

**NAÏVE REALISM, IMAGINATIVE
DISJUNCTIVISM, AND THE PROBLEM
OF MISLEADING EXPERIENCE**

LOUISE JUNE MOODY

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University of York

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Abstract

This thesis defends *naïve realism* about the essential nature of perceptual experience, that is, the experiences that subjects enjoy when they hear, see, smell, taste, and touch things. It claims that the essential natures of such experiences are intrinsically constituted and relationally determined by the perceptible properties of those worldly objects with which perceiving subjects are immediately and irreducibly acquainted. In particular, this thesis defends naïve realism against the *Problem of Misleading Experience* which exploits the existence of misleading experiences (viz., dreams, hallucinations, and illusions) in order to show that *no* perceptual experience can be naïve realist in nature.

Chapter 1 presents naïve realism's metaphysical commitments and the *Problem of Misleading Experience*. In Chapter 2, I sketch three desirable constraints on any successful naïve realist solution: I argue that it is desirable for the Naïve Realist to (i) adopt some form of *Basic Phenomenal Disjunctivism* (i.e. the claim that perceptual and misleading experiences have different phenomenal natures), (ii) *positively* explain the phenomenal nature of misleading experience, and, (iii) tell the same fundamental story of dreams, hallucinations, and illusions. Chapter 3 introduces my own theory – *Imaginative Disjunctivism* (i.e. the claim that perceptual experiences have naïve realist natures whereas the natures of misleading experiences are *perception-like* imaginings) – that I argue has the right conceptual and empirical shape to meet these three constraints.

I then put Imaginative Disjunctivism to work by showing how it can explain dreams (Chapter 4), hallucinations (Chapter 5), and illusions (Chapter 6) in a way that is compatible with naïve realism. Though there is some precedent for explaining dreams (e.g. Ichikawa 2009) and hallucinations (e.g. Allen 2014) in terms of perception-like imaginings, my account is the first to extend this treatment to illusions, and so, provides a theoretically attractive unified theory of misleading experience.

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Author's Declaration

I declare that the work herein presented is my own, and that due credit has been given where reference has been made to the work of others. This work has not previously been presented for an award at this, or any other, University

PREFACE

Pause, whilst reading these words, and look at Brewer’s “macroscopic constituents” (2011: Ch.1:1) (e.g. persisting objects such as cats on mats; zebras; and part-submerged straight sticks) that apparently populate your immediate environment. Or, in a Moore-ean (1939) vein, raise a hand in front of your face. Unless, like some Cartesians, you are especially sceptically troubled or some obvious countervailing conditions obtain (e.g. “That’s clearly a badly disguised mule!” you might protest), your visual experience seems to present “itself as [...] an *immediate* consciousness of the existence of things outside” (Strawson 1979: 97) your mind. Pre-theoretically at least, you just seem to be immediately acquainted with things that do not ontologically depend in some way upon your experience or thought about them. This lay conception of everyday perceptual experience that I will be defending goes by the name *naïve realism* – ‘naïve’ to reflect folk intuition about such experience, and ‘realism’ to reflect the thought that such experiences are essentially *of*, and immediately acquaint us *with*, aspects of mind-independent reality.

Now when you read these words and touch the smooth surface of this paper you are, most obviously, having a particular (i.e. *token*) *perceptual experience*, i.e. an event of some determinate duration¹ that occurs in *at least* one of the five standardly recognized sense-modalities (though I am inviting you to consider the visual and haptic case, you might also be e.g. smelling and tasting freshly brewed coffee, and hearing passing traffic). It is intuitively evident that there is a peculiarly subjective aspect to conscious perceptual experience which is commonly called *phenomenal character*²: ‘what it is like’ (e.g. Hellie 2007: 262; Nagel 1974: 435) to see a bright silver moon, for example, qualitatively differs from what it is like to see a blood red moon, and what it is like to taste a bell pepper qualitatively differs from what it is like to taste a ghost pepper. Perhaps the most basic to say about it is this: when a subject *S* is having a perceptual experience E_p at time t , it is subjectively like something for her at t ; and when it is subjectively like something for her at t , there is some F such that it is F for her at t – F is E_p ’s phenomenal character.³

¹ Officially, I remain neutral as to whether perceptual experiences are instantaneous events which have zero duration or have a non-zero duration, though considerations concerning our experience of time and change incline me towards the latter (e.g. Gallagher 1998).

² Also appearing in the guise of “qualitative character” (e.g. Shoemaker 1994a: 22) and “subjective character” (e.g. Metzinger 1995: 9).

³ This does not entail that *S* has any higher-order perspective on the nature of her mental state (if say, *S* is a cane

A perceptual experience's phenomenal character is metaphysically built from what are commonly called *phenomenal properties*⁴, which as I will employ the term, are those determinate properties that type a perceptual experience according to what it is subjectively like to have it (see e.g. Byrne 2002: 9). By way of analogy: *Palatinate purple* is a determinate of the determinable *purple* (a *shade* is a determinate way of being *coloured*); likewise, the phenomenal property 'purplish' is a determinate of the determinable *phenomenal character*. The simplest thing to say is that phenomenal properties are particular aspects of what a perceptual experience is subjectively like, and phenomenal character is the total sum of what a perceptual experience is subjectively like.⁵

The Naïve Realist takes a specific stance on the metaphysical nature of a perceptual experience's phenomenal properties (hence its phenomenal character). A stance that is made explicit by Campbell:

“[T]he phenomenal character of your experience, as you look around the room, is constituted by the actual layout of the room itself: which particular objects are there, their intrinsic properties, such as color and shape, and how they are arranged in relation to one another and to you.” (2002: 116, my emphasis)

A perceptual experience's phenomenal character is thus 'out there in the world' (in a sense to be explained in (§1.1)): when you “look around the room”, the only phenomenal properties of which you are directly aware are perceptible properties “such as color and shape” of mind-independent objects themselves. The phenomenal character of a visual experience of *purple*, for example, is really a mind-independent instance of *purple-ness* itself.

Some experiential culprits – namely, *dreams*, *hallucinations*, and *illusions* – are said to overthrow naïve realism. This is because they are *misleading*, that is, they seem to immediately present things that are not aspects of mind-independent reality. The *basic* argument (to be developed in §1.3) runs thus:

toad).

⁴ Also appearing in the guise of “subjective” properties (e.g. Peacocke 2008) and “qualia” (e.g. Shoemaker 1991).

⁵ The phenomenal character of a perceptual experience is, no doubt, an extremely complex property (and perhaps not even capturable in words); hence I restrict myself to speaking of the phenomenal character of a perceptual experience of say, *green* or a certain *shape*.

1. Misleading experiences that are reflectively indiscriminable (i.e. based on introspective means alone, not knowably distinct from one another) from non-misleading experiences sometimes occur.⁶
2. If two mental states are reflectively indiscriminable, then they have a common phenomenal character. (Intuitive premise)
3. The phenomenal characters of misleading experiences cannot be naïve realist in nature.
4. The phenomenal characters of non-misleading experiences cannot be naïve realist in nature. (2, 3)

Consider (1): it seems possible, for example, to have a “*hallucination* as of a yellow banana” (Logue 2011: 268) that you cannot introspectively distinguish from the corresponding non-misleading experience *of* seeing a banana, i.e. an experience that presents what is objectively there (in this case, a banana). In this case, the phenomenal ‘yellow-ness’ and ‘banana-shape’ of which you are directly aware cannot be properties that metaphysically spring from a mind-independent banana. If this were to occur, you might then be persuaded by (2)’s intuitive claim that your banana-hallucination and the corresponding non-misleading experience share a common phenomenal character⁷ or “highest common factor” (McDowell 1998: 386) that explains your inability to reflectively discriminate between them. But the phenomenal character of your banana-hallucination cannot, as (3) notes, be intrinsically *world-involving* (i.e. be metaphysically built from aspects of mind-independent reality) and *world-acquainting* (i.e. directly acquaint you with aspects of mind-independent reality); hence (4)’s conclusion that the phenomenal character of your corresponding non-misleading experience cannot be naïve

⁶ Smith thinks that the *p.m.e* “does not even require that [misleading experiences] ever” (2005: 29) occur, though as we will see, it is well-motivated by actual cases.

⁷ That non-misleading and misleading experiences share the common property of being *mental states* is trivial: what is at issue is whether your banana-hallucination and corresponding non-misleading experience also share some ingredient which constitutively explains the type of mental states that they are (see Martin 2006: 7). Since I aim to defend a naïve realist conception of non-misleading experience, I take no line on what this purported ingredient might be (e.g. a Lockean *idea* (1690, Book II, Ch.8, §8), a *sense-datum* (e.g. O’Shaughnessy 2003), or perhaps an *intentional trope* (e.g. Sturgeon 1998)), though for exegetical purposes, we will meet one influential account in §1.2.1.

realist. Or so goes what I call the *Problem of Misleading Experience* (e.g. Moore 1918; Robinson 1994).

This thesis is an attempt to resist the move to (4) by rejecting (2): I will argue that the phenomenal characters of misleading experiences are typed by *sensory* or *perception-like* imaginings which are reflectively indiscriminable from the corresponding non-misleading experience; hence the phenomenal character of a hallucinatory experience *as of* a banana is typed by an imagined seeing of a banana. As these perception-like imaginings are no intrinsic part of a non-misleading experience's phenomenal character, naïve realism survives unscathed.

Before outlining each chapter, two restrictions will confine this thesis to manageable proportions. First, I cannot possibly explain the nature of every single possible misleading experience: rather, will I confine my attention to those cases that are oft-said to threaten naïve realism (e.g. paradigmatic illusions such as the part-submerged straight stick that is said to look bent). Second, as the first restriction suggests, I largely confine myself to explaining misleading experiences that are said to occur in one sense-modality: vision. This is because it is experience within this modality that is standardly said to motivate naïve realism (see e.g. Broad 1952: 6), and so, it is the apparent existence of misleading experiences within this modality that pose the most significant threat to naïve realism.

Overview

In the first chapter, I explain first, the naïve realism that I will be defending, or how aspects of the mind-independent world can constitutively, as Martin says, “shape the contours” (2004: 64) of a non-misleading experience's phenomenal character; and second, how Hellie's (2007) *p.m.e* threatens this naïve realism. I have chosen Hellie's version rather than its traditional ancestors (e.g. Broad: 1923; Russell: 1912a) since its premises are *explicit*, thus assuaging the complaint (e.g. Martin, forthcoming: 11; Moore, 1918: 19) that inexplicit premises – specifically, it has been complained that it is unclear *how* the argument's cited cases of misleading experiences can motivate its conclusion that *no* experience is naïve realist – have muddled historical debate.⁸

⁸ Hence Dummett's (1979: 2) insistence that the *p.m.e* is best construed as advancing a set of *considerations* (e.g. Broad's (1925: 187) case of *double vision*; Russell's (1912: 8, 1914: 84) case of *perspectival variation* as when the same table is said to look different shapes from different perspectives; and Ayer's (1940: 4) weary traveller who is said to hallucinate a desert oasis) which constitute a *starting point* for reflection about in what the distinction

In the second chapter, I sketch three constraints on what I consider a successful naïve realist solution to the *p.m.e.* First, it is argued that naïve realism minimally entails a *Basic Phenomenal Disjunctivism* according to which “the most specific kind of experience one enjoys when one perceives [does] not occur when having an illusion or hallucination” (Martin, 2006: 8), i.e. non-misleading and misleading experiences are phenomenally type-distinct mental states. Second, it is argued that the phenomenal disjunctivist must *positively* explain a misleading experience’s “remarkable features” (Sturgeon, 1998: 186): specifically, why any misleading experience is (i) *reflectively indiscriminable* from some metaphysically possible non-misleading experience, (ii) seems to *immediately present a scene* that could also be presented by some metaphysically possible non-misleading experience, (iii) is *subjectively like* some metaphysically possible non-misleading experience, and, (iv) able to motivate the same *beliefs* and *behaviours* as some metaphysically possible non-misleading experience. Third, it is argued that the positive phenomenal disjunctivist is plausibly committed to telling a *unified* story of misleading experience, i.e. a story that treats dreams, hallucinations, and illusions as having the basic explanation.

In the third chapter, I sketch a positive version of *Basic Phenomenal Disjunctivism* called *Imaginative Disjunctivism* that, or so I will argue in remaining chapters, successfully meets all three constraints on a naïve realist solution to the *p.m.e.*: in broad outline, I suggest that misleading experiences are not *perceptual* experiences, but rather, are *perception-like* imaginings that convincingly simulate the phenomenal characters of non-misleading experiences. This chapter can be seen as an attempt to rehabilitate a conception of misleading experience that has fallen out of favour: Hobbes, for example, thought that “the imaginations of them that sleep are those we call dreams” (1651, Part 1: Ch.2), and later, Hibbert characterized hallucinations as “the recollected images of the mind, which have been rendered more vivid than actual impressions” (1825: 5). For this rehabilitation to be successful, of course, two things must be shown: first, that subjects indeed occasionally mistake their imaginings for real perceptual experiences; and second, that perception-like imaginings do not turn out to be a ‘highest common factor’ that constitutively explains the phenomenal character of non-misleading experience. These then, are the main claims that I defend and develop in this chapter.

In the fourth chapter, I explain *Imaginative Disjunctivism*’s theory of dreams according to which dream experiences are essentially perception-like imaginings that are presented to

between misleading and non-misleading experience might essentially consist.

consciousness (usually) during sleep. I defend this claim against the *received view* (e.g. Russell, 1948: 214; Sebastián, 2014) according to which dreams are misleading perceptual experiences, and the *dream fabrication view* (e.g. Dennett, 1976; Stoneham, 2013) according to which dreams are false memories of experiences that never occurred. I have chosen the *received view* since any competing theory must convincingly explain why dreams are not what they intuitively seem to be (viz., perceptual experiences), and the *dream fabrication view* since it claims to convincingly explain away this intuition. I argue that both views are unsuccessful since they have narrower explanatory scope than *Imaginative Disjunctivism*: in broad outline, I argue that the *received view* is neither conceptually nor empirically satisfactory, whereas the *dream fabrication view* cannot convincingly explain away lucid dream reports, i.e. why subjects, on occasion, report that they were ‘awake whilst continuing to dream.’

In the fifth chapter, I explain *Imaginative Disjunctivism*’s theory of hallucination according to which hallucinatory experiences are essentially perception-like imaginings. I defend this claim against Johnston’s (2004) *Sensible Profile* theory according to which the phenomenal characters of reflectively indiscriminable non-misleading and hallucinatory experiences are typed by a structured arrangement of qualities and relations (viz., a ‘Sensible Profile’) that, in the hallucinatory case, are not instantiated by any candidate worldly object within the subject’s immediate environment. I have chosen Johnston’s account since any worked out theory which claims to posit a common element of awareness that explains the phenomenal nature of non-misleading and hallucinatory experiences whilst preserving the former’s naïve realist status must be taken seriously. I argue that Johnston’s attempt to perform this spectacular metaphysical feat is ultimately unsuccessful since it runs headlong into another version of the *p.m.e.*

In the sixth chapter, I explain *Imaginative Disjunctivism*’s theory of illusion. As is becoming conventional in the philosophical (e.g. Fish 2009: Ch.6) and psychological (e.g. Gregory 2009: 242) literature, I distinguish between three varieties of illusion: namely, (i) *cognitive* illusions which have a subject-dependent cognitive explanation (e.g. as when we see a rope *as* a snake), (ii) *optical* illusions which have a joint subject-independent physical and subject-dependent perceptual explanation (e.g. as when the Müller-Lyer lines’ end-hashes somehow mislead our visual system into seeing them *as* unequal in length), and, (iii) *physical* illusions which admit of a purely subject-independent physical explanation (e.g. as when a part-submerged straight stick is said to look bent). I argue that perception-like imaginings have some role to play in explaining cognitive and optical illusions, whereas physical illusions are

really non-misleading experiences. Finally, I consider Brewer's (2008; 2011) *object view* of illusion according to which illusions occur when the worldly object with which the subject is directly acquainted has visually relevant similarities to a paradigm kind that it does not objectively exemplify. I argue that it is unsuccessful since it ultimately has narrower explanatory scope than *Imaginative Disjunctivism*.

1

Mapping the Terrain

This chapter maps the terrain upon which this thesis is built. I begin (§1.1, §1.1.2) by properly introducing the *naïve realist* conception of non-misleading experience to be defended. This conception is then (§1.2) contrasted with a rival *conjunctivism* (e.g. Foster 2000: 8; Johnston 2004: 114) which asserts that non-misleading and misleading experiences are phenomenally typed by the same non-naïve ingredient to which (and this is the important conjunct) a normal – standardly, *causal*⁹ – relation is conjoined between that ingredient and worldly item in the former case. This contrast is further elucidated (§1.2.1) by considering one influential form of conjunctivism¹⁰, namely, a *minimal representationalism* (e.g. Harman 1990: 34; Lycan forthcoming: 1) which construes the common ingredient as being a certain sort of representational content, i.e. content that represents something as being a particular way. The essential difference then, is that the naïve realist construes non-misleading experience as being phenomenally typed by those worldly items with which the subject is immediately and irreducibly acquainted, whereas the conjunctivist construes such experience as being phenomenally typed by some non-naïve ingredient that is shared with misleading experience, and which only ever indirectly acquaints her with the world.

I then (§1.3) sketch naïve realism’s main threat, viz., the *p.m.e.* In particular, we will meet Hellie’s (2007: 271-2) version which exploits the property of *reflective indiscriminability* that non-misleading and misleading experiences share to show that even non-misleading experience cannot be naïve realist. Once this banishment of naïve realism is accepted, conjunctivism naturally gets a grip since it is said (e.g. Broad 1923: 240; Robinson 1994: 32) to be intuitively obvious and indubitable in the light of reflection upon experience that the subject is directly aware of *something*, which, as the *p.m.e.* taught us, must be non-naïve. With the terrain

⁹ Though not always, e.g. Lewis (1980) construes this relation as being one of systematic counterfactual dependence.

¹⁰ A less influential form is *adverbialism* (e.g. Sellars, 1968; Thomas, 2003) which asserts that experiences just *are* modes of sensing in particular ways that can be characterized by specialized adverbs, e.g. someone who experiences the colour green is said to be appeared to green-ly. Adverbialism will take a conjunctivist form if one thinks that being appeared to F-ly is the common phenomenal ingredient. Pace Conduct (2008), I am unconvinced that the naïve realist can accept adverbialism since there seems to be no coherent way (e.g. Jackson, 1975) to individuate those determinate phenomenal properties that constitute an experience’s phenomenal character.

mapped, we will meet the beginnings of a solution in Ch.2.

1.1 Naïve Realism

In a nutshell, my naïve realism asserts that a non-misleading experience's phenomenal character is intrinsically *constituted* and *determined*, in a sense to be shortly explained, by the perceptible properties (e.g. *colour*, *shape*) of those worldly objects – e.g. Strawson's "clustered branches of the elms", "dappled deer", and "green grass" (2000: 454) – to which subjects stand in a *sui generis*, or metaphysically basic, direct *acquaintance* relation.¹¹ Hume famously declared naïve realism a commitment of,

"[...] the vulgar [who] confound perceptions and objects, and attribute a distinct continued existence to the very things they feel or see." (1739/40: Bk 1, Part 4, §II)

Hume's complaint that "the vulgar confound perceptions and objects" is the complaint that we tend to unreflectively assume that everyday experience – unless *something* is obviously askew – directly acquaints us with aspects of the world itself which metaphysically ground its 'what-it-is-like' aspects. So understood, naïve realism tells us that non-misleading experience essentially involves awareness of aspects of the external world. Hume's "vulgar" realism has been elaborated by Martin:

"According to Naïve realism, the actual objects of perception, the external things such as trees, tables and rainbows, which one can perceive, and the properties they can manifest to one when perceived, partly constitute one's conscious experience. *This talk of constitution and determination should be taken literally.*" (1997: 83, my emphasis)

And more recently, Conduct:

"In enjoying a [naïve realist] perceptual experience, a subject *stands in a relation* to the thing that they perceive, such that the subjective aspect of their experience [...] *is constituted* by that which they perceive." (2012: 727, my emphasis)

¹¹ Or as Russell (1921: 234) put it, the acquaintance relation is a "mystic union of knower and known."

Two distinct theses which encapsulate naïve realism's core metaphysical commitments can be extracted from these remarks. First, Conduct's remark that a non-misleading experience's phenomenal character "is constituted by that which they perceive", where, as Martin says, such "talk [...] should be taken literally" suggests what I will call naïve realism's *Constitution Thesis* (first-pass formulation):

Constitution Thesis: For all subjects s : If s has a non-misleading experience E_{NM} , then necessarily, E_{NM} 's phenomenal character is intrinsically constituted by naïve properties $P_{N1}, P_{N2} \dots P_{NN}$.¹² (Metaphysical commitment of *Naïve Realism*)

A *naïve* property, to borrow Hellie's (2009: 264) terminology, is simply a determinate property of a non-misleading experience's overall phenomenal character which is directly grounded in the perceptible properties of those worldly objects that are immediately presented to the subject, i.e. a purely mental property whose nature is directly inherited¹³ from, or constituted by, aspects of the external world itself. This reflects Foster's (2000: 2) general conception of constitution according to which "[...] a fact F is constituted by a fact F' [if and only if] F obtains in virtue of the obtaining of F' ." For instance, an object's being a generic *shape* (F) can be constituted by the fact that it has the determinate shape property of being *hexagonal* (F'), i.e. the object's having a generic *shape* obtains in virtue of the fact that it is determinately *hexagonal*. Likewise, to borrow Hellie's (ibid) example, a non-misleading experience has the naïve property *being-a-case-of-visual-awareness-of-a-white-picket-fence in virtue* of the fact that the subject non-misleadingly sees a white picket fence.

