in a non-standard way, the resulting mental state would not be an experience with sensory imagery phenomenal character. It is important to point out that, according to this view, the resulting mental state cannot be introspectively indiscriminable from a veridical perceptual experience of a certain kind, otherwise there would be causally matching hallucinations that are not sensory imagery episodes. This claim contrasts with the sensory imagery account of hallucination, according to which, all hallucinations are sensory imagery experiences. Therefore, those creatures that lack imagery skills would not be able to hallucinate.

Although I think that there could be veridical perceptual experiences that are soaked with sensory imaginings, I hold that the sensory imagery theory of hallucination is too demanding when it comes to explaining the phenomenal nature of causally matching hallucinations. I think that a phenomenological disjunctivist theory of perception would benefit from the idea that there could be hallucinations that have a sensory phenomenal nature and hallucinations that have a cognitive phenomenal nature. In the next subsection, I will argue that if we combine cognitive disjunctivism and the sensory imagery account of hallucination to explain the phenomenal nature of different possible hallucinatory experiences, then we will have the best version of phenomenological disjunctivism to defend naïve realism from the screening-off worry, the argument from hallucination and the causal argument. I call this view 'pluralist cognitive disjunctivism'.

### 6.2.3. Pluralist cognitive disjunctivism

Both, cognitive disjunctivism and the sensory imagery theory explain the indiscriminability condition of hallucination in terms of cognitive errors. The subject cannot know by introspection alone that a certain mental state that lacks perceptual phenomenal character—the hallucinatory experience—is a veridical perceptual episode. According to cognitive disjunctivism, hallucinations have a cognitive phenomenal nature—that is, they lack sensory properties. In contrast to cognitive disjunctivism, according to the sensory imagery theory of hallucination, hallucinations have a sensory imagery phenomenal nature.

I have argued that both disjunctivists theories of perception—cognitive disjunctivism and the sensory imagery account of hallucination—avoid the screening-off worry so long as they reject the metaphysical possibility of perfect hallucinations—that is, hallucinations that are impersonally introspectively indiscriminable from veridical perceptual experiences.

After considering the advantages and disadvantages of both views, I suggest that the naïve realist should combine both approaches to uphold naïve realism from the argument from hallucination. For that purpose, I propose pluralist cognitive disjunctivism. Like standard cognitive disjunctivism and the sensory imagery theory of hallucination, pluralist cognitive disjunctivism explains the

indiscriminability condition of hallucination in terms of cognitive mistakes. The subject cannot introspectively discriminate a mental state without perceptual phenomenal character from a veridical perceptual episode at a particular time due to a subjective failure. Unlike standard cognitive disjunctivism and the sensory imagery theory of hallucination, pluralist cognitive disjunctivism holds that there could be hallucinations with sensory imagery phenomenal nature and hallucinations with cognitive phenomenal nature. My view is then less radical than standard cognitive disjunctivism and the imagery account of hallucination because it allows for the possibility of both types of hallucinatory experiences.

According to pluralist cognitive disjunctivism, there are experiences that are impersonally introspectively indiscriminable from veridical perceptual episodes, these are mental states that have a perceptual phenomenal character in virtue of having a naïve phenomenal nature. On this view, two veridical perceptual experiences could be impersonally introspectively indiscriminable from each other in virtue of their intrinsic nature—that is, in virtue of having external objects and properties as constituents. However, this view denies the claim that hallucinations could be impersonally introspectively indiscriminable from veridical perceptual experiences in virtue of their phenomenal nature. In short, it rejects the metaphysical possibility of perfect hallucinations.

However, pluralist cognitive disjunctivism does not deny the claim that there could be a hallucinatory experience for every veridical perceptual episode. It could be possible that, the artificial stimulation of the neural states underlying any sort of veridical perceptual experience could, in principle, cause an experience that is introspectively indiscriminable from such a veridical perceptual episode. The claim that pluralist cognitive disjunctivists deny is that there could be a perfect hallucination for every veridical perceptual experience.

On pluralist cognitive disjunctivism, the stimulation of a neural state underlying a veridical perceptual experience could lead to different scenarios:

1. If the neural state has been stimulated in a standard way—the subject is in perceptual contact with the external object that she seems to perceive—the mental state will have perceptual phenomenal character.

2. If the neural state has been stimulated in a non-standard way—the subject is not perceptually related to the external object that she seems to perceive—the resulting state will not have perceptual phenomenal character. In this situation, three different events could occur.
    2.1 The resulting state is not a conscious mental state. The functional role of this neural state is to detect a certain external object, property or event that will shape the contours of the subject's experience. As the subject is not perceptually related to such an external object, property or event, the stimulation of the neural state does not cause any phenomenal effect on the subject (Locatelli, 2016:226).
    2.2 The neural state causes a mental state without phenomenal character whose cognitive effects make it, for the subject, as if she were perceiving (Fish, 2008, 2009).
    2.3 The resulting state could be a sensory imagery experience. This will occur if the functional role of this neural state is not only to detect a certain external object, property or event to shape the contours of the subject's experience, but also to produce a state that has some sort of sensory imagery phenomenal character. If the subject introspectively mistakes such a mental state from a veridical perceptual experience of a certain kind—for example, because it has also produced the higher-order belief that the subject is perceptually related to a certain external object, property or event—then the sensory imagery sensory experience will be qualified as a hallucination.