This notion of non-misleading experience as being constituted by naïve properties is not, *pace* traditional causal theories of perception (e.g. Russell 1927: 197; Dilworth 2004) to be understood in a causal sense. Such theories assert that non-misleading experience essentially consists in the fact that subjects stand in a certain sort of causal relation to the world. For instance, Locke spoke of "imperceptible bodies" from worldly objects that strike our "eyes, and thereby convey to the brain some motion, which produces these ideas which we have of

¹² Obviously, a *complete* specification of every naïve property that constitutes an experience's overall phenomenal character would undoubtedly be extremely complex, if indeed, such a property complex is specifiable at all (for it would have to describe every determinate perceptual property in the subjects perceptual field) – it matters only that such a specification is possible *in principle*.

¹³ Campbell (1997: 189) is responsible for this metaphor of phenomenal inheritance.

them in us” (1690: Ch.8, §12). And in Hellie’s example, this Lockean story goes: Physics tells us that a white picket fence reflects particles of light or “imperceptible bodies”; this light strikes, and is refracted through the subject’s eyes, producing a retinal image of that fence; her visual machinery processes this perceptual information or “conveys to” her “brain some motion” which culminates in a visual experience *of* a white picket fence. Causal theories of perception thus assert that perceptual experiences are not intrinsically world-involving (hence Locke’s assertion that that causal relation which holds between subject and worldly object “produces [in her] ideas [that resemble] them”: Rather, what *makes* perceptual experiences world-involving is the fact that subjects stand in the correct type of causal relation (however that is specified) to worldly objects themselves.

Naïve realism’s *constitution thesis* resists this traditional dictum and claims instead that it is the *presence* of such objects themselves which make the experience intrinsically world-involving. I am not strangely denying that there is *no* causal story to be told about non-misleading experience in the sense that a certain sort of causal relation must necessarily hold between subject and worldly object in order for such experience to occur: what I am denying is that non-misleading experience *essentially consists* in any such causal relation. Fish (2009: 6) provides an illuminative analogy: Just as a hillside shapes a landscape by *being* the contours of that landscape, so the world constitutively contributes to a non-misleading experience’s phenomenal character by *being* the contours of its phenomenal character. There will naturally be some causal story to be told of why the landscape has *that* particular shape (e.g. one involving glacial retreat), but that is entirely consistent with the thought that its hillside *is* its shape. Likewise, that there is some causal story of why a particular non-misleading experience has the naïve properties it does is entirely consistent with the thought that its phenomenal character is intrinsically constituted by aspects of the world.

Second, Conduct’s remark that, in non-misleading experience, “a subject stands in a relation” to what they perceive suggests what I will call naïve realism’s *Acquaintance Thesis* (first-pass formulation):

Acquaintance Thesis: For all subjects *s*: If *s* has a non-misleading experience E_{NM} , then necessarily, *s* stands in a direct *sui generis* acquaintance relation *r* to a worldly object, \underline{o}_w ’s, perceptible properties $P_{P1}, P_{P2} \dots P_{PN}$, (Metaphysical commitment of *Naïve Realism*)

This acquaintance relation is to be understood as relationally determining an experience's naïve properties. In Hellie's example, the naïve property *being-a-case-of-visual-awareness-of-a-white-picket-fence* which is said to phenomenally type the experience will be relationally determined by the fact that the subject stands in a direct *sui generis* acquaintance relation to a white picket fence – *that* perceptual experience cannot be had absent the presence of *that* white picket fence. A non-misleading experience's naïve properties then, are relationally determined by the particular worldly item with which the subject is directly acquainted.

We can now see that naïve realism's *constitution* and *acquaintance* theses mesh together as follows: Its *constitution thesis* ensures that a non-misleading experience's phenomenal character is intrinsically constituted by naïve properties, whereas its *acquaintance thesis* ensures that a direct *sui generis* acquaintance relation relationally determines those naïve properties that perform the crucial phenomenal constitutory work. This yields our first proper sighting of naïve realism (first-pass formulation¹⁴):

Naïve Realism: For all subjects s : If s has a non-misleading experience E_{NM} , then;

- (i) E_{NM} 's phenomenal character is intrinsically constituted by naïve properties P_{N1} , $P_{N2} \dots P_{NN}$; and,
- (ii) S stands in a direct *sui generis* acquaintance relation r to a worldly object, Ω_w 's, perceptible properties $P_{P1}, P_{P2} \dots P_{PN}$, where $P_{P1}, P_{P2} \dots P_{PN}$, directly ground E_{NM} 's naïve properties $P_{N1}, P_{N2} \dots P_{NN}$.¹⁵ (Conjunction of *Constitution* and *Acquaintance* Theses)

Thus (i) tells us that, when a subject non-misleadingly sees a white picket fence, the most fundamental characterization of her experience's phenomenal character can be given by specifying its naïve properties (e.g. *being-a-case-of-visual-awareness-of-a-white-picket-fence*), whereas (ii) tells us that the fence's perceptible properties directly ground her experience's naïve properties. This then, is what it means to enjoy a naïve realist experience.

1.1.1 Four Refinements

¹⁴ To be refined in §2.1.2 where I develop the concept *phenomenal character*.

¹⁵ For related formulations, see e.g. Brewer (2008: 171); Fish (2009: 15); Logue (2010: 23); McDowell (1986: 390-1); and Nudds (2009: 335).

1. *Naïve Realism is not Phenomenal Relationalism*

It is instructive to distinguish the naïve realism that I will be defending from *phenomenal relationalism*¹⁶ according to which non-misleading experiences “*are* relations between material objects and minds” (Langsam 1997: 33). The phenomenal relationalist thus assigns a phenomenally constitutive, and not simply a relationally determinative, role to that acquaintance relation which holds between subject and worldly object, e.g. it will be claimed that a subject’s visual experience of a white picket fence is intrinsically constituted by the *relation* and not the *relatum* (viz. the fence) itself. Possible confusion between phenomenal relationalism and naïve realism ostensibly stems from Campbell who describes naïve realism as a “relational view of experience” (2002: 116/117). But Campbell’s thought, I suggest, entails *no more* than that the acquaintance relation which holds between subject and world in non-misleading experience plays a relationally determinative, and not a phenomenally constitutive, role.

The reason that I distinguish naïve realism from phenomenal relationalism is that assigning a phenomenally constitutive role to *just* an acquaintance relation means, or so it strikes me, that we needlessly risk losing our grip on naïve realism’s key thought that it is the presence of worldly objects themselves that make non-misleading experience intrinsically world-involving. Put another way, imbuing *all* of a non-misleading experience’s phenomenal character into an acquaintance relation unnecessarily risks ‘screening off’ the world itself from constitutively contributing to that character in any explanatory significant way since that relation would then, in a conceptually unintelligible move, become the direct object of awareness. *If* phenomenal relationalism really is innocuous, then nothing significant will be lost. But distinguishing the two views at least ensures that my investigation begins on as secure a worldly footing as possible.

2. *Naïve Realist Experience Presents Subjects with Worldly Object-Property Couples*

Fish claims that “when we see an object [...] we see [...] at a minimum, that object’s bearing a property” (2009: 52). This minimal condition on object perception is extremely plausible. Definitionally, worldly objects are never presented *in loginquitas* as possessing *no* properties whatsoever, but are always presented as possessing *at least* one property. Even if you hold that

¹⁶ This distinction is also made by Hellie (2007: 264).

non-misleading experience presents subjects with *more* than worldly objects bearing properties (e.g. perhaps Wittgenstein's (1922: §1.1) states of affairs), it is conceptually nonsensical to speak of perceiving worldly objects that are somehow size-less, shape-less, and colour-less – *being* such an object presupposes possession of *at least* one property. Hence Johnston speaks of tasting the “astringency of calvados” (2006: 281) and Matthen speaks of “visual apprehensions of features in objects” (2005: 281). A worldly object, then, constitutively contributes to an experience's phenomenal character through presenting the subject with certain of its perceptible properties. This is why I will speak of subjects being directly acquainted with worldly *object-property couples* in naïve realist experience.

3. Naïve Realist Experience Does Not Present Subjects with Every Worldly Object-Property Couple within their Perceptual Field

This is because what a subject perceives is constrained by three main factors: namely, (i) the *observational conditions* (e.g. the fence that looks white in daylight may not be visually discerned in the dark) (ii) the *perspective* (e.g. the fence that looks three-dimensional when viewed head-on will look two-dimensional from a certain height), and, (iii) the subject's *perceptual abilities* (e.g. the myopic, unlike the non-myopic, subject will likely report that the fence's boundaries look ‘fuzzy’). Of (iii), I suggest that the experience had by the subject whose perceptual equipment is functioning normally has *more* naïve properties (e.g. the myopic subject's experience might be typed by the naïve property *being-a-case-of-visual-awareness-of-a-white-fence*, whereas the non-myopic subject's might be typed by the naïve properties *being-a-case-of-visual-awareness-of-a-white-picket-fence_{PN1}-with-ten-posts_{PN2}*. This does not mean that perceptually impaired subjects will have non-naïve realist experiences, as if something non-naïve ‘plugs’ the ‘gaps’ in their phenomenal characters: rather, the thought is that the subject whose perceptual equipment is functioning normally has the capacity to experientially detect more naïve properties; hence, two token experiences of the same scene can have different phenomenal characters.

4. Naïve Realist Experience is constitutively Non-Conceptual

My naïve realism resists the general thought voiced by *experience conceptualists* of various stripes (e.g. Brewer 1999; early-McDowell 1994) that the very *having* of non-misleading experience requires that subjects possess conceptual-recognitional capacities¹⁷ for those worldly object-

¹⁷ However these are understood: specifically, it is disputed whether subjects must possess determinate (e.g.

property couples that are immediately presented to them. On this, I am clearly in agreement with Johnston who claims that a subject “need not [though she *may*] conceptualize” (2006: 283) that which she experiences: specifically, I claim that the having of a naïve realist experience requires *no more* than that the subject’s perceptual machinery be capable of physically registering, and discriminating between, certain rudimentary object-properties such as *shape* and *colour*. Suppose that Hellie’s subject lacks the concept *white picket fence* (or indeed, any concept at all). My claim is that she will still have a naïve realist experience *providing* that her visual machinery is capable of processing a sufficient amount of light (a specification best left to the optical sciences) that enables her to visually discriminate *at least* the fence’s rough *shape* and *colour* from that of its surrounding objects, where this sub-personal physical process is independent from any concepts that she may possess.¹⁸ Pace McDowell, a concept-less subject is not confined to a mere *environment* that is “a succession of problems and opportunities” (1994: 116) but, owing to her perceptual discriminative capacities, fully experiences the *world*.¹⁹ Generalizing, then, a subject’s ability to have a naïve realist experience does not asymmetrically depend upon the possession of any conceptual-recognitional capacities for those worldly-object property couples that metaphysically ground her experience’s naïve properties.

It is mistaken to think that the subject’s acquiring more concepts can fundamentally change her experience’s phenomenal character. For my claim that naïve realist experiences are constitutively non-conceptual entails no further claim about the extent of the subject’s conceptual repertoire. Consider Crane’s (1992: 1) familiar example of the child and scientist who are both looking at the same cathode ray tube, where only the scientist possesses the determinate concept *cathode ray tube*. It is intuitively obvious that since the child lacks the scientist’s concept, only the latter can see the object *as* a cathode ray tube. This intuition might then be taken to motivate an experience conceptualism which asserts that the child and scientist’s experiences are phenomenally type-distinct mental states since the former lacks a concept possessed by the latter that determinately describes the common object that is seen: specifically, it will be said that *only* the scientist’s experience can have the naïve property *being-*

‘rhomboid’), less determinate (e.g. ‘That shape’) or even referentially pauze (e.g. ‘That is thus’) concepts for those items which are experienced.

¹⁸ Compare Peacocke’s (1998: 301) ‘Three Level’ view of experience which distinguishes between (i) the worldly object itself (e.g. a *shape*), (ii) the way that object is presented in experience (e.g. *as a diamond*), and, (iii) those demonstrative concepts which the subject deploys to describe the object in (ii) (e.g. ‘That diamond’) – crucially, the subject’s ability to have a naïve realist experience does not depend upon (iii).

¹⁹ The *environment-world* distinction is explicated in e.g. Gadamer (2004: 441) and Scheler (1961: 37).

a-case-of-visual-awareness-of-a-cathode-ray-tube. My *content non-conceptualism* resists this and holds instead that both child and scientist will – in line with those three constraints previously sketched – have experiences that have many of the same naïve properties, i.e. their experiences do not phenomenally differ in any fundamental way because the scientist possesses a concept that is lacked by the child.

The main reason that I claim naïve realist experience is constitutively non-conceptual is that introducing something conceptual into a non-misleading experience's phenomenal character means, or so it strikes me, that we needlessly risk losing our grip on naïve realism's key thought that such experience is directly *world-acquainting*. For that conceptual item would seemingly become the direct object of awareness with the risk that it mediates the subject's awareness of the external world. That is, *experience conceptualism* carries with it the worry that subjects can only be acquainted with worldly object-property couples *in virtue* of first being directly acquainted with some non-naïve realist conceptual item. My *content non-conceptualism*²⁰ avoids this worry by insisting that an unmediated and brute acquaintance relation holds between subjects and worldly object-property couples.

1.1.2 Summary

Hume's 'vulgar' naïve realism with which I began has now been revealed to be a substantive metaphysical thesis about the phenomenal nature of non-misleading experience: specifically, the naïve realist insists that such experience is phenomenally typed by naïve properties which metaphysically spring from the perceptible properties of those worldly objects to which subjects stand in a direct *sui generis* acquaintance relation. Naïve realism was then refined in four ways: namely, (i) it is distinct from phenomenal relationalism, (ii) naïve realist experience directly acquaints subjects with worldly object-property couple, (iii) subjects are highly unlikely to be directly acquainted with every worldly object-property couple within their perceptual field, and, (iv) naïve realist experience is constitutively non-conceptual. With a more robust conception of naïve realism in place, I can now contrast it with its main rival, viz., *conjunctivism*.

1.2 Conjunctivism

²⁰ I take no line on *what* non-conceptual content might be, e.g. Evan's (1982) informational content; Peacocke's (1992) scenario content; or Tye's (2005) Russellian non-conceptual content.

In a nutshell, *conjunctivism* asserts that non-misleading and misleading experiences share a common phenomenal ingredient, to which a normal – standardly, *causal* – relation is conjoined between that ingredient and worldly object in the former case. In Johnston’s words,

“[...] the direct object of [the subject’s] visual awareness is not some particular in the external environment, but something that she *could be aware of even if she were hallucinating*. By contrast [...] her visual awareness is *appropriately caused* by some external particular in the scene before the eyes.” (2004: 114, my emphasis)

First, Johnston’s remark that the direct object of non-misleading experience is “something” that the hallucinating subject “could [also] be aware of” suggests what I, following Martin (2007: 4), will call conjunctivism’s *Common Kind Thesis*:

***Common Kind Thesis*:** For any non-misleading experience E_{NM} and metaphysically possible misleading experience E_M (or *vice-versa*), E_{NM} and E_M are of phenomenal type F , where particular tokens of F are the direct objects of the subject’s awareness. (Metaphysical commitment of *Conjunctivism*)

Hellie’s subject who sees a white picket fence is thus said to be directly aware of a token of some phenomenal ingredient (e.g. a ‘white-ish’ sense-datum) that would also be the direct object of her awareness *if* her experience were misleading. For this reason, that direct object of awareness is traditionally said to be something *mind-dependent*²¹ whose instantiation is ontologically distinct from, and does not relationally depend upon, the existence of the candidate worldly object itself, viz., a white picket fence. The conjunctivist’s first basic thought, then, is that non-misleading, dream, hallucinatory, and illusory experiences have a *common* phenomenal character or exemplify instances of the same basic phenomenal kind.

Second, Johnston’s remark that non-misleading and misleading experiences differ *in virtue* of the fact that the former is “appropriately caused²²” by some “connection” that holds between the direct object of awareness and candidate worldly object suggests what I will call

²¹ Though not always, see e.g. Price (1950: 246–52) and Smythies (2003: 52).

²² Though Johnston does not spell out in what “appropriate” causation consists, the natural assumption is that the candidate object is the external distal cause of the subject’s experience; hence, Grice’s thought that, intuitively, we would be reluctant to say that a subject genuinely perceived a pillar x if, unknown to her, she perceived a mirror image of a numerically distinct but qualitatively similar pillar, y (1961: 42).

conjunctivism's *Indirect Acquaintance Thesis*:

***Indirect Acquaintance Thesis*:** For all subjects s : If s has a non-misleading experience E_{NM} which is of phenomenal type F , then necessarily, a normal causal relation r holds between particular tokens of F and worldly objects $\underline{o}_{w1}, \underline{o}_{w2} \dots \underline{o}_{wn}$, such that F 's tokens indirectly acquaint s with $\underline{o}_{w1}, \underline{o}_{w2} \dots \underline{o}_{wn}$. (Metaphysical commitment of *Conjunctivism*)

Hellie's subject who sees a white picket fence is thus acquainted with it *in virtue* of *first* standing in a direct acquaintance relation to a particular token of some basic phenomenal kind that 'shapes the contours' of her experience's phenomenal character. This direct object of awareness is a mental intermediary that, when a normal causal relation holds between it and the white picket fence, mediates her "visual awareness" of that worldly object. Smith (2005: 6) provides an illuminative analogy: Just as the subject inside a *camera obscura* (i.e. a 'dark room') is said to see worldly objects *in virtue* of first seeing images projected onto a surface, so the subject having a non-misleading experience is said to see worldly objects *in virtue* of first being directly aware of particular tokens of some common phenomenal kind, where normal causal relations hold between those tokens and worldly objects.²³ The conjunctivist's second basic thought, then, is that subjects indirectly experience the world through their being directly acquainted with particular tokens of some common phenomenal kind.

This basic thought can be made more precise. I am not concerned with denying that Hellie's subject can have a non-misleading experience which is mediated by her *first* seeing the fence's facing surface (biological limitations dictate that she cannot see *through* it): What I do deny is the conjunctivist's thought that there is *never* any point at which she is directly acquainted with the world. Perceptual experience, Foster says, becomes direct when "there is no further perceptual mediation within the physical domain" (2000: 6). And there is no physical item which is more directly experienced than the fence's facing surface. It is at this final point that a particular token of the conjunctivist's common kind is said to replace the facing surface, and hence, become the direct object of awareness. Thus, I am insisting that there is always a

²³ A less illuminative analogy is that seeing is like looking through a windowpane, where the 'image' on the window is that common kind which is the direct object of awareness irrespective of whether or not there exist any worldly objects 'beyond.' This does not capture the Conjunctivist's notion of *indirectness* since the subject sees the world *through* a windowpane, whereas the common kind is better construed as something that *precludes* her direct awareness of the world.

terminal point in non-misleading experience where the subject is directly acquainted with the world, whereas the Conjunctivist insists that there is never any such terminal perceiving.

We can now see that conjunctivism's *Common Kind* and *Indirect Acquaintance* theses mesh together as follows: Its *common kind* thesis ensures that non-misleading and misleading experiences are tokens of the same phenomenal type, whereas its *Indirect Acquaintance Thesis* ensures that an experience is non-misleading whenever a normal causal relation is conjoined to the former's direct object of awareness. This yields:

Conjunctivism: For all subjects s : If s has a non-misleading experience E_{NM} , then;

- (i) E_{NM} 's phenomenal character is of phenomenal type F , where particular tokens of F would be the direct objects of s 's awareness were E_{NM} misleading; and,
- (ii) A normal causal relation r holds between F 's tokens and worldly objects \underline{O}_{w1} , $\underline{O}_{w2} \dots \underline{O}_{wn}$, such that F 's tokens indirectly acquaint s with \underline{O}_{w1} , $\underline{O}_{w2} \dots \underline{O}_{wn}$.
(Conjunction of *Common Kind* and *Indirect Acquaintance* Theses)

A stronger grip on the contrast with naïve realism can be gotten by considering conjunctivism's main guise, viz., *minimal representationalism*.

1.2.1 Minimal Representationalism

The *minimal representationalist* – minimal since I am unconcerned with the ontological nature of *what* is doing the representing²⁴ – asserts that an experience's phenomenal character is typed by a certain sort of representational content.²⁵ Experience, Burge says,

“[...] represents or is about objects, properties, and relations [...] a person may have a perceptual representation even though he or she is perceiving nothing of the kind that is perceptually represented.” (2007: 198)

²⁴ Some candidates are Frege's (1892) senses; Lewis's (1986) possible world content; and Schellenberg's (2010) 'Gappy' *de re* modes of presentation.

²⁵ Perhaps by non-reductively supervening upon (e.g. Chalmers 1996; Crane 1998), or by being reductively identical to (e.g. Dretske 1995; Tye 2000), such content – nothing significant turns upon this difference here.

A thought perspicuously illustrated by Lycan:

“You see a grey rat. The greyness you see is that of the rat; your visual system correctly and veridically represents greyness in that part of the environment. Deranged Desmond hallucinates a pink rat [...] The pinkness Desmond sees is that of the rat; it’s just that that rat doesn’t exist, but is merely [...] a representatum.” (Forthcoming: 1)

First, Burge’s remark that both non-misleading and misleading experience represent certain “objects, properties, and relations” such as Lycan’s “rat” or “greyness” to the subject suggests what I will call minimal representationalism’s *Common Kind Thesis*:

Minimal Representationalism’s Common Kind Thesis: For any non-misleading experience E_{NM} and possible misleading experience E_M (or *vice-versa*), E_{NM} and E_M are of representational type F , where particular tokens of F represent objects, $o_1, o_2 \dots o_N$, properties $p_1, p_2 \dots p_N$, and relations $r_1, r_2 \dots r_N$ to the subject’s consciousness. (Metaphysical commitment of *Minimal Representationalism*)

Lycan’s seeing subject is thus said to be directly aware of a “representatum” that would also be the direct object of her awareness *if* her experience were misleading. It is just that, in non-misleading experience, this representatum *correctly* represents the fact that a grey rat is in “some part of [the subject’s] environment”, whereas in the misleading case, it *incorrectly* represents items to her consciousness such as a hallucinatory “pink rat.” This common representatum, since its instantiation is ontologically distinct from, and does not relationally depend upon, the existence of the candidate worldly object itself (viz., a grey rat), is standardly said to be mind-dependent. The minimal representationalist’s first basic thought, then, is that non-misleading, dream, hallucinatory, and illusory experiences have a *common* representational content or exemplify instances of the same fundamental representational kind.

Second, Burge and Lycan’s claim that non-misleading and misleading experiences differ *in virtue* of the fact that, in the former case, the common representatum correctly represents worldly items suggests what I will call minimal representationalism’s *Indirect Acquaintance thesis*:

Minimal Representationalism's Indirect Acquaintance Thesis: For all subjects s : If s has a non-misleading experience E_{NM} which is of representational type F (where F 's tokens correctly represent worldly objects $\underline{o}_{w1}, \underline{o}_{w2} \dots \underline{o}_{wn}$, properties $\underline{p}_1, \underline{p}_2 \dots \underline{p}_N$, and relations $\underline{r}_1, \underline{r}_2 \dots \underline{r}_N$ to s 's consciousness), then necessarily, F 's tokens indirectly acquaint s with $\underline{o}_{w1}, \underline{o}_{w2} \dots \underline{o}_{wn}, \underline{p}_1, \underline{p}_2 \dots \underline{p}_N, \underline{r}_1, \underline{r}_2 \dots \underline{r}_N$ (Metaphysical commitment of *Minimal Representationalism*)

Lycan's subject who sees a grey rat is thus acquainted with it *in virtue of first* standing in a direct acquaintance relation to some representational ingredient that 'shapes the contours' of her experience's phenomenal character. This representational ingredient is thus a mental intermediary that, when it correctly represents the grey rat, mediates her seeing that worldly object. The minimal representationalist's second basic thought, then, is that subjects indirectly experience the world through their being directly acquainted with particular tokens of some common representational kind.

We can now see that minimal representationalism's *common kind* and *indirect acquaintance* theses mesh together as follows: Its *common kind* thesis ensures that non-misleading and misleading experiences are tokens of the same representational type, whereas its *indirect acquaintance thesis* ensures that an experience is non-misleading whenever it correctly represents those worldly objects, properties and relations within the subject's immediate environment. This yields:

Minimal Representationalism: For all subjects s : *If* s has a non-misleading experience E_{NM} , then;

- (i) E_{NM} 's phenomenal character is of representational type F , where particular tokens of F would be the direct objects of s 's awareness were E_{NM} experience misleading; *and*,
- (ii) F 's tokens correctly represent worldly objects $\underline{o}_{w1}, \underline{o}_{w2} \dots \underline{o}_{wn}$, properties $\underline{p}_1, \underline{p}_2 \dots \underline{p}_N$, and relations $\underline{r}_1, \underline{r}_2 \dots \underline{r}_N$ to s 's consciousness, such that F 's tokens indirectly acquaint s with $\underline{o}_{w1}, \underline{o}_{w2} \dots \underline{o}_{wn}, \underline{p}_1, \underline{p}_2 \dots \underline{p}_N, \underline{r}_1, \underline{r}_2 \dots \underline{r}_N$.
(Conjunction of *Common Kind* and *Indirect Acquaintance* Theses)

Thus (i) tells us that when a subject sees a grey rat, the most fundamental characterization of

her experience is to be given by specifying the nature of that representational kind which is also shared by some metaphysically possible misleading experience; whereas (ii) tells us that that the direct object of her awareness is not the naïve property *being-a-case-of-visual-awareness-of-a-grey-rat*, but rather, something mental that correctly represents the presence of a grey rat. This then, is what it means to enjoy a minimally representationalist experience.

1.2.2 Summary

Two views are now on the table: namely,

Naïve Realism: For all subjects s : If s has a non-misleading experience E_{NM} , then; (i) E_{NM} 's phenomenal character is intrinsically constituted by naïve properties $P_{N1}, P_{N2} \dots P_{NN}$; and, (ii) S stands in a direct *sui generis* acquaintance relation r to a worldly object, \mathcal{O}_w 's, perceptible properties $P_{P1}, P_{P2} \dots P_{PN}$, where $P_{P1}, P_{P2} \dots P_{PN}$, directly ground E_{NM} 's naïve properties $P_{N1}, P_{N2} \dots P_{NN}$.

And,

Conjunctivism: For all subjects s : If s has a non-misleading experience E_{NM} , then;

- (i) E_{NM} 's phenomenal character is of phenomenal type F , where particular tokens of F would be the direct objects of s 's awareness were E_{NM} misleading; and,
- (ii) A normal causal relation r holds between F 's tokens and worldly objects $\mathcal{O}_{w1}, \mathcal{O}_{w2} \dots \mathcal{O}_{wn}$, such that F 's tokens indirectly acquaint s with $\mathcal{O}_{w1}, \mathcal{O}_{w2} \dots \mathcal{O}_{wn}$.
(Conjunction of *Common Kind* and *Indirect Acquaintance* Theses)

This, as we have seen, standardly comes in the guise of minimal representationalism. It is now time to meet the *p.m.e* which is the problem of how to reconcile naïve realism with the existence of misleading experiences given that such experiences are said to banish naïve realism and motivate some form of conjunctivism.

1.3 The Problem of Misleading Experience

Hellie's (2007: 271-2) *p.m.e* employs an *argument from hallucination*²⁶ in order to show that even non-misleading experience cannot be intrinsically naïve realist. Like its traditional ancestor's, Hellie's *p.m.e* also has two stages. In the first, it is simply noted that, definitionally, hallucinations cannot be naïve realist. In the second – a manoeuvre that Smith calls the “generalizing step” (2005: 27) and Snowdon the “negative revision” (1992: 69) – it is argued that *if* hallucinatory experience is not naïve realist, then *ex hypothesi*, non-misleading experience cannot be naïve realist. Hellie's *p.m.e* thus has this structure: *if* misleading experience is a certain way, then *ex hypothesi*, non-misleading experience must too be that way. Here is how Hellie expresses the *p.m.e* (call this the *basic* formulation²⁷):

Hellie's Basic P.M.E

First, Hellie invites us to accept three premises. The first, which can be assumed for *reductio*, is:

- (1) **Naïve Realism**: “Phenomenal characters of veridical visual experiences are naïve properties.” (2007: 264) (Assumption)

Hellie then invites us to accept the conjunction of,

- (2) **Base**: “No phenomenal character of a hallucinatory experience is a naïve property.” (2007: 271) (Premise)

And,

- (3) **Spreading**: “If some phenomenal character of a veridical experience is a naïve property, some phenomenal character of a hallucinatory experience is that same naïve property.”²⁸ (Premise)

²⁶ Though Hellie ignores illusions (perhaps he thinks that they are metaphysically on a par with hallucinations, and so, what goes for hallucinations, goes *mutatis mutandis* for illusions), I explain later how his *p.m.e* can – given their importance in motivating most versions – accommodate them.

²⁷ For a similar formulation see Hellie's (2006: 2).

²⁸ Hellie (2007: 291) motivates *Spreading* by appeal to a premise he calls *Apparent Spreading*, i.e. the non-controversial claim that non-misleading and misleading experiences can phenomenally *appear* to have naïve properties. For reasons of simplicity and space, discussion of this move is postponed until §2.1.2 where I consider the *Argument from Phenomenal Infallibility*.

This, since hallucinatory experiences lack naïve properties, clearly negates (1) and is said to compel acceptance of,

- (4) **Conjunctivism**: For all subjects s : If s has a non-misleading experience E_{NM} , then; (i) E_{NM} 's phenomenal character is of phenomenal type F , where particular tokens of F would be the direct objects of s 's awareness were E_{NM} misleading; and, (ii) a normal causal relation r holds between F 's tokens and worldly objects $\underline{o}_{w1}, \underline{o}_{w2} \dots \underline{o}_{wn}$, such that F 's tokens indirectly acquaint s with $\underline{o}_{w1}, \underline{o}_{w2} \dots \underline{o}_{wn}$. (Conjunction of *Common Kind* and *Indirect Acquaintance* Theses) (Traditional implication of (3), replacement of (1))

Groundwork laid, it is time to take each stage of Hellie's *p.m.e* in turn.

1.3.1 Base

Driving premise (2)'s *Base* is the obvious thought that, definitionally, hallucinatory experiences must lack naïve properties since their natures are not intrinsically constituted by, nor do they acquaint subjects with, the world, i.e. naïve realism's *constitution* and *acquaintance* theses are false for hallucination. Call this first background assumption the *Standard Hallucination Thesis*:

- (2.a) **Standard Hallucination Thesis**: For all subjects s : If s has an experience e in which objects $\underline{o}_1, \underline{o}_2 \dots \underline{o}_N$ phenomenally appear to be F , and $\underline{o}_1, \underline{o}_2 \dots \underline{o}_N$ do not objectively exist within s 's environment, then s has a hallucinatory experience. (Assumption)

Hellie cites non-lucid dreaming as a paradigmatic instance of hallucination:

“Suppose that Bill falls asleep on a lawn facing a white picket fence. Is Bill visually aware, in his dream, that a white picket fence is before him? No! To accept this would be to accept that dreams [...] can provide us with the same sort of psychological contact with our environments as veridical experiences.” (2007: 271)

That Bill's dream is not naïve realist is just obvious since no worldly picket fence is directly

presented to his consciousness during sleep. In addition to dreams, we also have (i) *permanent* hallucination (e.g. Putnam's envatted brain that is said to hallucinate *everything* (2000: 388)), (ii) *veridical* hallucination (e.g. Johnston's patient who is said to hallucinate white lights exactly where there are operating theatre lights (2004: 122), and, (iii) *clinical* hallucination (e.g. hallucinations that accompany various physical-psychological disorders such as Charles Bonnet Syndrome in which the subject may report hallucinating complex scenes). None of these varieties, since they are endogenously (Austin, 1964: 23) "*conjured*" from certain of the subject's physical-psychological features, involve "psychological contact" with anything worldly. Hallucinatory experiences then – whatever else is true of them – lack any naïve properties.

Assumption (2.a) might be questioned on the grounds that *partial* hallucinations (i.e. hallucinations that involve only a part of the subject's sensory field) are partly world-involving and world-acquainting, and so, partly naïve realist. The thought is that the subject who hallucinates something against a non-misleading background scene simply misperceives some candidate worldly object, e.g. Johnston's patient simply misperceives the operating theatre lights. Partial hallucinations are thus illusions as standardly conceived.

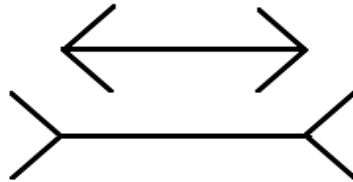
This suggestion is implausible for three reasons. First, in some hallucinations, *no* candidate worldly object can be identified that is ostensibly misperceived: The suggestion that someone who hallucinates a pink elephant rampaging around the room misperceives objects such as the wall or the shape of a table when those things have radically different properties from, and are likely to be occluded by, the 'elephant' is plain strange. Second, in some hallucinations, nothing worldly even exists to be misperceived: The non-lucid dreamer or envatted brain cannot point to something and say that *that* is misperceived, and these total hallucinations are all that assumption (2.a) requires. Third, even if I am wrong and partial hallucinations reduce to illusions, illusory experiences, as *standardly conceived*, are not intrinsically naïve realist.

Enter illusions. The standard conception of illusion asserts that illusory experiences occur when the subject misperceives a worldly object, where the misperception is *either* that the object looks to have some property (or properties) that it objectively lacks *or* looks to lack some property (or properties) that it objectively has (e.g. Ayer 1956: 87; Smith 2005: 3). Illusory experiences are thus said to be intrinsically world-acquainting but not world-involving mental states, i.e. naïve realism's *acquaintance*, but not *constitution*, thesis holds of illusory experience. Call this second background assumption the *Standard Illusion Thesis*:

(2.b) **Standard Illusion Thesis:** For all subjects s : If s has an experience e in which worldly objects $\underline{o}_{w1}, \underline{o}_{w2} \dots \underline{o}_{wN}$ phenomenally appear to be F , but $\underline{o}_{w1}, \underline{o}_{w2} \dots \underline{o}_{wN}$ are objectively G , then s has an illusory experience.
(Assumption)

Examples oft-marshalled to illustrate assumption (2.b) include experiences involving phenomenally apparent *size* such as the Müller-Lyer illusion in which it is said that two lines of equal length look unequal in length.

The Müller-Lyer Illusion



Or experiences involving phenomenally apparent *shape* such as the ‘Bent Stick’ illusion in which it is said that a straight stick looks bent when part-submerged in water.

The Bent Stick Illusion

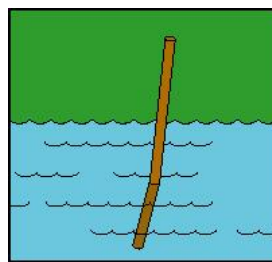


Image reproduced from <http://interactagram.com/physics/optics/refraction/BentStick.jpg>

Or experiences involving phenomenally apparent *ambiguity* such as Jastrow’s (1899) ‘Duck-Rabbit’ illusion in which it is said that a line drawing looks to ‘flip’ between depicting a duck-then-rabbit (or *vice-versa*).

Jastrow’s Duck-Rabbit Illusion



These examples are traditionally described as being experiences in which the subject is directly acquainted with some worldly object (lines with exverted and inverted end-hashes; a straight stick; a line drawing) that looks, in some sense, to possess some property (being unequal-in-length; being bent; flipping) that it objectively lacks. Because certain of the experience's phenomenal properties (looking unequal-in-length; looking bent; looking to flip) cannot, *ex hypothesi*, metaphysically spring from any of the candidate object's perceptible properties (nothing *is* unequal-in-length, bent, or flips), it is concluded that illusory experiences cannot be naïve realist mental states.

Hellie's (2006: 5-7) argument²⁹ that our ordinary colour experiences lack naïve colour properties signals acceptance of the standard conception of illusion. Hellie invites us to consider three colour experiences: first, a white card seen under white light that is gradually brought under blue light (*ww*); second, a white card seen under blue light (*wb*); and third, a blue card seen under white light (*bw*). It is then claimed that in *ww* we experience, since the card's surface is white and illuminated by white light, a token of surface-whiteness and illumination-whiteness; in *wb* we experience, since the card's surface is white and illuminated by blue light, a token of surface-whiteness and illumination-blueness; and in *bw* we experience, since the card is blue and illuminated by white light, a token of colour-blueness and illumination-whiteness.

According to Hellie, *wb* and *bw* share some basic non-naïve realist phenomenal kind *k* that *ww* lacks. This phenomenal mismatch, Hellie reasons, occurs because *k* cannot be metaphysically instantiated in *wb*'s and *bw*'s phenomenal character by any one of four possible candidate phenomenal properties: namely, the property of *at least* representing (a) a token of surface-blueness, (b) a token of surface-whiteness, (c) a token of illumination-blueness, or, (d) a token of illumination-whiteness. For *wb* phenomenally has (b) and (c) but lacks (a) and (d); *bw* phenomenally has (a) and (d) but lacks (b) and (c); and *ww* phenomenally has (b) and (d) but

²⁹ A similar argument can be found in e.g. Russell (1914: 86) and Smith (2005: 25).

lacks (a) and (c). Hellie concludes that *if k* grounds *wb* and *bw*'s phenomenal *F*-ness (where *F* is the property of appearing *such-and-such* to a subject *s*), and *if F* is not satisfied by any candidate property, then *ex hypothesi*, *F* cannot be an object's surface colour or illumination property, i.e. a naïve colour property. This argument signals acceptance of assumption (2.a) since its conclusion is that *wb* and *bw* exemplify experiences in which it is said that worldly objects phenomenally appear to possess colour properties (phenomenal blueness in *wb* and phenomenal whiteness in *bw* and) that, since the card is white in *wb* and blue in *bw*, they objectively lack.

A tempting thought is that paradigm illusions are too *familiar* to be truly misleading experiences – we would, Austin wrote, “be badly put out” (1964: 26) were a round penny not to look elliptical from certain perspectives. We might as well, Austin continues, “ask whether producing a photograph is producing an illusion” which is just silly” (1964: 27). That photographed objects cannot be qualitatively identical to their worldly counterparts does not mean that we experience an illusion every time we look at a photograph, e.g. a photographer might use a tilt-and-shift lens to produce a photograph of a skyscraper that looks like a miniature scale model, but we hardly conclude that we misperceive its real size since that is just how a photograph produced in that way should look. Likewise, that two objectively equal-in-length lines with exverted and inverted end hashes look *unequal-in-length* does not mean that we experience an illusion since that is just how they should look. Thus, the *standard illusion thesis*' antecedent does not *eo ipso* entail its consequent since *familiarity* means that not all mismatches between phenomenal appearances and mind-independent reality are true illusory experiences.

I reject Austin's tempting thought for two reasons. First, the reduction of familiar illusions to non-misleading experiences does not preclude subjects from experiencing *unfamiliar* illusions. For instance, Wexler's (2011) 'Turning Wheel', at least for most subjects at the time of writing, is an unfamiliar motion after-effect illusion in which a rotating wheel looks to 'jump' backwards as the normally sighted subject fixates on a dot in its centre. Austin (1964: 24) compared such cases to the proof-reader who misreads 'causal' as 'casual': Just as the unfamiliar token experience exemplifies an instance of the familiar type of experience we call *misreading*, so a subject's unfamiliar token experience of Wexler's 'Turning Wheel' exemplifies an instance of the familiar type of experience called *motion after-effect*. But it is far from obvious that *motion after-effect* experiences are, for most of us, as familiar as misreading; and even if they were, the *standard illusion thesis* requires only one unfamiliar example from a

familiar class to be upheld.

The more problematic second reason is that familiar ‘illusions’ still involve a mismatch between phenomenal appearances and mind-independent reality – indeed, Austin conceded that “the trouble is just that one [Müller-Lyer] line *looks longer* than the other, though *it isn’t*” (1964: 28, my emphasis). Familiarity with Müller-Lyer lines does not preclude them from phenomenally appearing *unequal-in-length*, which is just the standard conception of illusion that motivates *Base*. *Familiarity* would just seem to be irrelevant to the *standard illusion thesis*.

It is time to explain how the assumptions (2.a) and (2.b) metaphysically entail premise (2)’s *Base*. Assumption (2.a) tells us that hallucinatory experiences do not directly acquaint subjects with worldly items and are not phenomenally typed by naïve properties; assumption (2.b) tells us that, although illusory experiences directly acquaint subjects with worldly items, they are not phenomenally typed by naïve properties; hence the phenomenal characters of hallucinatory and illusory experiences cannot be intrinsically naïve realist. In this way, we arrive at a more developed version of,

- (2) **Base**: For all subjects s : If s has a misleading experience E_M , then E_M ’s phenomenal character is not typed by any naïve properties $P_{N1}, P_{N2} \dots P_{NN}$.
 ((2.a), (2.b), Negation of Naïve Realism *qua* misleading experience)

I turn now to the *Spreading* step according to which *no* non-misleading experience is fundamentally naïve realist.

1.3.2 Spreading

Driving premise (3)’s *Spreading* is a background argument that relies upon three premises. The first of which is the *a priori* assumption that a non-misleading experience’s *phenomenal appearance* can always, *in principle*, be matched by that of some metaphysically possible misleading experience. Call this *Match*:

- (3.a) **Match**: For any non-misleading experience E_{NM} , E_{NM} ’s phenomenal appearance stands in a matching relation r to the phenomenal appearance that is instantiated by some metaphysically possible misleading experience, E_M . (*A priori* assumption)

Hellie (2007: 291-2) illustrates *Match* by inviting us to reflect upon the phenomenal appearances of dreams. For instance, he describes (ibid) a “very realistic” dream that, vis-à-vis its phenomenal appearance, seemed to match his non-misleading experience of writing philosophy. Framed this way, *Match* is uncontroversial. For the notion that any non-misleading experience’s phenomenal appearance can be convincingly matched by that instantiated by some metaphysically possible misleading experience is conceptually coherent, and *Match* requires only this.

Hellie’s second premise is an intuitive implication of *Match*: specifically, Hellie claims that non-misleading and misleading experiences have matching phenomenal appearances *only if* they are, in some sense, *indiscriminable*, i.e. share a certain type of indiscriminability property (hence “very realistic” dreams). Call this *Basic Indiscriminability*:

- (3.b) ***Basic Indiscriminability***: If a non-misleading experience E_{NM} has a phenomenal appearance that stands in a matching relation r to the phenomenal appearance that is instantiated by some metaphysically possible misleading experience E_M , then E_{NM} and E_M are indiscriminable.
(Intuitive Implication of (3.a))

Basic Indiscriminability seems obvious. For instance, we naturally think that two numerically distinct objects, \underline{o}_1 and \underline{o}_2 , match in respect of the perceptible property *size* *only if* that property is not an identifier that enables the subject to perceptually discriminate their respective sizes. Likewise, we naturally think that a non-misleading experience matches a misleading experience in respect of the property *phenomenal appearance* *only if* that property is not an identifier that enables the subject to discriminate between them in some way.