Note that in all these scenarios, the subject's state could be accompanied by a feeling of reality—the feeling that one is perceptually related to a certain object, property or event (Dokic & Martin, 2012, 2013). As we have seen in the previous chapter, the cognitive feeling of reality occurs when metacognitive mechanisms tag first-order states as being genuinely perceptual—regardless of whether the subject is in perceptual contact with the external world or not. On pluralist cognitive disjunctivism, the feeling of reality is not sufficient to explain the indiscriminability condition of hallucination. However, we should consider that perceptual experiences and hallucinations are usually accompanied with this

feeling of reality. This cognitive feeling plays an important role in explaining the phenomenal character of a vast array of sensory experiences—precisely, those sensory experiences that are accompanied by a feeling of reality.

We have just seen how pluralist cognitive disjunctivism tackles the nature of different types of causally matching hallucinations. What about non-causally matching hallucinations? Veridical perceptual experiences and non-casually matching hallucinations do not have an underlying neural state in common. Pluralist cognitive disjunctivists follow MacGregor's line of thought: if the subject's neural state is different from that involved in any possible veridical perceptual episode, then one could speculate that this sort of neural state might produce their own phenomenology (MacGregor, 2015:101). In such a circumstance, the neural state could produce a mental state with cognitive phenomenal nature or a mental state with sensory phenomenal nature. For example, it could produce a higher-order belief of the following sort 'I see Neko' or it could produce a sensory imagery experience of Neko. If the subject introspectively mistakes such mental state for a veridical perceptual episode of a certain kind due to a cognitive error, we will say that the subject has a non-causally matching hallucination.

The reader might think that any theory of hallucination that rejects the possibility of perfect hallucination should be rejected, and therefore, one should reject pluralist cognitive disjunctivism. If that is the case, we end up in a drastic situation for naïve realism, since as I argued, no phenomenological disjunctivist account could accept the metaphysical possibility of perfect hallucinations without falling into the screening-off problem. Therefore, I conclude that pluralist cognitive disjunctivism is the best option left for naïve realism. This view does not only not fall into the screening-off problem, but it also offers a modest and plausible explanation of the nature of different types of hallucinations.

## 6.3 Conclusions

The goal of this thesis was to defend naïve realism from the problems that the nature of hallucination poses to this theory of perception. According to naïve realism, veridical perceptual episodes are, at least, partly constituted by the

perceived external objects and properties. Veridical perceptual experiences that have feeling of reality—the cognitive feeling that a certain external object or property is present—will be also constituted by such a feeling of reality. I contend that naïve realists should be open to the claim that non-external objects and properties could also play a role in explaining what it is like to perceive, so long as those elements do not screen off the role that the naïve realist aspects of perception play in (partly) explaining the phenomenal character of such episodes.

To support the claim that external world plays a role in explaining what it is like to perceive, naïve realists hold that the same sort of experience could not have occurred if the subject were not in perceptual contact with the external world. Thus, we reach the main phenomenological claim of naïve realism—the phenomenal character of the veridical perceptual experience metaphysically depends on a perceptual relation between the subject and the external world.

Traditional common kind theories of perception reject naïve realism. These theorists hold that the same sort of experience could be obtained when one is in perceptual contact to the external world and when one is not in perceptual contact with the external world. To support this claim, they present the argument from hallucination, according to which, introspectively indistinguishable experiences should be given the same account. They claim that hallucinations and veridical perceptual states are not constituted by the external world, as the former is, *obviously*, not constituted by the external world.

Disjunctivists accept the claim that hallucinatory experiences are not constituted by the external world, however, they reject the assumption that introspectively indiscriminable episodes should be given the same account. According to disjunctivism, veridical perceptual states are constituted by the external world, while hallucinations are not, despite the fact that the latter is introspectively indiscriminable from the former. Disjunctivists argue that the argument from hallucination is not sound because the claim that veridical perceptual experiences and hallucinations are identical in nature—an ontological assumption—does not follow from the claim that a hallucination is introspectively indiscriminable from a veridical perceptual episode of a certain kind—an epistemological statement. Having rejected the argument from hallucination,

disjunctivists owe us an explanation of how it is possible that a hallucination is introspectively indistinguishable from a veridical perceptual experience if both mental states are qualitatively different. In this thesis, I have explored different disjunctivist theories whose aim is to explain the indiscriminability condition of hallucination while preserving naïve realism.

After an analysis of the argument from hallucination, I have explained that, according to common-kind theorists (e.g., Robinson, 2013) and some disjunctivists (e.g., Martin, 2004), there is a specific type of hallucinatory experience, namely, causally matching hallucination—hallucination that has the same neural state as a veridical perceptual experience of a certain kind—that gives rise to the screening-off problem. The problem is that if the phenomenal character of a causally matching hallucination can be explained by reference to an element that is common to the causally matching hallucination and the veridical perceptual experience, then the external world does not play a role in explaining what it is like to perceive, since the common factor of the casually matching hallucination and the veridical perceptual episode suffices in itself to explain what it is like to perceive. If the external world does not play any substantial role in explaining the phenomenal character of veridical perceptual experiences, then one does not have any motivation to endorse naïve realism.