Hellie’s third premise plausibly follows from *Basic Indiscriminability*: specifically, Hellie claims that non-misleading and matching misleading experiences have indiscriminable phenomenal appearances *only if* the subject cannot *reflectively* discriminate the former’s phenomenal appearance from the latter’s, and *vice-versa*. Call this *Reflective Indiscriminability*:

- (3.c) ***Reflective Indiscriminability***: For all subjects s : It is phenomenally possible that s cannot reflectively discriminate between (i) a non-misleading experience E_{NM} ’s phenomenal appearance from some

metaphysically possible misleading experience E_M 's phenomenal appearance, and, (ii) a misleading experience E_M 's phenomenal appearance from some metaphysically possible non-misleading experience E_{NM} 's phenomenal appearance. (Metaphysical implication of (3.b))

Hellie illustrates *Reflective Indiscriminability* by inviting us to,

“[...] focus on our current experience *from the inside*, by phenomenological study, and focus on the experience in the skeptic's story as envisage it to be when we *project ourselves into having it* [...] when we do this, the experiences are indiscriminable.”³⁰ (2007: 293, my emphasis)

For instance, I presently seem to be experiencing worldly events and objects such as *seeing my fingers moving across the keyboard* and *hearing the sound of rain striking the skylight above*. Hellie's thought is that phenomenal reflection upon my “experience from the inside” cannot establish whether or not it is naïve realist³¹ – I cannot, phenomenally at least, “activate” (Williamson, 1990: 8) any sort of knowledge that enables me to discern whether or not my experience is truly world-involving. Of course, I may be “tipped off” (Martin, 2007: 11) by someone who knows that my experience is misleading and resist believing that it is naïve realist, or an observer may numerically distinguish my hallucination from some other previous naïve realist experience. But the former is second-order knowledge that I have acquired through testimony (analogy: Just as the news can provide you with second-order knowledge of Eyjafjallajökull's eruption in Iceland, so testimony can provide you with second-order knowledge of your present experience's worldly status), and the latter is just irrelevant to my present mental state. My predicament is that, when confined to phenomenally reflecting upon appearances, I cannot identify some property (or properties) of my apparently naïve realist experience *in virtue* of which it is discriminable from some metaphysically possible misleading counterpart, or *vice-versa*.

Reflective Indiscriminability, Hellie reasons, is best explained by the hypothesis that non-misleading and misleading experiences “share all their phenomenal characters” (2007: 272)

³⁰ For similar remarks, see, e.g. Broad (1952: 12); Johnston (2006: 287); and Neta (2008: 317).

³¹ This is why Hellie (2007: 294) thinks that I am never *epistemically justified* in judging that my present experience is non-misleading. I sidestep this epistemic move since I am concerned only with how things phenomenally seem rather than thorny issues of epistemic justification.

(thus *Reflective Indiscriminability* has now emerged as abductively motivating the *common kind thesis*). That is, a subject's inability to reflectively discriminate between two token experiences, E_1 and E_2 , (and *vice-versa*) is best explained by the thought that E_1 and E_2 are tokens of phenomenal type F , where F ultimately explains their mental nature. Hence,

- (3) *Spreading*: "If some phenomenal character of a veridical experience is a naïve property, some phenomenal character of a hallucinatory experience is that same [naïve] property." (Premise)

Or slightly more formally,

- (3) *Spreading*: For all subjects s : If s cannot reflectively discriminate (i) a non-misleading experience E_{NM} 's phenomenal appearance from some metaphysically possible misleading experience E_M 's phenomenal appearance, or, (ii) a misleading experience E_M 's phenomenal appearance from some metaphysically possible non-misleading experience E_{NM} 's phenomenal appearance, then E_{NM} and E_M are of phenomenal type F . (Abductive implication of (3.c))

Hellie appears to find the inferential transition from *Reflective Indiscriminability* to *Spreading* intuitively obvious.³² Still, an analogy is helpful. Consider the oncologist who is confronted with two tumours, T_1 and T_2 , that look indiscriminable to her on scans, and at the cellular level when viewed through a microscope. Her medical knowledge abductively justifies her inference that T_1 and T_2 are primarily caused by the same genetic mutation. That partial genome sequencing then reveals that T_1 and T_2 fundamentally consist in the same genetic mutation is, given their visual indiscriminability, thoroughly unsurprising (it would be unexpected, though not medically impossible, were T_1 and T_2 primarily caused by something else). Likewise, someone seeking to explain why a subject cannot reflectively discriminate between two token experiences, E_1 and E_2 , is *prima facie* abductively justified to infer that E_1 and E_2 are of the same phenomenal type – not because some metaphysical principle dictates this (one has not yet been discovered), but because something intuitively fantastic would be occurring were E_1 and E_2 "utterly different" (Price 1950: 31-2) mental states.

³² As does Foster who thinks it plain that reflectively indiscriminable experiences have "the same psychological character through and through" (2000: 8).

Hellie's story behind *Spreading* can now be summarized. *A priori* reflection established that a non-misleading experience's phenomenal appearance can always, *in principle*, be convincingly matched by that of some possible misleading experience (*Match*). This matching relation was intuitively understood in terms of some type of indiscriminability property that non-misleading and misleading experiences share (*Basic Indiscriminability*). This indiscriminability property was identified as being the subject's inability to reflectively discriminate a non-misleading experience's phenomenal appearance from some possible misleading experience's phenomenal appearance, or *vice-versa* (*Reflective Indiscriminability*). It was then argued that, since such reasoning usually works well in everyday cases, and since we have no obvious reason for thinking that the mental genus *experience* is exceptional, non-misleading and misleading experiences are phenomenally type-identical mental states (*Spreading*).

1.3.3 Goodbye to Naïve Realism

It is perhaps obvious how the conjunction of *Base* and *Spreading* threaten naïve realism. First, since it is the view at issue, assume that,

- (1) **Naïve Realism**: For all subjects s : *If* s has a non-misleading experience E_{NM} , then, (i) E_{NM} 's phenomenal character is intrinsically constituted by some set of naïve properties $P_{N1}, P_{N2} \dots P_{NN}$, and, (ii) S stands in a direct *sui generis* acquaintance relation r to a worldly object, ω_w 's, perceptible properties $P_{P1}, P_{P2} \dots P_{PN}$, where $P_{P1}, P_{P2} \dots P_{PN}$, metaphysically ground E_{NM} 's naïve properties $P_{N1}, P_{N2} \dots P_{NN}$. (Assumption)

is true. Now, *if* we accept,

- (2) **Base**: For all subjects s : If s has a misleading experience E_M , then E_M 's phenomenal character is not typed by any naïve properties $P_{N1}, P_{N2} \dots P_{NN}$. (Assumption)

And,

- (3) **Spreading**: For all subjects s : If s cannot reflectively discriminate (i) a non-misleading experience E_{NM} 's phenomenal appearance from some metaphysically possible misleading experience E_M 's phenomenal appearance,

or, (ii) a misleading experience E_M 's phenomenal appearance from some metaphysically possible non-misleading experience E_{NM} 's phenomenal appearance, then E_{NM} and E_M are of phenomenal type F . (Assumption)

Then, since *Base* tells us that misleading experiences are not intrinsically naïve realist, and since *Spreading* tells us that reflectively indiscriminable non-misleading and misleading experiences are phenomenally type-identical mental states, *ex hypothesi*, even non-misleading experiences cannot be intrinsically naïve realist.

1.3.4 Conjunctivism (Again)

Conjunctivism would now seem to replace naïve realism *qua* leading theory of non-misleading experience. For it is said to be intuitively obvious and indubitable in the light of reflection upon experience that phenomenal appearances must be experientially instantiated by some direct object of awareness (e.g. Broad 1923: 240; Smith 2005: 224-5). A thought encapsulated by Robinson's *Phenomenal Principle*:

“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 sensible quality.” (1994: 32, my emphasis)

Or,

(4.a) **Phenomenal Principle:** For all subjects s : If s has an experience E of a phenomenally apparent property F , then necessarily, s is directly aware of an object, o , which experientially instantiates F . (Premise)

Smith (2005: 36) illustrates the *Phenomenal Principle* by inviting us to consider a standard illusory experience in which the subject describes a white wall as looking yellow. As a rational subject, she does not randomly “pick a colour term” to describe this look; rather, she describes the white wall as looking, in some sense, yellow *because that is the phenomenal property of which she is directly aware*. *Base* tells us that that that yellow look cannot, since the wall is objectively white, be experientially instantiated by any naïve property. And since *Spreading* tells us that her illusory and corresponding non-misleading experience are tokens of the same phenomenal type, we get,

- (4.b) For all subjects s : If s has a non-misleading experience E_{NM} of a phenomenally apparent property F , then necessarily, s is directly aware of an object, \underline{o} , which experientially instantiates F , where \underline{o} is intrinsically non-naïve. (*Spreading*, (4.a))

And if it is the presence of a white wall that is *not* illuminated yellow which determines that her experience is non-misleading, then it seems plain that it must be appropriately causally related to that non-naïve item which is also the direct object of awareness in the illusory case. Hence,

- (4) **Conjunctivism**: For all subjects s : If s has a non-misleading experience E_{NM} , then; (i) E_{NM} 's phenomenal character is of phenomenal type F , where particular tokens of F would be the direct objects of s 's awareness were E_{NM} misleading; and, (ii) a normal causal relation r holds between F 's tokens and worldly objects $\underline{o}_{w1}, \underline{o}_{w2} \dots \underline{o}_{wn}$, such that F 's tokens indirectly acquaint s with $\underline{o}_{w1}, \underline{o}_{w2} \dots \underline{o}_{wn}$ (Metaphysical implication of (4.b), Replacement of *Naïve Realism*)

Naïve realism has now not only been banished, but *replaced* as the leading theory of non-misleading experience.

1.4 Conclusion

In this chapter I outlined two theories of non-misleading experience: First, a *naïve realism* which insists that the phenomenal characters of non-misleading experiences are intrinsically constituted and relationally determined by those worldly-object property couples with which subjects are immediately and irreducibly acquainted; and second, a *conjunctivism* which insists that the phenomenal characters of non-misleading and misleading experiences are type-identical, where a suitable causal relation holds between the direct object of awareness and worldly objects in the former case. I then explained Hellie's *p.m.e.*, and in particular, how he exploited the property of *reflective indiscriminability* that non-misleading and misleading experiences share to topple naïve realism. Finally, I explained how the *Phenomenal Principle* is said to positively motivate conjunctivism. This completes my mapping of the essential terrain.

2

Three Constraints on a Solution

In this chapter I argue that a successful naïve realist solution to the *p.m.e* takes the shape of three constraints on a theory of misleading experience. The first (§2.1) *metaphysical* constraint is that the naïve realist is minimally committed to a view I will *Basic Phenomenal Disjunctivism* (e.g. Alston 1989; Langsam 1997) which denies *Spreading* by insisting that reflectively indiscriminable non-misleading and misleading experiences are phenomenally type-distinct mental states. Two objections to *naïve realism's disjunctivist stratagem* are discussed and rejected. The first (§2.1.1) is Conduct's (2012) objection that, since phenomenal intuition shows that non-misleading *and* hallucinatory experience is presentational of experience-independent objects³³, naïve realism entails *Spreading*, and hence, *Basic Phenomenal Disjunctivism* must fall. The second (§2.1.2) is Hellie's (2007) objection that *Basic Phenomenal Disjunctivism* problematically violates the strong intuition that an experience's phenomenally apparent properties must intrinsically constitute its phenomenal character. Conduct's objection is rejected on two counts: first, that phenomenal intuition equally shows that hallucination is *pseudo-presentational*, i.e. merely seems to be presentational of experience-independent objects; and second, that any naïve realist who accepts *Spreading* is put out of experiential business by the *p.m.e*. Hellie's objection is rejected on the grounds that it presupposes a conception of phenomenal character that there is no obvious reason for the phenomenal disjunctivist to accept. An alternative conception of phenomenal character is then outlined.

The second (§2.2) *explanatory* constraint is that the phenomenal disjunctivist is committed to a *positive* explanation of misleading experience. This is because simply denying *Spreading* cannot meet Sturgeon's (1998) highly plausible *Adequacy Condition* on experience according to which non-misleading and misleading experiences are (i) *reflectively indiscriminable*, (ii) *scene-immediate*, i.e. seem to immediately present the same scene, (iii) *subjectively equivalent*, i.e. seem to be subjectively like each other, (iv) *rationally equivalent*, i.e. can rationally motivate the same beliefs, and, (v) *behaviourally equivalent*, i.e. can rationally motivate the same behaviours. Two influential forms of phenomenal disjunctivism are discussed and rejected. The first (§2.2.1) seeks to positively explain features (ii)-(v) by appeal to a primitive conception of (i)'s *reflective*

³³ This position, called *Object Disjunctivism* claims that what makes an experience *hallucinatory* is something about the type of experience independent object with which the subject is acquainted (e.g. Byrne & Logue (2008: 63); Thau (2004: 195)).

indiscriminability (e.g. Langsam 1995; Martin 2004). The second (§2.2.2) seeks to positively explain features (i)-(v) by appeal to the fact that a misleading experience produces indiscriminable *cognitive effects* (i.e. beliefs and behaviours) in the subject that the corresponding non-misleading experience would have produced in *that* doxastic setting (Fish, 2008; 2009). The first form is rejected on the grounds that its conception of *reflective indiscriminability* is just too weak to robustly secure features (ii)-(v). The second form is rejected on the grounds that it is objectionably circular since a misleading experience's cognitive effects are analytically equivalent to features (i)-(v). These objections point towards the need for a different form of phenomenal disjunctivism that can perform this explanatory work – a form which I introduce in Ch.3.

The third (§2.3) *unificatory* constraint is that a persuasive positive phenomenal disjunctivism is committed to a *unified* theory of misleading experience, i.e. a theory that tells the same fundamental story of dream, hallucinatory, and illusory experiences. I motivate this constraint by arguing that a unified theory of misleading experience, or what I call *unidisjunctivism*, enjoys three important advantages over non-unified theories: namely, it is (i) *elegant*, i.e. concise, simple, and explanatory satisfying, (ii) can explain hard to classify cases, i.e. experiences that resist neat categorization as being dreams *or* hallucinations *or* illusions, and, (iii) of the right theoretical shape to save naïve realism.

2.1 Naïve Realism's Disjunctivist Stratagem

The thought that the Naïve Realist is committed to a basic phenomenal disjunctivism is made explicit by Fish³⁴, who writes that,

“[...] the visual experience we enjoy [is] a matter of the subject's being acquainted with elements of the mind-independent environment, where a *relationship of this kind would not hold* were the subject's environment not to be as the experience presents it as being. Thus, naive realism entails disjunctivism: if naive realism is true, then the kind of mental state that is involved in a veridical perception [...] *could not* be involved in a hallucinatory situation.” (2009: 37, my emphasis)

Hence,

³⁴ See also e.g. Campbell (2002: 117); Martin (2006: 14); and Nudds (2009: 335).

“[...] where the spreading step [...] takes the indiscriminability of perception and hallucination to show that there is only *one* kind of object we can perceive [...] the disjunctive response aims to resist this and hold instead that the objects of visual experience might be of one kind or of another, it is just that objects of different kinds might yet be indiscriminable.” (2009: 34)

Thus, since the naïve realist asserts that a non-misleading experience’s phenomenal character is relationally individuated by worldly object-property couples, and since *Base* tells us that a relation “of this kind” cannot hold in misleading experience, she is committed to *at least* a basic phenomenal disjunctivism: an experience’s phenomenal character is *either* typed by (i) relationally individuated naïve properties (if non-misleading), *or*, (ii) something else (if misleading). Exploiting the thought that reflectively indiscriminable experiences can have distinctive phenomenal ingredients thus allows the naïve realist to sensibly resist the conjunctivist intuition that naïve realist and misleading experiences are phenomenally type-identical mental states.

Naïve realism’s disjunctivist stratagem can be elaborated in two stages. In the first stage, all parties agree that there are three varieties of looks: if something looks like a dog, then that look is *either* a non-misleading perception of a dog; *or* a dog-illusion; *or* a dog-hallucination.³⁵ ‘Looks’ statements can thus be characterised disjunctively (D). We can say that,

(D) *L* is a look *as if* a worldly object, \underline{o}_w , is *F* *iff* either,

(D.i) *L* is a non-misleading perception of the fact that \underline{o}_w is *F*; *or*

(D.ii) *L* is an illusion *as if* \underline{o}_w is *F*; *or*,

(D.iii) *L* is a hallucination *as if* \underline{o}_w is *F*.

I am not claiming that this disjunctive schema neatly individuates *all* looks (e.g. perhaps there are ‘hybrid’ illusory-hallucinatory looks); only that it is a mutually agreed sensible starting point. In the second stage, we can sketch truth-makers for (D.i) – (D.iii). (D.i)’s truth-makers receive purely naïve realist treatment. So,

(D.i) (a) A non-misleading perception of a worldly object, \underline{o}_w , which is

³⁵ This tripartite individuation of looks is also made explicit in Sturgeon’s (2000: 10; 2008: 112-5).

objectively F is determined by an object-dependent *sui generis* acquaintance relation, r , that is instantiated between a subject s , \underline{o}_w , and \underline{o}_w 's perceptible properties $P_{P1}, P_{P2} \dots P_{PN}$. (*Acquaintance Thesis*)

- (b) A non-misleading perception's phenomenal character is typed by naïve properties $P_{N1}, P_{N2} \dots P_{Nn}$. (*Constitution Thesis*)

Next, (D.ii)'s truth-makers receive partly naïve and non-naïve realist treatment. So,

- (D.ii) (a) An illusory perception *as if* a worldly object, \underline{o}_w , is F is determined by an object-dependent *sui generis* acquaintance relation, r , that is instantiated between a subject s and \underline{o}_w .

- (b) An illusory perception's phenomenal character is not typed by any naïve properties $P_{N1}, P_{N2} \dots P_{NN}$.³⁶ (*Instance of Base*)

Finally, (D.iii)'s truth-makers receive purely non-naïve realist treatment. So,

- (D.iii) (a) A hallucinatory perception *as if* a worldly object, \underline{o}_w , is F is not determined by an object-dependent *sui generis* acquaintance relation, r , that is instantiated between a subject s and \underline{o}_w .

- (b) A hallucinatory perception's phenomenal character is not typed by any naïve properties $P_{N1}, P_{N2} \dots P_{Nn}$. (*Instance of Base*)

To illustrate each disjunction, consider Foster's (2000: 23) character, Henry, who is sitting on a riverbank watching a salmon leaping. Let's assume that Henry's visual system is working well and that the viewing conditions are conducive to seeing salmon leaping. Call Henry's non-misleading experience salmon-experience₁; in salmon-experience₁, a salmon-leaping look is made true by the fact that Henry stands in a direct *sui generis* acquaintance relation to a salmon that *is* pink and leaping. Introducing some disjunctivist terminology that will be staying with us, salmon-experience₁ can be described as a 'Good' case since its phenomenal character is relationally typed by that worldly object-property couple (viz., a pink salmon) with which

³⁶ Some (e.g. Brewer 2011; Child 1992; Snowdon 1980) treat illusions as 'Good' cases. For simplicity, I keep to this traditional characterization until Ch.6 which tells my story of illusion.

Henry is irreducibly and immediately acquainted – such cases occur when phenomenal appearances are “fully grounded in [...] perceptual contact with” (Sturgeon 2008: 115) the world. Salmon-experience₁, since it is both intrinsically world-involving and world-acquainting, thus exemplifies the *best possible experience* a subject can enjoy.

Now, suppose that Henry is presented with a worldly object that is cleverly designed to produce (at least to him) a misleading look *as of* a salmon that is pink and leaping, and reports ‘seeing’ a salmon that he cannot reflectively discriminate from the worldly one that was presented in salmon-experience₁. Call Henry’s reflectively indiscriminable illusion salmon-experience₂; in salmon-experience₂, a salmon-leaping look is made *false* by the fact that Henry stands in a *sui generis* direct acquaintance relation to some candidate worldly object. Introducing some more disjunctivist terminology that will be staying with us, salmon-experience₂ can be described as a ‘Bad’ case since its phenomenal character is *not* relationally typed by that worldly object-property couple with which he is directly acquainted – such cases occur when, phenomenal appearances are “yoked to, but not drawn wholly from, perceptual contact with” (Sturgeon 2008: 114) the world. Salmon-experience₂, since it is intrinsically world-acquainting but not intrinsically world-involving, thus exemplifies the *second best possible experience* a subject can enjoy.

Finally, suppose that the mad scientist has attached a remote controlled apparatus to Henry’s optic nerve, where this device, when active, allows total control over those neural signals which are transmitted to his brain. As Henry looks at the same spot where the salmon was leaping, the implant is activated which then produces qualitatively identical neural signals as those which are proximately produced by a salmon that *is* pink and leaping. In this scenario, my objector reasons that since intuition dictates that experiences locally supervene upon the subject’s internal physical constitution, and since Henry’s internal constitution that he had at the time of salmon-experience₁ has been exactly duplicated, he must experience a hallucination that, according to Robinson, “exactly resembles [salmon-experience₁] in its subjective character” (2001: 151), i.e. Henry’s mental state is phenomenally type-identical to the one that he was in during salmon-experience₁.³⁷ Call Henry’s indiscriminable hallucination salmon-experience₃; in salmon-experience₃, a leaping-salmon look is made false by something that is not a leaping salmon. In now familiar terminology, Salmon-experience₃ can be described as a *very* ‘Bad’³⁸ case since none of its phenomenal character metaphysically springs from the

³⁷ This is our first glimpse of the *Argument from Local Supervenience*, discussion of which must wait until §3.3.

³⁸ Future references to ‘Bad’ experience will include hallucination unless otherwise indicated.

perceptible properties of anything worldly – such cases occur when phenomenal appearances are “unyoked to perceptual contact with” (Sturgeon 2008: 114) the world. Salmon-experience₃, since it is neither intrinsically world-acquainting nor world-involving, thus exemplifies the *worst possible experience* a subject can enjoy.

Of salmon-experience₂ and salmon-experience₃, I claim that, *if* naïve realism’s supposition that non-misleading experience is phenomenally typed by naïve properties is true, then *ex hypothesi*, they cannot be phenomenally type-identical to salmon-experience₁ since their phenomenal characters were not relationally typed by naïve properties. As a result, the kind of experience Henry had in salmon-experience₁ cannot be enjoyed in salmon-experience₂ and salmon-experience₃.

I can now bring *naïve realism’s disjunctivist stratagem* to a close. Hellie’s journey began with:

Base: For all subjects *s*: If *s* has a misleading experience E_M , then E_M ’s phenomenal character is not typed by any naïve properties $P_{N1}, P_{N2} \dots P_{NN}$.
(Conclusion of the *p.m.e*’s first stage)

The “indiscriminability of perception and hallucination” was then said to abductively motivate,

Spreading: For all subjects *s*: If *s* cannot reflectively discriminate (i) a Good experience E_G ’s phenomenal appearance from some metaphysically possible Bad experience’s E_B ’s phenomenal appearance, *or*, (ii) a Bad experience’s E_B ’s phenomenal appearance from some metaphysically possible Good experience E_G ’s phenomenal appearance, then E_G and E_B are of phenomenal type *F*.

I resist *Spreading* by arguing that: *if* phenomenal characters are relationally individuated, then *ex vi termini*, ‘Good’ and ‘Bad’ experiences must differ in phenomenal type. Hence,

Basic Phenomenal Disjunctivism: For all subjects *s*:

- (i) If *s* has a Good experience E_G , then E_G ’s objective phenomenal character is of type *F*, where *F* is naïve realist.
- (ii) If *s* has a Bad experience E_B , then E_B ’s objective phenomenal character is of

type G , where G is not naïve realist. (Metaphysical commitment of *naïve realism*)

Because the reflective indiscriminability of ‘Good’ and ‘Bad’ experience is not to be denied, I can now replace *Spreading* with,

Apparent Spreading: If some Good experience E_G phenomenally appears to a subject s to have a naïve property P_N , then some metaphysically possible Bad experience E_B can phenomenally appear to s to have P_N , where E_G and E_B are tokens of different phenomenal types.

Thus ensuring that naïve realism remains in play.

2.1.1 Naïve Realism minus Phenomenal Disjunctivism

One suspicion is that naïve realism does not, since its metaphysical commitments are compatible with the intuition that reflectively indiscriminable experience share phenomenal character, *eo ipso* metaphysically entail *Basic Phenomenal Disjunctivism*. This position has recently³⁹ been articulated by Conduct, who begins by arguing that,

“[...] there is phenomenological support for the thought that [...] hallucination⁴⁰ is presentational, and hence relational, in nature. [there is] good reason to suppose that for experience to be genuinely presentational, the objects of experience must be independent of their presence in experience, [...] to satisfy this phenomenological intuition that hallucination is presentational, we should think that the objects of such experiences are awareness-independent.” (2012: 731)

But because the Naïve Realist claims that ‘Good’ experience is likewise “presentational, and hence relational in nature”, she is committed to ...

³⁹ The sheer counterintuitiveness of this position probably explains why it has been historically overlooked.

⁴⁰ Though Conduct’s objection employs only hallucinations, there is no obvious reason for thinking that it does not also extend to dreams and illusions. For this reason, I assume that Conduct would also claim that naïve realism is compatible with the thought that ‘Good’ and *all* ‘Bad’ experience has the same basic nature.

“[...] conceiving of hallucinatory experience as having the *same nature* as perceptual experience.” (2012: 728)

Conduct, then, begins by defining naïve realism as the view that non-misleading experience essentially consists in a direct *sui generis* acquaintance relation that holds between subject and worldly object. This suggests,

- (1) **Conduct's Naïve Realism:** For all subjects s : If s has a non-misleading experience E_{NM} , then E_{NM} 's phenomenal character essentially consists in a direct *sui generis* acquaintance relation r in which s stands to worldly objects $\underline{o}_{w1}, \underline{o}_{w2} \dots \underline{o}_{wn}$, where $\underline{o}_{w1}, \underline{o}_{w2} \dots \underline{o}_{wn}$ are immediately presented to s 's consciousness. (Assumption)

He then proceeds by claiming that we have “good reason” to accept two related constraints on presentational experience, i.e. experiences that are immediately “presentational of the objects of perception” (2012: 727). First, Conduct's claim that presentational experience is “relational [...] in nature” suggests that we should accept:

- (2) **Relational Constraint:** For all subjects s : If s has a presentational experience E_p , then E_p essentially consists in an acquaintance relation r that holds between s and objects $\underline{o}_1, \underline{o}_2 \dots \underline{o}_n$, where $\underline{o}_1, \underline{o}_2 \dots \underline{o}_n$ are immediately presented to her consciousness. (1st metaphysical constraint)

Whereas Conduct's claim that the objects of “genuinely presentational” experiences are “independent of their presence in experience” suggests that we should also accept:

- (3) **Experience Independent Constraint:** For all subjects s : If s has a genuinely presentational experience E_p in which objects $\underline{o}_1, \underline{o}_2 \dots \underline{o}_n$ are immediately presented to her consciousness, then $\underline{o}_1, \underline{o}_2 \dots \underline{o}_n$ have the ontological property of existing independently of E_p . (2nd metaphysical constraint)

Now, *if* genuinely presentational experiences essentially consist in the property of being relational mental states, and *if* the objects of such experiences have the ontological property of being experience independent, then making sense of a “genuinely relational state of affairs between the subject and object” (Conduct 2012: 730) obviously requires that, in genuinely

presentational experience, she stands in an acquaintance relation to objects that have the ontological property of being experience independent. The *Relational* and *Experience Independent* constraints thus mesh together like this:

- (4) For all subjects s : If s has a genuinely presentational experience E_p , then E_p essentially consists in an acquaintance relation r that holds between s and experience independent objects $o_1, o_2 \dots o_n$, where $o_1, o_2 \dots o_n$ are immediately presented to her consciousness. ((2) & (3))

Conduct's next, and crucial, move is to argue that premise (4) is also a metaphysical constraint on hallucination. This is because he thinks that "phenomenological intuition" shows that hallucination is genuinely presentational. That is, he argues that since,

- (5) For all subjects s : If s has a hallucinatory experience E_H , then E_H immediately presents objects $o_1, o_2 \dots o_n$ to her consciousness. (Premise)

is phenomenally compelling, we have good reason to accept that,

- (6) For all subjects s : If s has a hallucinatory experience E_H , then E_H essentially consists in an acquaintance relation r that holds between s and experience independent objects $o_1, o_2 \dots o_n$, where $o_1, o_2 \dots o_n$ are immediately presented to consciousness. (Inductive implication of (4) & (5))

is true. Now, since Conduct understands the Naïve Realist as asserting that non-misleading experience *also* essentially consists in an acquaintance relation that holds between subject and experience independent objects that are immediately presented to consciousness, he concludes that she is committed to "conceiving of hallucinatory experience as having the same nature as perceptual experience." In other words, she is committed to this instance of *Spreading* (relation 'r' replaces phenomenal type F).

- (7) ***Spreading****: For all subjects s : If s cannot reflectively discriminate (i) a non-misleading experience E_{NM} 's phenomenal appearance from some metaphysically possible hallucinatory experience E_H 's phenomenal appearance, *or*, (ii) a hallucinatory experience E_H 's phenomenal appearance from metaphysically some possible non-misleading experience E_{NM} 's

phenomenal appearance, then E_{NM} and E_H essentially consist in an acquaintance relation r that holds between s and experience independent objects $\underline{o}_1, \underline{o}_2 \dots \underline{o}_n$, that are immediately presented to her consciousness. ((1) & (6), *Negation of Basic Phenomenal Disjunctivism*)

To illustrate. It presently looks to me as if Scrabble, the Terrier, is dozing underfoot. Now, Conduct's naïve realism (premise (1)) tells us that, if my experience is 'Good', then its phenomenal character essentially consists in an acquaintance relation in which I stand to Scrabble, the dozing Terrier who is that experience independent object of which I am immediately aware. Premise (6) tells us that, if I am hallucinating, then my experience's phenomenal character essentially consists in an acquaintance relation in which I stand to some experience independent object that is reflectively indiscriminable from Scrabble, the worldly dozing Terrier. Conjoining premises (1) and (6) entail premise (7): For since my reflectively indiscriminable experiences are said to essentially consist in the property of being relational mental states, and since this property is their common experiential ingredient, we are not, Conduct concludes, to straightforwardly accept that naïve realism metaphysically entails phenomenal disjunctivism. In which case, *Basic Phenomenal Disjunctivism* will not, *contra* my insistence, constitute a requirement on a successful answer to the *p.m.e.*

My response relies *solely* upon rejecting the supposition that hallucinatory experience is genuinely presentational, so it is premise (5)⁴¹ which requires elaboration. Conduct's argument for it is that since 'Good' experience presents worldly objects in "an ontologically immediate way" (2011: 730), and since 'Good' and hallucinatory experiences are reflectively indiscriminable, *ex hypothesi*, hallucinatory experience must also present objects in "an ontologically immediate way." For a hallucinatory experience that was not presentationally immediate would then have a phenomenal property *in virtue* of which it is reflectively discriminable from some possible non-misleading experience, and this is not the case. This, in conjunction with premise (4)'s claim that genuinely presentational experience essentially consists in an acquaintance relation that holds between subject and experience independent object then motivates premise (6): Hallucinatory experiences likewise essentially consist in an acquaintance relation that is instantiated between subject and experience independent object.

As it stands, premise (5) is overly strong. Once it is accepted that hallucination is genuinely

⁴¹ The curious reader can find independent argument for premises (2) and (3) in Conduct's (2011: 730) and Foster's (2000: 164-170).

presentational, it is tempting to conclude that hallucinatory and ‘Good’ experiences are phenomenally type-identical mental states. But once it is accepted that hallucination only *seems* genuinely presentational, then, since premise (4) will cease to apply to hallucination, we can deny that hallucinatory and ‘Good’ experiences share a common phenomenal kind.

What I am suggesting is that by substituting,

- (5) **Strong Presentation:** For all subjects s : If s has a hallucinatory experience E_H , then E_H immediately presents objects $\underline{o}_1, \underline{o}_2 \dots \underline{o}_n$, to her consciousness. (Premise)

With,

- (5*) **Weak Presentation:** For all subjects s : If s has a hallucinatory experience E_H , then E_H seems to immediately present objects $\underline{o}_1, \underline{o}_2 \dots \underline{o}_n$ to her consciousness. (Premise)

We can resist premise (7) and save *Basic Phenomenal Disjunctivism*.

Someone who endorses *weak presentation* is – whether they are committed to my naïve realism or Conduct’s (ostensibly *phenomenal relationalism*) – plausibly committed to *Basic Phenomenal Disjunctivism*. Let’s assume that either my,

- (1*) **Naïve Realism:** For all subjects s : If s has a non-misleading experience E_{NM} , then, (i) E_{NM} ’s phenomenal character is intrinsically constituted by naïve properties $P_{N1}, P_{N2} \dots P_{NN}$, and, (ii) S stands in a direct *sui generis* acquaintance relation r to a worldly object, \underline{o}_w ’s, perceptible properties $P_{P1}, P_{P2} \dots P_{PN}$, where $P_{P1}, P_{P2}, \dots P_{PN}$, metaphysically ground E_{NM} ’s naïve properties $P_{N1}, P_{N2} \dots P_{NN}$. (Assumption)

Or,

- (1) **Conduct’s Naïve Realism:** For all subjects s : If s has a non-misleading experience E_{NM} , then E_{NM} ’s phenomenal character essentially consists in a direct *sui generis* acquaintance relation r in which s stands to worldly objects

$\underline{o}_{w1}, \underline{o}_{w2} \dots \underline{o}_{wn}$, where $\underline{o}_{w1}, \underline{o}_{w2} \dots \underline{o}_{wn}$ are immediately presented to s 's consciousness. (Assumption)

is correct. Then since,

- (4) For all subjects s : If s has a genuinely presentational experience E_p , then E_p fundamentally consists in an acquaintance relation r that holds between s and experience independent objects $\underline{o}_1, \underline{o}_2 \dots \underline{o}_n$, where $\underline{o}_1, \underline{o}_2 \dots \underline{o}_n$ are immediately presented to her consciousness. (Conjunction of *Relational* and *Experience independent* constraints)

will not apply to,

- (5*) **Weak Presentation:** For all subjects s : If s has a hallucinatory experience E_H , then E_H seems to immediately present objects $\underline{o}_1, \underline{o}_2 \dots \underline{o}_n$ to her consciousness.

We can, on either mine or Conduct's naïve realism, preserve *Basic Phenomenal Disjunctivism*.

To illustrate. Suppose that I am hallucinating Scrabble, the Terrier, dozing underfoot. It is obvious that someone who endorses my *naïve realism* and *weak presentation* is committed to *Basic Phenomenal Disjunctivism* since, unlike a genuinely presentational look, no acquaintance relation holds between myself and some experience independent object to relationally determine my experience's phenomenal character. It is also plausible that someone who endorses *Conduct's naïve realism* and *weak presentation* is likewise committed to *Basic Phenomenal Disjunctivism* since, unlike a genuinely presentational look, no acquaintance relation holds between myself and some experience independent object to intrinsically constitute my experience's phenomenal character.⁴² What both naïve realists will claim is that my hallucination essentially consists in some phenomenally type-distinct property that makes it seem genuinely presentational, where this property then explains my inability to reflectively discriminate it from a corresponding 'Good' experience of Scrabble, the Terrier, dozing underfoot. On neither naïve realism, is there any move to be made from the existence of this indiscriminability property to the claim that my hallucination and corresponding 'Good' experience are phenomenally type-identical mental states.

⁴² Though Johnston thinks otherwise, I ultimately reject his theory of hallucination in §5.3.2.

Having sketched a possibility that either naïve realist can exploit, I want to conclude by sketching two reasons for preferring *weak presentation*. First, Conduct said that phenomenal reflection established *strong presentation*. But there is an important reading of the concept *reflection* which equally shows that hallucinations are pseudo-presentational. Consider the cognitively sound subject who, owing to macular degeneration, develops Charles Bonnet Syndrome and reports ‘seeing’ things that are very small in size (so-called ‘Lilliputian’ hallucinations). In this case, she is likely to unreflectively judge, since that is how things phenomenally seem, that her hallucinations are genuinely presentational of certain experience-independent objects. But when she rationally reflects upon her initial judgement, she is likely to reject it since such reflection informs her that her hallucinations depend upon her ocular pathology. And in those cases where subjects think that their hallucinations *are* presentational (e.g. as in the famous case of the mathematician, John Nash, who thought it rational to believe that extra-terrestrials were sending him encrypted messages through the New York Times, since those messages cognitively arrived in ways that were similar to his mathematical theorems) it is surely *we* who can rationally judge that their hallucinations depend upon some pathology.

Conduct’s argument for *strong presentation*, then, relies upon too narrow a reading of the concept *reflection*. If *reflection* just means phenomenal reflection, then hallucination will seem genuinely presentational; but if *reflection* also incorporates rational reflection about relevant non-phenomenal facts, then hallucination will seem pseudo-presentational. We should not, I submit, straightforwardly accept Conduct’s narrow reading of *reflection* which underlies premise (5)’s *strong presentation* when a wider reading well-motivates *weak presentation*.

Second, Conduct’s argument is vulnerable to the *p.m.e.* Assume that ‘Good’ and hallucinatory experiences essentially consist in a direct *sui generis* acquaintance relation to experience independent object(s) – it is just that, in the latter, there is “something about the kind of entity” (Conduct 2011: 278) to which the subject is related that explains the experience’s non-world involving status. Conduct’s “something” cannot, *otherwise the experience would not be hallucinatory*, be a naïve property, i.e. he must accept *Base qua* hallucination. This, in conjunction with the claim that ‘Good’ and hallucinatory experiences can be reflectively indiscriminable, now threatens naïve realism: For it can now be reasoned that, since hallucinatory experience essentially consists in a direct *sui generis* acquaintance relation to some experience independent non-naïve realist object (instance of *Base*), and since indiscriminable

experiences share a phenomenal kind (*Spreading*), ‘Good’ experience must likewise essentially consist in a direct *sui generis* acquaintance relation to some experience independent non-naïve realist object.

Conduct might deny that those non-naïve realist experience independent objects which hallucination ‘spreads’ over to ‘Good’ experience do not, unlike the latter’s naïve properties, do any important phenomenal work. But then he owes us some story of why those objects magically become epiphenomenal once they figure in ‘Good’ experience. It is surely better to avoid this *ad hoc* worry by resisting *Spreading* in the first place. I submit that the difficulties involved in making sense of *strong presentation* means that the preferred story of hallucination is one that involves *weak presentation*. In this way, the Naïve Realist can tell a phenomenally attractive story of hallucination (it *seems* presentational) whilst cleaving to a *Basic Phenomenal Disjunctivism* that is not vulnerable to the *p.m.e.*

2.1.2 The Argument from Phenomenal Infallibility

Another suspicion is that *Basic Phenomenal Disjunctivism* is intuitively unseated by what Hellie calls an “interestingly strong” thesis about phenomenal character that “seems free from counterexample” (2007: 283). This is:

“Infallibility

If an experience phenomenally appears to have a certain property, it has that property as a phenomenal character.⁴³ (2007: 282)

Hellie’s thought is that if “expert phenomenological study under ideal circumstances⁴⁴” (2007:

⁴³ *Infallibility* is one arm of a stronger premise called *Revelation* which asserts that phenomenal reflection can *fully* reveal an experience’s true phenomenal character. *Revelation*’s other arm is:

***Self-Intimation*:** Necessarily, for any phenomenal experience *E* of a subject *s* and phenomenal property *P*, if *E* has *P*, then *E* phenomenally appears *P* to *s*. (Converse of *Infallibility*)

Because the phenomenal disjunctivist can accept *self-intimation* (she need not deny that an experience’s phenomenal character cannot be *hidden* from its phenomenal appearance), I am concerned only with *Infallibility* here.

⁴⁴ Ideal circumstances, Hellie suggests (2007: 267), are simply those conducive to phenomenological study, e.g. the subject is cognitively sound, understands what she is doing, and has considered relevant alternatives. Such

267) reveals that a property P phenomenally appears to be in the phenomenal character of experience, then necessarily, P is in the phenomenal character of experience. *Infallibility* can be stated slightly more formally:

***Infallibility*:** Necessarily, for any phenomenal experience E had by a subject s and phenomenal property P , if careful reflection by s under ideal circumstances c reveals that E phenomenally appears to have P , then E has P .

Suppose that you have just experienced a papercut across your eyeball and I cheerfully inform you that the phenomenally apparent *pain* which you now seem to be experiencing is not *really* a property of your experience's phenomenal character. You may well incredulously splutter "B-b-but I am *experiencing* pain! And that is evidence enough. Of course *pain* is a real phenomenal property. Otherwise it could not *be* phenomenally apparent." Or suppose I tell you that, when you look at the sky, the phenomenally apparent *blue-ness* that you consciously see is not *really* a part of your experience's phenomenal character. Again, you may well be incredulous: "Of course *blue-ness* is a real phenomenal property. Otherwise I could not be consciously aware of it. You are just talking metaphysical nonsense." Driving *Infallibility*, then, is the thought that there is no mismatch between an experience's phenomenal appearance and its true phenomenal character since its appearance just *is* its phenomenal character.

Hellie now advances,

"Apparent Spreading"

If some veridical experience phenomenally appears to have a naïve property, some hallucinatory experience phenomenally appears to have that same naïve property." (2007: 280)

Or,

***Apparent Spreading*:** If some Good experience E_G phenomenally appears to a subject s to have a naïve property P_N , then some hallucinatory experience E_H can phenomenally appear to s to have P_N .

Apparent Spreading, in conjunction with *Infallibility* clearly imperils *Basic Phenomenal*

circumstances do not require elucidation since *Infallibility* requires only that they are specifiable *in principle*.

Disjunctivism: For if an experience cannot phenomenally appear to the suitably reflective subject to have some property *P* without *P* being in its phenomenal character, then *ex hypothesi*, reflectively indiscriminable ‘Good’ and ‘Bad’ experiences cannot phenomenally appear to the suitably reflective subject to each have the same naïve property without that property being in their phenomenal characters. In this way, Hellie resurrects,

Spreading: For all subjects *s*: If *s* cannot reflectively discriminate (i) a Good experience *E_G*’s phenomenal appearance from some metaphysically possible Bad experience’s *E_B*’s phenomenal appearance, or, (ii) a Bad experience’s *E_B*’s phenomenal appearance from some metaphysically possible Good experience *E_G*’s phenomenal appearance, then *E_G* and *E_B* are of phenomenal type *F*. (Conjunction of *Infallibility* and *Apparent Spreading*, negation of *Basic Phenomenal Disjunctivism*)

Basic Phenomenal Disjunctivism is now banished from featuring in a successful naïve realist answer to the *p.m.e.*

It is not obvious that Hellie’s intuitive motivation for *Infallibility* constitutes an independent argument rather than a problematic presupposition concerning how the phenomenal disjunctivist understands the concept *phenomenal character*. Hellie’s stipulation that “phenomenal characters are just [...] phenomenally apparent features” (2007: 282) trivially precludes his opponent from marshalling any convincing counterexamples against *Infallibility*, but *Infallibility*’s denial⁴⁵ is already operative in *Basic Phenomenal Disjunctivism*. For if, as I insist, a ‘Good’ experience’s phenomenal character essentially consists in, and is relationally determined by, those worldly object-property couples with which the subject is immediately and irreducibly acquainted (*naïve realism*); and if ‘Bad’ experiences are not intrinsically world-involving mental states (*Base*); then reflectively indiscriminable ‘Bad’ experiences must have phenomenal appearances that mislead about their true phenomenal characters. That is, since I deny that an identity relationship necessarily exists between an experience’s phenomenally apparent type and its true phenomenal character, reflectively indiscriminable ‘Good’ and ‘Bad’ experiences can phenomenally appear to be, *though they are not*, type-identical mental states. Hellie has plainly begged the question by presupposing a mutually agreed conception of phenomenal character.