Martin (2004, 2006) holds that the only way to preserve naïve realism from the screening-off problem is to endorse reflective disjunctivism—the view that characterises the nature of causally matching hallucination solely in negative epistemic terms. According to Martin, nothing characterises the phenomenal nature of such mental states save the property of being introspectively indiscriminable from a veridical perceptual experience. Thus, Martin rejects those disjunctivists accounts that give a positive explanation of the indiscriminability condition of causally matching hallucinations. For example, according to sensory disjunctivists, a causally matching hallucination is introspectively indiscriminable from a veridical perceptual episode in virtue of a common sensory element that constitutes the phenomenal nature of both experiences. Martin holds that this common element gives rise to the screening-off worry, since it would be sufficient to fully explain both, the phenomenal character of the veridical perceptual experience and the phenomenal character of the causally matching hallucination.

To avoid the screening-off worry, Martin claims that the phenomenal character of the causally matching hallucination has to metaphysically depend on the phenomenal nature of the veridical perceptual experience. However, I have argued that Martin's gambit does not avoid the screening-off problem. Albeit the explanation of the phenomenal character of a causally matching hallucination metaphysically depends on the existence of the naïve realist aspects of perception, this does not entail that the common factor of the causally matching hallucination and the veridical perceptual episode—the negative epistemic property—cannot screen off the external world from playing a role in explaining the phenomenal character of veridical perceptual experiences.

In contrast to Martin, I hold that the screening-off worry does not necessarily rear its head if one offers a positive explanation of the phenomenal nature of hallucination in terms of sensory qualities. Rather, I argued that the screening-off problem arises if one accepts the metaphysical possibility of perfect hallucinations—that is, hallucinations that are metaphysically impossible to tell apart by introspection alone from veridical perceptual states. In other words, disjunctivists avoid the screening-off problem if they explain the indiscriminability condition of hallucination in a personal sense—as a subjective failure—as, for example, cognitive disjunctivists do (e.g., Fish, 2008, 2009). The screening-off worry does not arise because the resulting state could have been told apart by introspection alone from a veridical perceptual experience had not the cognitive mistake have occurred. This is a claim that reflective disjunctivists deny, as they assume that causally matching hallucinations are always introspectively indiscriminable from veridical perceptual experiences due to their intrinsic nature. I argued that the key to avoid the screening-off problem is to characterise the indistinguishability condition of hallucination as a contingent fact that depends on the subject's abilities. A mental state that is in principle, qua mental state, introspectively discriminable from a veridical perceptual experience is taken as veridical perceptual episode by the subject due to a cognitive mistake. The common factor of the veridical perceptual experience and the causally matching hallucination that explains the phenomenal character of the causally matching hallucination *at that time* does not screen off the naïve realist aspects of perception because in normal circumstances—when the subject is perceiving

the external world—they play a role in explaining the phenomenal character of the veridical perceptual experience.

Phenomenological disjunctivists who hold that the indiscriminability condition of hallucination is relative to a subject and relative to a time can coherently uphold the claim that the indistinguishability condition of hallucination is asymmetrical. The claim that a hallucinatory experience is introspectively indiscriminable from a veridical perceptual state does not entail that the veridical perceptual episode is introspectively indiscriminable from that hallucination.

In contrast to what Johnston claims (2004:112), I hold that if Sophie goes from a causally matching visual hallucination to a veridical visual episode of spotlights in the ceiling, she would be able to tell apart by introspection alone such a veridical visual experience of spotlights in the ceiling from her previous hallucinatory experience. Sophie would notice a difference because the phenomenal character of the veridical perceptual episode is different from the phenomenal character of the causally matching hallucination. When Sophie has the veridical visual experience of spotlights in the ceiling, she does not undergo any cognitive mistake that prevents her from knowing by introspection alone that she is perceiving rather than hallucinating. Thus, we can make sense to the claim that the indiscriminability condition of hallucination is asymmetrical.

Here is when pluralist cognitive disjunctivism comes into play. There is no reason to accept the claim that all hallucinatory experiences lack sensory qualities, as standard cognitive disjunctivists claim (e.g., Fish, 2008, 2009). In contrast to standard cognitive disjunctivism, pluralist cognitive disjunctivism offers a more modest view: it is metaphysically possible that some hallucinations have a sensory phenomenal nature while other hallucinations have a cognitive phenomenal nature. This view combines the advantages of sensory disjunctivism and cognitive disjunctivism to offer an account of the nature of hallucination that is compatible with naïve realism. This disjunctivist account does not fall into the screening-off worry for the same reason as cognitive disjunctivism does not—it rejects the metaphysical possibility of perfect hallucination, and it explains the indiscriminability condition of hallucination in a personal sense.

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