⁴⁵ Successfully denying *Infallibility* and *Spreading* also blocks Hellie’s final move that associates naïve realism with *paradox* – the paradox being that ‘Good’ experience does (from *Infallibility* & *Spreading*), and does not (from the *p.m.e.*), have naïve properties (2007: 272).

At this stage, it might be suspected that I have merely accomplished a linguistic impasse. Hellie insists that an experience's phenomenally apparent properties cannot mislead the suitably reflective subject about its true phenomenal character, whereas I am insisting that this is just what occurs in 'Bad' experience. But my claim is not implausible. That is, we have reason to accept,

No-Infallibility Thesis: Necessarily, for any phenomenal experience *E* had by a subject *s* and phenomenal property *P*, if careful reflection by *s* under ideal circumstances *c* reveals that *E* phenomenally appears to have *P*, then it is metaphysically possible that *E* lacks *P*.

To illustrate. Carefully reflect upon the phenomenally apparent character of your visual experience (we can assume that the circumstances are ideal): You should seem to see a range of colours and bounded shapes that are clearly presented within a broadly stable visual field of approximately 30 degrees, or maybe more. At least, this is how things phenomenally appear to me, e.g. I seem to clearly see a wide swath of text against a white background, a number of books to my right, and a mug of tea to my left, *all at once*. In these everyday cases, we can say that careful reflection in ideal circumstances reveals that visual experience phenomenally appears to have the property of *wide clarity*.

Now, follow Schwitzgebel's (2008: 255) instruction to continuously move your eyes around the scene whilst continuing to carefully reflect upon your visual experience's phenomenally apparent character in those regions away from any determinate focal points. Because human biology dictates that the preciseness with which we see shapes and colours precipitously declines outside of a central, foveal area of vision of around 1 to 2 degrees, most people who attempt Schwitzgebel's experiment eventually conclude that the character of visual experience is not as clear as it originally seems.⁴⁶ In this case, we can say that careful reflection in ideal circumstances reveals that visual experience phenomenally appears to have the property of *narrow clarity*.

⁴⁶ Likewise, in Dennett's (1991: 53-4) 'Playing Card Experiment', most of us have to bring a playing card held at arm's length very close towards the centre of our visual field before we can clearly identify its suit, colour, and value.

Schwitzgebel's experiment plausibly shows that, since visual experience cannot simultaneously have *wide* and *narrow clarity*, careful reflection in ideal circumstances can fail to reveal an experience's true nature.⁴⁷ This suggests that we can, despite Hellie's insistence that "it is difficult to see any daylight between being a property which is [phenomenally] presented and being a phenomenal character of [the subject's] experience" (2007: 283), find "daylight" between an experience's phenomenally apparent properties and its phenomenal character by distinguishing between two concepts of *phenomenal character*: namely, (i) *subjective*⁴⁸ phenomenal character which is an experience's phenomenally apparent properties, and, (ii) *objective* phenomenal character which is an experience's fundamental nature or true phenomenal type.⁴⁹ 'Good' experiences are cases in which (i) does not mislead about (ii), e.g. someone who sees a white picket fence will have an experience that phenomenally appears to have the naïve property *being-a-case-of-visual-awareness-of-a-white-picket-fence* because a white picket fence is really there. Thus, the first-pass formulation of naïve realism that we met in (§1.1) now becomes:

Naïve Realism: For all subjects s : If s has a non-misleading experience E_{NM} , then;

- (i) E_{NM} 's subjective and objective phenomenal character is intrinsically constituted by the same naïve properties $P_{N1}, P_{N2} \dots P_{NN}$; and,
- (ii) S stands in a direct *sui generis* acquaintance relation r to a worldly object, ω_w 's, perceptible properties $P_{P1}, P_{P2} \dots P_{PN}$, where $P_{P1}, P_{P2} \dots P_{PN}$, directly ground E_{NM} 's naïve properties $P_{N1}, P_{N2} \dots P_{NN}$.

Experiences with this metaphysical structure thus comprise *Basic Phenomenal Disjunctivism*'s 'Good' disjunct.

⁴⁷ Schwitzgebel (2008) also argues that we can be mistaken about our cognitive phenomenology as evidenced by the unsurprising fact that a group of philosophers at a 2002 conference could not agree if *thought* has any distinctive phenomenological characteristics.

⁴⁸ Hellie (2007: 288) calls this *projective* phenomenal character and describes it as *weakening* his original concept. Though a refinement that saves naïve realism is, I think, a *strengthening* of that concept.

⁴⁹ Alternatively, some (e.g. Dennett 1976; Sundström 2008) deny *Infallibility* by denying that 'Bad' experiences are phenomenally characterful mental states, and so, mislead about having phenomenal character. This tack is rejected in §2.2.1 and §2.2.2.

In contrast, ‘Bad’ experiences are cases in which (i) misleads about (ii), e.g. someone hallucinating a white picket fence has an experience that phenomenally appears to have, but objectively lacks, the naïve property *being-a-case-of-visual-awareness-of-a-white-picket-fence*. Following Hellie (2007: 280), I call this strategy *Epistemological Rejectionism*:

Epistemological Rejectionism: For all subjects s : If s has a Bad experience E_B , then;

- (i) E_B ’s subjective phenomenal character phenomenally appears to be intrinsically constituted by naïve properties $P_{N1}, P_{N2} \dots P_{NN}$; and,
- (ii) E_B ’s objective phenomenal character lacks any naïve properties $P_{N1}, P_{N2} \dots P_{NN}$. (Negation of *Infallibility*)

Experiences with this metaphysical structure thus comprise *Basic Phenomenal Disjunctivism*’s ‘Bad’ disjunct. An explanation of *how* (i) can mislead about (ii) must wait until the next chapter. Until then, it is enough that *epistemological rejectionism* is available for the phenomenal disjunctivist to conceptually exploit.

2.1.2 Summary

I have argued that the Naïve Realist is minimally committed to a *Basic Phenomenal Disjunctivism* which resists the *p.m.e*’s *Spreading* step by denying that reflectively indiscriminable ‘Good’ and ‘Bad’ experiences are phenomenally type-identical mental states. Conduct’s objection that naïve realism entails *Spreading* was then shown to rely upon a concept of *reflection* that the Naïve Realist need not accept, and further, that that entailment risks resurrecting the *p.m.e*. Hellie’s objection that phenomenal appearances are reductively identical to phenomenal characters was then shown to beg the question relying upon a conception of phenomenal character that there is no obvious reason to accept, and further, that reflection in ideal circumstances is not an infallible guide to an experience’s true phenomenal character. I turn now to the second constraint on a successful naïve realist solution to the *p.m.e*.

2.2 Five Remarkable Features

At this stage in the dialectic, a natural objection is that a suasive phenomenal disjunctivism must explain *what – in absentia* worldly things – types a ‘Bad’ experience’s objective

phenomenal character. The worry is that the *negative* phenomenal disjunctivism sketched thus far simply denies that ‘Good’ and ‘Bad’ experiences are phenomenally type-identical mental states, and in turn, “avoids saying anything [substantive] about the nature” (Martin 2006: 9) of the latter at all. I argue that this quietist worry is well-motivated, and in turn, aim to establish our second constraint on *any* explanatorily adequate theory of misleading experience: namely, that the phenomenal disjunctivist is committed to telling *some* positive story of ‘Bad’ experience.

The worry that phenomenal disjunctivism is unacceptably quiet about the nature of ‘Bad’ experience is vociferously expressed by Sturgeon⁵⁰ who says that,

“[...] we have no positive story about the phenomenology of illusion, and no positive story about hallucination at all. Disjunctive Quietism denies [that] a common thread runs through its [‘Good’ and ‘Bad’ disjuncts], and then remains studiously silent. (1998: 184) [...] it treats neither illusion nor hallucination effectively.” (1998: 186)

The worry is not that, as Sollberger (2007: 14) points out, the phenomenal disjunctivist’s failure to explain the ‘Bad’ disjunct is counterintuitive – after all, I already buck intuition by denying that indiscriminable ‘Good’ and ‘Bad’ experiences share objective phenomenal character. Nor is it, as Sturgeon (1998: 186) points out, that *no* such explanation is necessarily available. Rather, it is that failing to positively explain its ‘Bad’ disjunct precludes the phenomenal disjunctivist from meeting an *adequacy condition* on *any* explanatorily adequate theory of experience which, Sturgeon claims, is jointly constituted by five “remarkable features.” This is,

Adequacy Condition: A theory *t* of experience is explanatorily adequate *iff* *t* explains why a Good experience E_G and Bad experience E_B are (i) *reflectively indiscriminable* ($E_G \equiv_{RI} E_B$) (ii) *scene-immediate* ($E_G \equiv_{SI} E_B$) (iii) *subjectively equivalent* ($E_G \equiv_{SE} E_B$) (iv) *rationaly equivalent* ($E_G \equiv_{RE} E_B$), and, (v) *behaviourally equivalent* ($E_G \equiv_{BE} E_B$).

Sturgeon’s argument is that, since the necessary conditions (i)-(v) are pre-theoretic facts about experience that constrain any theory about its essential nature, and since phenomenal

⁵⁰ See also, e.g. Dancy (1995: 435) and Foster (2004: 124).

disjunctivism's standard theory of 'Bad' experience is *no more* than a mere negation of naïve realism's thought that 'Good' experience is intrinsically world-involving and world-acquainting, it cannot explain anything substantive about 'Bad' experience at all. For example, suppose that you are on a Safari and it looks *as if* a lion is gaining ground. You desire not to become lion-food. Five things seem obvious.

First, recall that 'Looks' statements are characterized disjunctively. The thought now is that when,

(D*) It looks to you *as if* a lion is approaching.

You cannot reflectively discriminate between,

(D.i*) *L* is a non-misleading perception of the fact that a lion is approaching ('Good' disjunct); *or*

(D.ii*) *L* is an illusion *as of* a lion approaching ('Bad' disjunct); *or*,

(D.iii*) *L* is a hallucination *as of* a lion approaching. ('Bad' Disjunct)

(Instances of *D-D.iii*, §2.1)

That you cannot reflectively discern any phenomenal differences between (D.i*)-(D.iii*) does not mean that you cannot exercise those cognitive capacities which can determine what kind of look-state you are in: if you have warrant for thinking that you are hallucinating, then you may well know that your experience is 'Bad.' But in line with *reflective indiscriminability*, what is phenomenally available to you does not enable you to reflectively discriminate between a 'Good' and 'Bad' lion-experience. 'Good' and 'Bad' experiences, then, share the remarkable phenomenal feature of being *reflectively indiscriminable*.

Second, irrespective of its essential nature, your experience *as of* a lion approaching will seem to immediately present some scene, viz., a lion approaching – 'Good' and 'Bad' experiences, as Sturgeon says, "seem to place objects and their features *directly* before the mind" (1998: 182). That is, irrespective of whether or not your lion-experience is 'Good' or 'Bad', it phenomenally strikes you that a lion is approaching. 'Good' and 'Bad' experiences, then, share the remarkable phenomenal feature of *scene-immediacy*.

Third, irrespective of its essential nature, your experience *as of* a lion approaching is subject to three plausible intuitions that comprise subjectivity. First, it is subjectively *like* something for you when a lion looks to be approaching; second, to *fully* understand your experience, you must know what it is subjectively like; and third, to know what it is subjectively like, you must have had *that* kind of experience (or failing that, a very similar kind of experience). Your describing the scene (e.g. ‘I anticipated feeling intense pain as the lion’s teeth shredded my flesh’) won’t allow me to fully capture those subjective qualities since I have not had your kind of experience.⁵¹ ‘Good’ and ‘Bad’ experiences, then, share the remarkable phenomenal feature of *subjective-equivalence*.

Fourth, irrespective of its essential nature, your experience *as of* a lion approaching can rationally occasion certain beliefs such as *a lion looks to be approaching*. Since those beliefs that are rationally occasioned by ‘Bad’ experience will lack factive support, rationally occasioned belief does not *eo ipso* entail knowledge. Still, when you judge *that a lion is approaching* in circumstances where you have no obvious reason to suspect that countervailing conditions obtain, you are epistemically blameless since you cannot reasonably be expected to form no such beliefs in that scenario (you would be epistemically irresponsible to judge *that a lion is approaching* if you have warrant for thinking that you are hallucinating). ‘Good’ and ‘Bad’ experiences, then, share the remarkable intentional feature of *rational equivalence*.⁵²

Fifth, irrespective of its essential nature, your experience *as of* a lion approaching can rationally occasion certain behaviours. For instance, if a look rationally occasions your belief *that a lion is approaching*, then that belief plausibly conjoins with your desire not to become lion-food, and the two will rationally occasion your fleeing. And even if you suspect that your experience is ‘Bad’, it can still rationally occasion e.g. a reflexive shriek as the hallucinatory lion roars (compare: recently, even though I knew the event was fictional, I reflexively ducked at a ‘meteorite’ that looked to hurtle out of the screen whilst watching a 3-D film). ‘Good’ and ‘Bad’ experiences, then, share the remarkable intentional feature of *behavioural equivalence*.

⁵¹ Such intuitions presumably explain our reluctance to attribute a phenomenal understanding of visual experience to the congenitally blind, e.g. describing a city-scape – ‘Straight ahead, a shiny steel skyscraper’ – to such subjects does not seem to capture the experience’s subjective qualities since they have not had *that* kind of experience.

⁵² Later (§4.1.1, §4.2.2, §5.1.1), I deny that *all* ‘Bad’ experiences rationally occasion real beliefs. Still, this unqualified assumption works well until then.

It might be suspected that the phenomenal disjunctivist need not explain a ‘Bad’ experience’s remarkable features since there are no such features to explain. This is unintelligible. If a ‘Bad’ experience *as of* a lion approaching conjoins with your desire not to become lion-food and you are motivated to flee, then your experience does not merely *seem* to have the remarkable feature of *behavioural equivalence* – it truly *does* as evinced by you fleeing! (this goes *mutatis mutandis* for remaining remarkable features). And even if such a denial is intelligible, we are still owed some story of why ‘Bad’ experience *seems* to have remarkable features that it objectively lacks. In other words, I am arguing that *if*,

Adequacy Condition: A theory *t* of experience is explanatorily adequate *iff* *t* explains why a Good experience E_G and Bad experience E_B are (i) *reflectively indiscriminable* ($E_G \equiv_{RI} E_B$) (ii) *scene-immediate* ($E_G \equiv_{SI} E_B$) (iii) *subjectively equivalent* ($E_G \equiv_{SE} E_B$) (iv) *rationally equivalent* ($E_G \equiv_{RE} E_B$), and, (iv) *behaviourally equivalent* ($E_G \equiv_{BE} E_B$).

can be denied, then we should accept:

Adequacy Condition*: A theory *t* of experience is explanatorily adequate *iff* *t* explains why a Good experience E_G and Bad experience E_B *seem* (i) *reflectively indiscriminable* ($E_G \equiv_{RI} E_B$) (ii) *scene-immediate* ($E_G \equiv_{SI} E_B$) (iii) *subjectively equivalent* ($E_G \equiv_{SE} E_B$) (iv) *rationally equivalent* ($E_G \equiv_{RE} E_B$), and, (iv) *behaviourally equivalent* ($E_G \equiv_{BE} E_B$).

An analogy may persuade: Just as my task is to explain why reflectively indiscriminable ‘Good’ and ‘Bad’ experiences do not, contra intuition, share a common phenomenal ingredient, so it is the task of someone who denies that ‘Bad’ experience lacks remarkable features to explain why this nevertheless seems to be the case. Explaining real (*Adequacy Condition*) or apparent remarkable features (*Adequacy Condition**) thus constitutes a plausible constraint on any explanatorily adequate theory of ‘Bad’ experience.

2.2.1 Positive Disjunctivism (A First Attempt)

One story that the phenomenal disjunctivist might tell of ‘Bad’ experience is that its remarkable features spring from the indiscriminability property that it shares with ‘Good’ experience. This story is implicit in Langsam who says that,

“... a perceptual experience that presents an appearance of redness instantiates a phenomenal feature that I shall refer to as [...] redness₁, whereas an [indiscriminable] hallucinatory experience that presents an appearance of red instantiates a different phenomenal feature [that] of redness₂. [...] the phenomenal features of redness₁ and redness₂ are determinate properties of a determinable to which only they belong.” (1995: 40)

In Langsam’s example, a ‘Good’ experience presents the subject with a red look *in virtue* of instantiating the determinate phenomenal feature redness₁, where this feature is metaphysically grounded in the worldly object’s perceptible property of *being coloured red*. In contrast, a hallucinatory experience presents the subject with a reflectively indiscriminable red look *in virtue* of instantiating the reflectively indiscriminable determinate phenomenal feature redness₂, where this feature is *not* metaphysically grounded in any worldly object’s perceptible property of *being coloured red*. Langsam elucidates this claim by analogy: Just as the determinate concepts *red* and *yellow* exemplify distinct instances of the determinable concept *colour*, so a ‘Good’ experience of redness₁ and indiscriminable hallucinatory experience of redness₂ exemplify instances of the determinable colour property *red* (it is easy to see how Langsam’s remarks apply to other perceptible properties, e.g. a ‘Good’ experience *as of* something looking square (square₁) and a reflectively indiscriminable hallucinatory experience (square₂) will exemplify instances of the determinable shape property *square*).

Langsam’s analogy might seem suspect. For science robustly explains the physical basis of colours in terms of the interaction between the nomological-physical laws of light (e.g. the phenomenon of Rayleigh scattering is thought to be the physical basis of the sky’s looking, to most persons, blue) and properties of the subject’s visual system (e.g. the sensitivity of her photoreceptor cells). But Langsam does not likewise robustly explain *how* a hallucinatory experience instantiates its phenomenally type-distinct “feature” – it is simply presupposed that the determinable colour property *red* somehow instantiates the reflectively indiscriminable phenomenal features redness₁ and redness₂. In which case, we have no substantive conception of hallucination at all.

Langsam can resist this tack by taking Martin’s (2004; 2006) line that hallucinatory experience consists in *no more* than the negative epistemic property of being reflectively indiscriminable from some metaphysically possible ‘Good’ experience; hence no substantive conception of *reflective indiscriminability* is required, i.e. it is a primitive property requiring no higher-order

explanans. On this conception, logical space opens for Langsam to argue that *reflective indiscriminability* can ground a hallucinatory experience's other remarkable features.

Take *scene-immediacy*. According to Langsam, 'Good' scene-immediacy springs from naïve realism's acquaintance relation. That is, when,

- (1) A subject s has a Good experience E_G of a worldly object, \underline{o}_w , that is F .

We have,

- (2) *Scene-Immediacy*: S 's Good experience E_G immediately presents a worldly object, \underline{o}_w , that is F .

Because,

- (3) S stands in a direct *sui generis* relation r to \underline{o}_w 's worldly F -ness.⁵³

Langsam's thought is that a 'Good' experience is scene-immediate because the subject stands in a direct acquaintance relation to those worldly items that are presented to her. Now, Sturgeon (2000: 14) objects that (3) cannot be (2)'s truth-maker since naïve realism's thought that, in 'Good' experience, a subject stands in an acquaintance relation to worldly object-properties does not *a priori* entail that they are presented in a scene-immediate way. For there exist, Sturgeon says, "countless [r -like] relations definable" (ibid) that are unrelated to scene-immediacy. But Sturgeon's demand for *a priori* entailment is overly stringent. That other *non-perceptual* r -like relations exist is irrelevant to *perceptual* experiences. In 'Good' experience, Langsam can insist that, *if naïve realism is true*, then an acquaintance relation *does* secure *scene-immediacy*.

Less compelling is the explanation of hallucinatory scene-immediacy. Definitionally, hallucinatory scene-immediacy cannot spring from naïve realism's acquaintance relation. Now, since Langsam's thought seems to be that hallucinatory experience essentially consists in the negative epistemic property of being reflectively indiscriminable from some metaphysically

⁵³ Though I would say that *scene-immediacy* springs from the fact that a 'Good' experience's objective phenomenal character is *constituted* by \underline{o}_w 's F -ness (likewise for remaining remarkable features). Fortunately, nothing important hinges upon this difference.

possible ‘Good’ experience, he must employ the remarkable feature of *reflective indiscriminability* to secure hallucinatory scene-immediacy. His argument presumably goes: ‘Good’ and hallucinatory experiences can be reflectively indiscriminable; ‘Good’ experience is phenomenally scene-immediate; so, reflectively indiscriminable hallucinatory experience is likewise scene-immediate. That is, when,

- (1) A subject *s* has a hallucinatory experience E_H , where E_H seems to immediately present an object, \underline{o} , as being *F*.

It is because,

- (2) *S* cannot reflectively discriminate E_H ’s phenomenal appearance from some metaphysically possible scene-immediate Good experience E_G ’s phenomenal appearance.

Langsam’s thought is that a hallucinatory experience is scene-immediate because it is reflectively indiscriminable from some metaphysically possible ‘Good’ experience, e.g. my hallucination *as of* a mango seems to immediately present me with a mango because I cannot reflectively discriminate it from a ‘Good’ experience *of* a mango that *is* scene-immediate. But it is unclear *how* (2) can be (1)’s truth-maker *in absentia* some positive story of how scene-immediacy can phenomenally spring from *reflective indiscriminability*.⁵⁴ One such story might appeal to the subject’s *beliefs*: specifically, Langsam might reason that, since the subject believes that her hallucination is reflectively indiscriminable from some ‘Good’ counterpart, and since ‘Good’ experience is scene-immediate, her reflectively indiscriminable hallucination is likewise scene-immediate. But that just shifts the bump around the remarkable rug: For now we are owed some story of how hallucinatory scene-immediacy can phenomenally spring from the subject’s *intentional state*. Again, it is unclear what this story might be: We have intentional facts about beliefs on one hand and phenomenal facts about scene-immediacy on the other, with no positive story of how to alchemize the latter from the former. At best, it is just opaque how *reflective indiscriminability* can robustly secure *scene-immediacy* (this objection applies *mutatis mutandis* to the remarkable phenomenal feature of *subjective equivalence*).

⁵⁴ Of course, Langsam can claim that the *object-immediacy* of *illusion* is secured by direct contact with the worldly object, but that cannot secure reflectively indiscriminable *property-immediacy*, e.g. direct contact with Müller-Lyer lines can secure their scene-immediacy but not their reflectively indiscriminable *unequal-in-length* scene-immediate look.

This problem is not limited to explaining remarkable *phenomenal* features. Take *rational equivalence*. Definitionally, hallucinatory rational equivalence cannot spring from naïve realism's acquaintance relation. Now, since Langsam's thought seems to be that hallucinatory experience fundamentally consists in the negative epistemic property of being reflectively indiscriminable from some possible 'Good' experience, he must, again, employ the remarkable feature of *reflective indiscriminability* to secure hallucinatory rational equivalence. Again, his argument presumably goes: 'Good' and hallucinatory experiences can be reflectively indiscriminable; 'Good' experience rationally occasions beliefs; so, reflectively indiscriminable hallucinatory experience likewise rationally occasions beliefs. That is, when,

- (1) A subject s has a hallucinatory experience E_H , where E_H rationally occasions her belief *that it is as if a worldly object, \underline{O}_w , is F .*

It is because,

- (2) S cannot reflectively discriminate E_H 's phenomenal appearance from some metaphysically possible Good experience E_G 's phenomenal appearance, where E_G would rationally occasion her belief *that \underline{O}_w is F .*

Langsam's thought is that a hallucinatory experience can rationally occasion a belief because it is reflectively indiscriminable from some metaphysically possible 'Good' experience that would rationally occasion that belief, e.g. my hallucination *as of* a mango can rationally occasion my belief *that a mango is in front of me* because I cannot reflectively discriminate it from a 'Good' experience *of* a mango that *would* rationally occasion that belief. But it is unclear *how*, even if rationally occasioned belief is minimally construed as *causally* (rather than *epistemically*) motivated belief, (2) can be (1)'s truth-maker *in absentia* some positive story of how rational equivalence can intentionally spring from *reflective indiscriminability*. Again, it is unclear what this story might be: We have phenomenal facts about indiscriminability on one hand, and epistemic facts about belief on the other, with no positive story of how to alchemize the latter from the former.⁵⁵ At best, it is opaque how *reflective indiscriminability* can robustly

⁵⁵ Appealing to *scene-immediacy* is obviously unhelpful: specifically, it might be reasoned that, since a hallucination and some metaphysically possible 'Good' experience are indiscriminable vis-à-vis *scene-immediacy*, the former can rationally occasion particular beliefs and actions. But, again, that story still shifts the bump around the remarkable rug: For we are now owed some positive story of how hallucinatory scene-immediacy can spring from the shared

secure *rational equivalence* (this objection applies *mutatis mutandis* to the remarkable intentional feature of *behavioural equivalence*).

The problem here is that although Langsam can plausibly employ naïve realism's acquaintance relation to secure a 'Good' experience's remarkable features, no positive story is forthcoming about how a hallucinatory experience's remarkable features can spring from a shared indiscriminability property. This does not mean that no such story is available. It is just that the phenomenal disjunctivist who presupposes that *reflective indiscriminability* is a primitive given that can then automatically secure a hallucination's other remarkable features unwittingly deprives herself of being able to convincingly explain a 'Bad' experience's remarkable phenomenal and intentional features.

2.2.2 Positive Disjunctivism (A Second Attempt)

The reader might suspect that I have misconstrued the nature of *reflective indiscriminability*. If we take the tack that a hallucinatory experience essentially consists in *no more* than the negative epistemic property of being reflectively indiscriminable from some possible 'Good' experience, then *reflective indiscriminability* will obviously be too deflationary to secure its remarkable features. But if we take Fish's (2008; 2009) tack that a hallucinatory experience essentially consists in the fact that it produces indiscriminable *cognitive effects* in the subject that some metaphysically possible 'Good' experience would have produced in *that* doxastic setting, then, or so Fish argues, *reflective indiscriminability* becomes robust enough to secure its remarkable features. This is because a hallucinatory experience's remarkable features just *are* those cognitive effects which explain everything about its mental nature that *needs* to be explained.

In Fish's words,

“[...] a hallucination is a mental event that, while lacking phenomenal character, produces the same cognitive effects in the hallucinatory subject that a veridical perception of a certain kind would have produced in a rational subject in the same overall doxastic setting.” (2009: 114)

This means that,

indiscriminability property in the first place!

“[...] the subject will [...] take himself to be having a perceptual experience of that kind, which in turn enables us to explain everything that the hallucinating subject thinks, does, and says.” (2008: 155)

As a result, my ...

“[...] demand for a more substantial intrinsic characterization of the hallucinatory mental state is misguided.” (2008: 156)

Unlike Langsam's primitive conception of *reflective indiscriminability*, the reflective indiscriminability of hallucination is now said to essentially consist in those cognitive effects that a 'Good' experience would have produced in that doxastic setting. Hence,

Fish's Hallucination Thesis: A mental event m is a pure hallucination *iff* m (i) lacks objective phenomenal character⁵⁶, and, (ii) produces in a rational subject s the same cognitive effects that a Good experience E_G would also have produced in s in those doxastic circumstances.

A mental event is thus a hallucination *as of* a mango *iff* that event cognitively motivates the subject to form beliefs such as 'I see something that looks like a mango'⁵⁷, where a 'Good' experience *of* a mango would likewise cognitively motivate her to form a highly similar belief in those doxastic circumstances. Construing the indiscriminability property that hallucinatory and 'Good' experience share *as* indiscriminability of cognitive effects thus enables us to “explain everything” about hallucination that requires explanation – in this case, why the subject thinks that she sees a mango that is not objectively there. For this reason, Fish concludes, I am mistaken to demand a “substantial intrinsic” or ‘Top Down’ explanation of the cognitive effects themselves.

⁵⁶ This conjunct can be ignored since we need only Fish's idea that *reflective indiscriminability* fundamentally consists in indiscriminability of cognitive effects.

⁵⁷ Or, if the subject resists believing that she really sees a mango, then she is likely to form the more cautious belief that (Fish, 2008: 165) 'I believe that [it is as if I see that {there is a mango}]', where this cognitive effect is indiscriminable from one which would be produced by a resisted 'Good' experience (i.e. one that she mistakenly believes is 'Bad') in those overall doxastic circumstances.

Fish is not denying that cognitive effects have *no* ‘Top Down’ explanation. Someone peering into an objectively trapezoidal Ames room is likely to see that it looks cube-shaped, and that someone positioned left looks significantly smaller than someone positioned right (when of similar height). *To illustrate:*

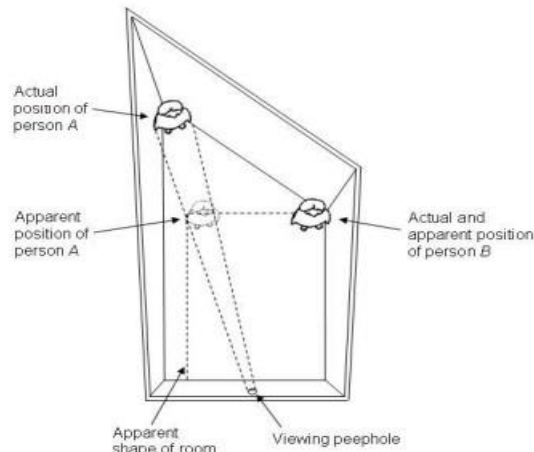


Image reproduced from <http://www1.appstate.edu/~kms/classes/psy3215/Depth/AmesDiagram.htm>

The *size-distance scaling* explanation posits that, since the room’s trapezoidal shape physically means that person A’s visual angle is smallest, and since the perceived distance is the same for both persons, person A looks smaller than person B, i.e. the room’s misleading cube-shape ‘overrides’ our tendency to perceive objects as looking constant in size. But the *size-relative* explanation posits that, since an object’s perceived size at least partly depends on its size relative to other objects, and since person B looks to occupy all of the distance between the room’s floor and ceiling whilst person A looks to occupy only a part of the distance, person A looks smallest, i.e. our tendency to perceive objects as looking constant in size ‘overrides’ the room’s misleading cube-shape. For Fish, it is of secondary importance which antecedent physicalist explanation is right (which is why it is also consistent with Fish’s view that *no* such explanation exists). What matters is that someone looking into an Ames room will typically be cognitively motivated to believe things such as ‘Person A looks smaller than person B’ and ‘The room looks cube-shaped’, where very similar beliefs would be formed when looking at two people who significantly differ in height that are stationed in top opposite corners of a cube-shaped room. Similarly, there may well be some antecedent physicalist explanation of a subject’s mango hallucination – it is just that that explanation will not then ground the mentalistic explanation of her beliefs and behaviours.

In taking this tack, Fish (2008: 155) can be understood as retaining an *explanatory claim* according to which a hallucinatory experience's indiscriminable cognitive effects explain everything substantive about its mental nature whilst rejecting a *constitutive claim* according to which a hallucinatory experience's fundamental nature is *exhaustively* constituted by such effects. That is, Fish retains,

Explanatory Claim: For all subjects s : If a subject s has a hallucinatory experience E_H , then necessarily, E_H produces in s cognitive effects $c_1 \dots c_n$ that a Good experience E_G would also have produced in s in those doxastic circumstances, where $c_1 \dots c_n$, sufficiently explain E_H 's fundamental nature.

And denies the,

Constitutive Claim: For all subjects s : If s has a hallucinatory experience E_H , then necessarily, E_H produces in s cognitive effects $c_1 \dots c_n$ that a Good experience E_G would also have produced in s in those doxastic circumstances, where $c_1 \dots c_n$ constitute E_H 's fundamental nature.

Traditionally (e.g. Armstrong 1961: 83; Pitcher 1971), $c_1 \dots c_n$ have been construed as a subject's false beliefs. The *constitutive claim* has then been invoked to ensure that, whenever she hallucinates, she believes that she sees something, whereas the *explanatory claim* has been invoked to explain her beliefs and behaviours. Against this, Fish insists that the *constitutive claim* need not (though it *may*) metaphysically ground the *explanatory claim*.⁵⁸ He (2008: 156) provides an analogy: Just as everything substantive about the concept *bachelorhood* can be explained by pointing out that bachelors are unmarried men (we need not appeal to some antecedent reductive explanation such as a man's desire to remain unmarried), so, everything substantive about a hallucinatory experience can be explained by pointing out that it produces indiscriminable cognitive effects in the subject as some possible 'Good' experience (we need not appeal to some antecedent reductive explanation involving, say, neurophysical facts).

⁵⁸ The reason that Fish (2008: 154) resists the thought that the *explanatory claim* has a constitutive base is that it explains our intuition that non-linguistic creatures can hallucinate. His thought is that we should reject the *constitution claim* since it implausibly ascribes beliefs to non-linguistic creatures, whilst we should retain the *explanatory claim* to explain certain of their behaviours, e.g. if a cat paws at the air, we might say that it is in a mental state that produces indiscriminable cognitive effects as some possible 'Good' experience.

Fish is now placed to explain hallucination's remarkable features. For it can now be argued that, since a hallucination's cognitive effects just *are* its remarkable features, and since such effects explain everything substantive about it that needs to be explained, it is unnecessary to seek a reductive antecedent explanation of the remarkable features themselves. And in Langsam's example, the thought is that the subject's 'Good' experience (redness₁) and hallucinatory experience (redness₂) are (i) reflectively indiscriminable *only if* she believes that redness₁ and redness₂ are of phenomenal type *F*, (ii) scene-immediate *only if* she believes that redness₂ seems to present the colour *red* in the same scene-immediate way as redness₁, (iii) subjectively equivalent *only if* she believes that redness₂ has the same subjective phenomenal character as redness₁, (iv) rationally equivalent *only if* redness₂ rationally occasions the same beliefs as redness₁, and, (v) behaviourally equivalent *only if* redness₂ rationally occasions the same actions as redness₁. *Reflective indiscriminability* can be employed to secure *scene-immediacy* and *subjective equivalence* since the reason why the subject believes that redness₁ and redness₂ are of phenomenal type *F* is that they seem to immediately present *red-ness* and are subjectively equivalent. In turn, *scene-immediacy* can be employed to secure *rational* and *behavioural* equivalence since the reason why redness₂ rationally occasions certain of the subject's beliefs and behaviours is that it seems to immediately present something red to her consciousness. Fish's phenomenal disjunctivism thus seems to positively explain everything substantive about the nature of its 'Bad' disjunct.

That hallucinatory experiences have cognitive effects is unilluminative: Of course the subject who believes that she sees something red *in absentia* any candidate worldly object will be in a mental state that produces indiscriminable cognitive effects as some possible 'Good' experience of something that is red in those doxastic circumstances. The question is *why* her mental state should produce such effects at all. Consider Fish's explanation of hallucinatory *scene-immediacy*:

(Me): Why did you believe that you had a scene-immediate hallucination *as of* a mango?

(Fish): That's obvious! It produced an indiscriminable cognitive effect (viz. the belief *that something scene-immediately looked like a mango*) as some possible 'Good' experience *of* a mango.

(Me): But what was it *about* your hallucination that produced that effect?

(Fish): That's irrelevant: it just *did*.

That is no answer at all. I wanted to know how Fish's hallucination secured *scene-immediacy*. Fish replied that his hallucination produced an indiscriminable belief as that of some possible 'Good' experience. Pressing further, I asked why his hallucination produced that effect. But because, according to Fish, *scene-immediacy* just *is* one such effect, no substantive answer was forthcoming.

The source of the difficulty is that, as Johnston says, "by treating [the] *explanans* [i.e. hallucination's remarkable features] as analytically equivalent to the *explanandum* [i.e. hallucination's cognitive effects]" Fish's story "leaves no room for a perfectly good explanation" (2004: 125). A hallucination's remarkable features are analysed *as* its indiscriminable cognitive effects; but such effects just *are* its remarkable features; so, its indiscriminable cognitive effects cannot then be sensibly invoked to explain its remarkable features.⁵⁹ Fish's attempt to tell a positive story of *reflective indiscriminability* that can be employed to secure a hallucination's remaining remarkable features has gotten the phenomenal disjunctivist nowhere *in absentia* some independent story of its cognitive effects. Jettisoning the *constitutive claim* has condemned this stripe of phenomenal disjunctivist to telling an objectionably circular story of hallucination.

It is unclear what options remain. Fish cannot ground a hallucination's remarkable features in its objective phenomenal character since he thinks that hallucinations are phenomenally characterless mental states. Neither will it do for him to insist that *if* his theory of hallucination is correct, then the correct theory of hallucination cannot explain remarkable features when the very problem is that his theory fails to explain them in the first place. I submit that Fish's attempt to positively explain the indiscriminability property that 'Good' and hallucinatory experiences share in terms of indiscriminability of cognitive effects collapses back into a problematic disjunctive quietism that leaves a hallucination's remarkable features, and hence, the fundamental nature of phenomenal disjunctivism's 'Bad' disjunct unexplained.

⁵⁹ Suppose instead, that Fish denies that hallucinatory experiences are higher order mental events than the act of seeing and claims that both acts are somehow *second-order*, e.g. seeing now involves seeming to the subject to be seeing. The objection recurs. For the subject's mango hallucination is now analysed as falsely seeming to her that she sees a mango. But we can still ask *why* it falsely seems that she is seeing a mango. The obvious explanation that she is hallucinating a mango is unavailable to Fish since the *explanans* (i.e. hallucination) is erroneously equivocated with the *explanandum* (i.e. why it falsely seems that she sees something).

2.2.3 Summary

I have argued that the phenomenal disjunctivist is committed to telling a *positive* story of ‘Bad’ experience. One such story, as told by Langsam, claimed that a ‘Bad’ experience’s objective phenomenal character essentially consists in *no more* than the negative epistemic property of being first-person reflectively indiscriminable from some possible ‘Good’ experience, where this shared indiscriminability property then secured remaining remarkable features. But this stripe of phenomenal disjunctivism was shown to be just too deflationary to secure remaining remarkable features. This led to Fish’s story, which construed *reflective indiscriminability* as essentially consisting in indiscriminability of cognitive effects. But this stripe of phenomenal disjunctivism was shown to lapse back into an objectionable quietism since indiscriminable cognitive effects are analytically equivalent to those remarkable features that require independent explanation. This leaves a gap in the disjunctivist market for an alternative stripe of *positive phenomenal disjunctivism* that can perform this explanatory work. Before introducing that, I want to sketch the final constraint on a successful naïve realist solution to the *p.m.e.*

2.3 Unidisjunctivism

Though the phenomenal disjunctivist is committed to telling a positive story of ‘Bad’ experience, I have not yet explained that story’s *shape*. In particular, I have not yet explained whether or not my positive story is what I will call a *undisjunctivism* that treats all ‘Bad’ experiences as falling under the umbrella of a single theoretical framework (i.e. a framework that provides the same fundamental explanation of dreaming, hallucination, and illusion, where certain of its non-essential axioms may be modified, or even abandoned, depending upon the particular ‘Bad’ experience being explained) or a *multi-disjunctivism* that treats different ‘Bad’ experiences – *either* at least one of dreams, hallucination, or illusion *or* tokens of the same ‘Bad’ sub-class – as having fundamentally distinct non-overlapping explanans. Here, I sketch three reasons for preferring *undisjunctivism* (bold analogy: Just as the physicist, working along the right lines, aims to discover a ‘Theory of Everything’ that has the explanatory power to unify general relativity and quantum mechanics, so the phenomenal disjunctivist, working along the right lines, aims to discover a ‘Theory of ‘Bad’ Experience’ that has the explanatory power to unify dream, illusory, and hallucinatory experience).

First, I want to dispel the worry that a *truly* unified theory of experience ought to provide a unified explanation of both ‘Good’ and ‘Bad’ experience since they share remarkable features

(e.g. one such story is that ‘Good’ and ‘Bad’ experiences share a certain sort of representational content); hence undisjunctivism becomes irrelevant, and *Basic Phenomenal Disjunctivism* must fall.

This objection problematically presupposes a mutually agreed conception of a unified theory of experience that I do not accept. Though ‘Good’ and ‘Bad’ experiences have the same remarkable features, I claim that their relationally determined objective phenomenal characters warrant treating them as phenomenally type-distinct mental states that have distinct non-overlapping explanans. An analogy may persuade: That a migraine and brain tumour can cause reflectively indiscriminable pain experiences does not entail that they must have the same fundamental physical explanation since the former is rarely caused by abnormal cell growth; likewise, that ‘Good’ and ‘Bad’ experiences share remarkable features does not entail that they must have the same metaphysical explanation since only the former’s objective phenomenal character is relationally determined by the world. My objector’s error, then, is the presupposition that experiences with the same remarkable features must share a fundamental ingredient when I am already conceptually committed to rejecting this conception of a unified theory of experience.

That dispelled, here are three reasons for preferring undisjunctivism.

1. *Undisjunctivism is Elegant*

Elegant theories, in any domain, are generally considered to have the virtues of being concise, simple, and explanatory satisfying. But consider Smith’s multi-disjunctivism which claims that ...

“When Macbeth hallucinated a dagger [...] he was aware of a dagger, located at some point in space before him, [a merely] *intentional* object.”(2005: 234)

Whereas illusory experience is said to essentially consist in a radically different tactile phenomenology called the *Anstoss* which is,

“[...] manifest to us simply *as a force*: a force that resists the counter-force of our animal striving.” (2005: 160) [...] in illusory cases of the *Anstoss*, what varies, and so what underlies our mistaken judgements, is our appreciation of the force *with*

which we ourselves act on the alien force. (2005: 166)

Smith's multi-disjunctivism thus treats the objective phenomenal characters of (i) hallucinatory experiences as essentially consisting in direct awareness of *non-existent intentional objects* (hence Macbeth's dagger-hallucination lacked any intrinsic ontological nature), and, (iii) illusory experiences as essentially consisting in the subject's *mistaken judgement* about the nature of the external force that she actively resists (e.g. when tired, we might misjudge the intensity of the force exerted on our arm when attempting to lift a barbell). Here then, we have a multi-disjunctivism that posits two radically distinct theories of hallucination and illusion, and hence, assigns hallucinatory and illusory experiences mutually exclusive 'Bad' disjuncts.

Unidisjunctivism's commitment to just one theory of 'Bad' experience is surely simpler, more concise, and explanatorily satisfying than a multi-disjunctivism which must posit *at least* two independent theories.⁶⁰ Here is a familiar analogy: Copernicus's Heliocentrism reduced the numerous and complicated epicyclical orbits posited by Ptolemy's Geocentrism whilst still adequately explaining planetary motion; likewise, unidisjunctivism reduces the number of the phenomenal disjunctivist's metaphysical commitments whilst, as I will argue in remaining chapters, adequately explaining the objective phenomenal characters of all paradigmatic 'Bad' experiences. I am not absurdly denying that elegant theories can be wrong (e.g. the ancient idea that everything material is constituted by the four elements of earth, fire, wind, and water has long been discredited): Rather, I am suggesting that, *ceteris paribus*, a theory of 'Bad' experience that does not have multiple metaphysical commitments is more concise and explanatory satisfying, and that unidisjunctivism has the right conceptual shape to fulfil that brief.

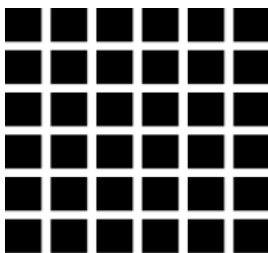
2. Unidisjunctivism can handle Hard to Classify Cases

Some 'Bad' experiences resist neat categorization: in particular, it is doubtful, as Macpherson (2013: 11) points out that, certain 'Bad' experiences can be straightforwardly categorized as dreams or illusions or hallucinations. One such case is the Herman-Hering grid.⁶¹

⁶⁰ Hellie's more complex multi-disjunctivism according to which "*this* hallucination of an apple consists in acquaintance with a sense-datum [whilst] *that* indiscriminable hallucination of an apple consists in the representation of a certain apple-relevant proposition" (2013: 2-3) magnifies this worry since token 'Bad' experiences from within the *same* class are given radically different explanans.

⁶¹ Others possibly include *afterimages* (i.e. images which are seen after exposure to the original stimulus has

Herman-Hering Grid



Normal sighted subjects typically report seeing dark ‘spots’ that alternately appear and disappear at the grid’s intersections. Though psychological scientists usually (e.g. De Lafuente and Ruiz 2004; Schiller & Carvey 2005) characterize the grid as an *optical illusion* in which the subject misleadingly sees the white intersections *as* dark spots, some philosophers (e.g. Brewer 2008: 11; Phillips 2005: 18) have suggested that it is an instance of *partial hallucination* owing to the grid’s interaction with the subject’s visual system. Now, if both multi-disjunctivism and unidisjunctivism have the right conceptual shape to explain standard ‘Bad’ experiences (e.g. there is widespread agreement that the Müller-Lyer is an optical illusion), then *ceteris paribus*, one plausible way to choose between them is to see which one best explains these hard to classify cases.

Consider Smith’s multi-disjunctivism which must, since the *Anstoss* is irrelevant, treat the grid’s ‘spots’ as hallucinated non-existent intentional objects. But that cannot capture the intuition that there is something *illusory* about the experience since the ‘spots’ cannot be seen *in absentia* the grid: conversely, a multi-disjunctivism that treats the ‘spots’ as illusory cannot capture the intuition that there is something *hallucinatory* about the experience since the ‘spots’ are standardly said to be particular objects, and no such objects exist. Perhaps the multi-disjunctivist might attempt to capture both intuitions by treating the grid as a hallucinatory-illusory ‘hybrid’ ‘Bad’ experience, i.e. a ‘Bad’ experience that is categorized as being part-hallucination and part-illusion. This is to treat the experience’s objective phenomenal

ceased) and *dream incorporation* (i.e. as when some worldly event is incorporated into a dream *via* some interpretation befitting its content). Though afterimages are usually characterized as hallucinations (e.g. Macpherson 2013: 11; Smith 2005: 193) and dream incorporations as part of a non-lucid dream, one might think that there is something illusory about both phenomena since they require the existence of something worldly to occur.

character as essentially consisting in *two* phenomenal kinds – *F* (which explains the *illusory* intuition) and *G* (which explains the *hallucinatory* intuition). It will then be claimed that the grid resists neat categorization because it is neither a hallucinatory nor illusory experience but a fusion of both.

This move is unconvincing on two counts: First, since the ‘spots’ are now claimed to be simultaneously non *world-acquainting* (hallucinatory) and *world-acquainting* (illusory), the experience now has a contradictory objective phenomenal character; and second, even *if* this move is coherent, conjoining two radically different phenomenal kinds in order to explain opposing intuitions is an inelegant explanation. My objection thus poses a trilemma for multi-disjunctivism’s story of hard to classify cases: For it is *either* (i) explanatory incomplete (if it ignores the opposing intuition), *or* (ii) metaphysically extravagant (if it seeks to simultaneously capture opposing intuitions by positing two radically different ingredients within the same objective phenomenal character), *or* (iii) inelegant (if it two radically different ingredients are required to explain one experience).

Unidisjunctivism has the right theoretical shape to explain hard to classify ‘Bad’ experiences since the fundamental explanation will be the same whether or not it is a dream *or* hallucination *or* illusion. Suppose I treat the Herman-Hering grid as a partial hallucination: *If* subsequent investigation determines that the ‘spots’ are illusory, then I will have made a taxonomical error rather than the multi-disjunctivist’s more serious one of being unable to adequately explain its objective phenomenal character – that I will have to modify, or even abandon, certain non-essential axioms does not prevent the fundamental explanation from remaining the same. Moreover, I do not risk metaphysical extravagance by positing hybrid ‘Bad’ experiences or explanatory inelegance.

3. Unidisjunctivism Saves Naïve Realism

Incomplete disjunctivist theories of ‘Bad’ experience are commonplace. For instance, some (e.g. Allen 2014) are concerned with hallucination but neglect dreams and illusions; others (e.g. Brewer 2011; Fish 2009; Smith 2005) are concerned with hallucination and illusion but neglect dreams; whereas others (e.g. Dennett 1976; Ichikawa 2009) claim to explain dreams but neglect hallucination and illusion. This explanatory incompleteness risks resurrecting *Spreading* since an opponent can argue that the unexplained variety of ‘Bad’ experience ‘spreads’ its non-naïve ingredient over to *all* ‘Good’ experience – after all, the *p.m.e* requires

just one variety to recur. For instance, Smith's opponent can concede that hallucinations and illusions phenomenally differ from 'Good' experience whilst denying that this is true of dreams which, by familiar appeal to their *reflective indiscriminability*, will once again be exploited to topple naïve realism.

One tack is to tell a different story of the *prima facie* neglected variety of 'Bad' experience. Thus someone with a positive story of hallucination and dreaming might then, perhaps on account of its world-acquainting nature, tell a different positive story of illusory experience. But that, as we have seen, risks *inelegance* and runs into a trilemma when seeking to explain hard to classify cases. Another tack is that the preferred story of one variety of 'Bad' experience can potentially explain others. Thus someone with a positive story of hallucination and illusion might then extend it to dreams – a thought hinted at by Allen who observes that any such story is also “likely to be [an] attractive” (2014: 4) story of dreams. But this attractiveness is not obvious *in absentia* a more explicit commitment to undisjunctivism. And that commitment is needed to prevent *Spreading's* return.

2.4 Conclusion

I have argued that the naïve realist can successfully answer the *p.m.e* by adopting three theses. The first thesis, which sprung from the claim that objective phenomenal characters are relationally determined, was,

Basic Phenomenal Disjunctivism: For all subjects *s*:

- (i) If *s* has a Good experience E_G , then E_G 's objective phenomenal character is of type *F*, where *F* is naïve realist.
- (ii) If *s* has a Bad experience E_B , then E_B 's objective phenomenal character is of type *G*, where *G* is not naïve realist.

The second thesis, which sprung from the requirement to adequately explain a 'Bad' experience's remarkable features, was,

Positive Phenomenal Disjunctivism: For any Bad experience E_B , E_B 's objective phenomenal character is of phenomenal type *F*, where *F* positively explains E_B 's

remarkable phenomenal and intentional features.

The third, which sprung from considerations of elegance, explaining hard to classify cases, and saving naïve realism, was,

Unidisjunctivism: For any Bad experience E_B (where E_B is *either* a dream *or* hallucination *or* illusion), E_B 's objective phenomenal character is of one fundamental phenomenal type F , where F does not type the corresponding Good experience.

It is now time to meet the version of *Basic Phenomenal Disjunctivism* that, or so I will argue, is well-equipped to positively explain, and tell a unified story of, 'Bad' experience.

3

Imaginative Disjunctivism

This chapter introduces (§3.1, §3.1.1) a version of *Basic Phenomenal Disjunctivism* that I call *Imaginative Disjunctivism* (I.D) according to which the objective phenomenal characters of ‘Bad’ experiences are sensory, or perception-like, imaginings that convincingly simulate the objective phenomenal characters of metaphysically possible ‘Good’ experiences. My aim here is to paint a ‘broad brush’ picture of the essential nature of ‘Bad’ experience that will be refined when explaining dreaming, hallucination, and illusion in remaining chapters. This chapter is thus to be understood as offering the first proper sighting of the positive version of *Basic Phenomenal Disjunctivism* that, or so I will argue in remaining chapters, robustly meets the previous chapter’s three constraints on a successful naïve realist solution to the *p.m.e.*

Having sketched (I.D), I consider two objections to its story of perception-like imagination. The first (§3.2) is *The Argument from Force and Vivacity* according to which ‘Bad’ experiences cannot be perception-like imaginings since such imaginings cannot phenomenally capture the indiscriminability property that ‘Good’ and ‘Bad’ experiences share. The second (§3.2.1) is *The Argument from The Will* according to which ‘Bad’ experiences cannot be perception-like imaginings since such imaginings fail to meet a necessary condition on imagining *simpliciter*, viz., subjection to the will. *The Argument from Force and Vivacity* is rejected on the grounds that there are no obvious compelling conceptual or empirical reasons for denying that there exists a class of imaginings which can be reflectively indiscriminable from metaphysically possible ‘Good’ experiences. *The Argument from The Will* is rejected on the grounds that ‘Bad’ experiences and *at least* some perception-like imaginings are subject to the will in a relevantly similar sense, viz., *physically* or *indirectly*.

Having defended (I.D)’s story of perception-like imagination, I consider two objections that any *Positive Phenomenal Disjunctivism* must answer. The first (§3.3) is *The Argument from Local Supervenience* according to which ‘Bad’ experiences cannot essentially be perception-like imaginings since intuition dictates that two intrinsic physical duplicates, one having a hallucination and the other having a ‘Good’ experience, must be having phenomenally type-identical experiences. The second (§3.3.1) is *The Argument from Explanatory Screening Off* according to which *any* positive explanation of ‘Bad’ experience has the undesirable consequence of ‘screening off’ a ‘Good’ experience’s relationally individuated naïve properties

from constitutively explaining its objective phenomenal character, thus rendering naïve realism *irrelevant*. *The Argument from Local Supervenience* is rejected on the grounds that there is nothing intuitively or empirically implausible about the thought that two intrinsic physical duplicates can be in phenomenally type-distinct mental states, viz., one perceptual, one a perception-like imagining. *The Argument from Explanatory Screening Off* is rejected on the grounds that since a necessary condition on the occurrence of ‘Good’ experience is the *presence* of a candidate worldly object, and since a necessary condition on the occurrence of ‘Bad’ experience is the *absence* of a candidate worldly object, those perception-like imaginings that phenomenally type ‘Bad’ experiences cannot ‘spread’ their way over to corresponding ‘Good’ cases and screen off naïve properties from playing their distinctive explanatory role.

3.1. Imaginative Disjunctivism – A Primer

Imaginative Disjunctivism’s key claim is that a ‘Bad’ experience’s objective, *contra* its subjective, perceptual phenomenal character, essentially consists in a phenomenally type-distinct *perception-like*, or *sensory-like*, imagining that simulates some metaphysically possible ‘Good’ perceptual experience’s objective phenomenal character, where this simulation explains the pervasive phenomenal intuition that the experience really *is* perceptual. This bold claim can be illuminated by considering Currie and Ravenscroft’s thought that sensory imaginings,

“[...] involve the capacity to have [...] states that are not perceptions [...], but which are in various ways *like those states* – like them in ways that enable the states possessed through imagination to *mimic* and, relative to certain purposes, to *substitute* for perceptions [...].” (2002:11, my emphasis)

And Martin’s thought that there are,

“[...] distinctive episodes of imagining or imaging which *correspond* to our use of the distinct senses: so we talk of visualizing corresponding to seeing, or listening in one’s head parallel to audition [...].”⁶² (2002: 403, my emphasis)

⁶² For related formulations, see e.g. Budd (2012); Noordhof (2002: 427); and Wollheim (1973).

Let's call those imaginings that can "mimic", "substitute" for, or "correspond" to, a perceptual experience's objective phenomenal character *p*-imaginings. Such talk is capturable by what I call the *Simulation Thesis* (first-pass formulation):

Simulation Thesis: For every Good experience E_G had by a subject s , there is some *p*-imagining I_p that convincingly simulates E_G 's objective phenomenal character.

Experiences belonging to *Imaginative Disjunctivism*'s 'Bad' disjunct are thus understood as mental events that are of the same type as those in which the subject imagines that an object, \underline{o} , looks, feels, tastes, or smells⁶³ F , where these non-naïve imaginings do not phenomenally type those naïve realist experiences which belong to the 'Good' disjunct.⁶⁴ A convincing or successful *p*-imagining is to be understood as one that the subject cannot reflectively discriminate from the corresponding 'Good' experience. I thus allow (it would be wrong not to) that there are *p*-imaginings which are often reflectively discriminable from the corresponding 'Good' experience, e.g. as when you deliberately imagine seeing a banana, and the object of your imagining is phenomenologically presented as occupying a subjective space 'inside your head' rather than a determinate spatio-temporal location in mind-independent reality.

Before developing the *Simulation Thesis*, it is worth noting that my conception of *simulation* is not to be understood as involving *computer* simulation, but instead, as involving what Heal (1986) calls *replication* simulation. When the Cern-physicist utilises a computer program to model, or simulate, the expected behaviour of the Higgs boson particle in the Large Hadron Collider, that simulation is driven by some pre-programmed theory which predicts, and potentially explains, its expected behaviour in that particular environment. But it is not the *primary* role of *p*-imaginings to predict and/or explain the subject's beliefs and behaviours in some particular environment: rather, it is that of convincingly replicating in what 'Good' experiences essentially consist, (viz., naïve properties), where this replication can *then* ground certain of her beliefs and behaviours.

⁶³ In line with the mirroring of perceptual experience, there may well be cross-modal imaginings in which the subject imagines that e.g. \underline{o} looks F and simultaneously feels G .

⁶⁴ I defend this claim in (§3.2). All future references to *p*-imaginings presuppose that they are successful unless otherwise indicated.

The first-pass formulation of the *Simulation Thesis* can now be developed in terms of Goldman's conception of *generic simulation* which is intended to apply to all non-mental and mental processes. Goldman's suggestion is that a process, P , simulates some other process, P' , *iff* ...

“ P [...] replicates [...] P' in some significant respects [...] and in its (significant) [replication] of P' , P fulfils one of its purposes or functions.” (2008: 37)

Let (i) ' P ' be a subject's p -imagining, (ii) ' P' ' be some metaphysically possible 'Good' experience, (iii) that “significant” feature which the subject's p -imagining “duplicates” be a 'Good' experience's naïve property, and (iv) a 'Good' experience's “purpose”, *insofar as it has one*, be that of having certain remarkable features. We then get the following stipulative definition (where ' E_B ' is any 'Bad' experience):

Simulation Thesis: A subject's p -imagining I_p is a successful simulation of some metaphysically possible 'Good' perceptual experience, E_G , *iff*

(i) I_p convincingly replicates E_G 's objective phenomenal character (Premise); *and*,

(ii) in its (significant) replication of E_G 's objective phenomenal character, I_p positively explains E_B 's remarkable phenomenal and intentional features.
(Implication of (i))

Condition (i) will be met *if* the subject's p -imagining convincingly replicates some metaphysically possible 'Good' experience's objective phenomenal character, e.g. if her experience seems to have the naïve property *being-a-case-of-visual-awareness-of-a-white-picket-fence*, but where this phenomenally apparent naïve property is instantiated by a p -imagining and not any worldly item. Condition (ii) is a plausible implication of condition (i): For if a 'Good' experience's remarkable features metaphysically spring from its naïve properties (§2.2.1), then it is plausible that a convincing replication of those properties by some p -imagining is sufficient to positively secure a 'Bad' experience's remarkable features.

Imaginative Disjunctivism thus takes,

Basic Phenomenal Disjunctivism: For all subjects s :

- (i) If s has a Good experience E_G , then E_G 's objective phenomenal character is of type F , where F is naïve realist.
- (ii) If s has a Bad experience E_B , then E_B 's objective phenomenal character is of type G , where G is not naïve realist.

as its starting point, and then seeks to positively explain 'Bad' experience in terms of p -imaginings. Hence,

Imaginative Disjunctivism: For all subjects s :

- (i) If s has a Good experience E_G , then E_G 's objective phenomenal character is of type F , where F is naïve realist. (Naïve realism); or,
- (ii) If s has a Bad experience E_B , then E_B 's objective phenomenal character is of type G , where G is p -imagined. (*Positive instance of Basic Phenomenal Disjunctivism*)

This then, is the version of *Positive Phenomenal Disjunctivism* that, or so I will argue, constitutes a successful naïve realist answer to the *p.m.e.*

3.1.1 Three Refinements

Three refinements will help clarify (I.D). I take each in order of (ascending) importance.

1. P-Imaginings are (probably) constitutively Non-Conceptual

I said (§1.1.1) that 'Good' experience is constitutively non-conceptual. But we might think that p -imaginings are constitutively conceptual since imaginings inherit their "content from the [subject's] thought" (Wollheim 1973: 52).⁶⁵ It might thus be suspected that p -imaginings are ill-equipped to play the simulative role that I am demanding of them. More precisely, since the *condition of cognitive conservation* claims that a mental state F can convincingly simulate another mental state G iff F and G have the *same type* of content (Currie and Ravenscroft 2002: 92), and since my conception of 'Good' experience (G) as being constitutively non-conceptual is plainly

⁶⁵ Compare Sartre's claim that "I shall never find anything in [the imagining] but what I put there." (1972: 7)

at odds with the intuition that *p*-imaginings (F) are constitutively conceptual, *p*-imaginings cannot convincingly simulate the objective phenomenal characters of metaphysically possible ‘Good’ experiences.

That *all* species of the mental genus *imagining* must be constitutively conceptual is implausible. I take my cue from Crane’s (1992: 19) non-controversial assumption that beliefs are constitutively conceptual since their possession requires the subject to possess certain inferential dispositions, e.g. someone who believes that *that dog is grey* (*a* is *F*) and that *that same dog is three-legged* (*a* is *G*) will be disposed to infer that *that dog is grey and three-legged* (*a* is *F* and *G*). These inferential powers depend upon her ability to grasp the structure that is inherent in her belief *that dog is grey and three-legged* – an ability that is constituted by her possessing those concepts – *dog*, *grey*, and *three-legged* – which characterize the content of her belief. Possessing beliefs thus requires possessing certain inferential dispositions, which in turn, requires possessing concepts. But perceptual experiences are not inferentially related to each other nor require that subject must have certain others for them to occur. There is no such thing as reasoning that *that dog has three legs* on the basis of first seeing *that it looks grey* since we *either* have (i) a single visual experience in which we see both of those properties at once, *or*, (ii) two distinct visual experiences that enable us to infer the *belief* that *that dog is grey and three-legged*. Nor does seeing that *that dog is grey* then necessitate seeing *that it has three legs* (or indeed, any other particular sort of experience) since we might e.g. fail to see its three-leggedness. So, we have a *prima facie* case for thinking that concept possession is probably unnecessary to characterize the content of perceptual experience.

P-imaginings are likewise inferentially unrelated to one another and do not necessitate the occurrence of certain others, e.g. someone who *p*-imagines seeing a *grey dog* and then *p*-imagines seeing a *three-legged dog* is not then inferentially disposed to *p*-imagine *seeing a grey dog with three-legs* or to have any other particular sort of *p*-imagining at all. Now, *if* Crane’s claims that perceptual experiences (i) are not inferentially structured like beliefs, and, (ii) do not necessitate the occurrence of any others, suggest that perceptual experience is constitutively non-conceptual, then *ex hypothesi*, the occurrence of (i) and (ii) in *p*-imaginings suggest that *p*-imaginings are constitutively non-conceptual. Of course, subjects usually recognize what they *p*-imagine, but that conceptual recognition must be kept distinct from the nature of *p*-imaginings themselves.⁶⁶

⁶⁶ I recognize that this is a controversial claim which considerations of space preclude delving further into: Thus, my modest aim is to show that *if* Crane’s argument implies that perceptual experience is constitutively non-

One important advantage of my account is that it avoids the worry (e.g. Evans 1982: 124; Peacocke 2001: 614) that someone who construes ‘Bad’ experience as being constitutively conceptual must implausibly deny a wealth of empirical evidence which shows that non-linguistic animals and pre-linguistic infants can have ‘Bad’ experiences.⁶⁷ Perhaps it will be said that empirical evidence can only ever be *behavioural* and not *demonstrative*. Thus, whilst the minor paw movements of a sleeping dog might constitute behavioural evidence that it *seems* to be dreaming, such movements cannot demonstrate that it *is* dreaming. But bluntly resisting empirical evidence in order to save one’s favoured theory is explanatorily unsatisfying; whereas my claim that non-linguistic animals and pre-linguistic infants who exhibit certain behaviours are having constitutively non-conceptual *p*-imaginings is both empirically (since nothing empirical dictates that ‘Bad’ experience is constitutively conceptual) and conceptually (since conceptual argument does not dictate that ‘Bad’ experience must be constitutively conceptual) consistent.

2. *P-Imaginings are (probably) Quasi-Pictorial*

It might be thought that treating *p*-imaginings as being constitutively non-conceptual commits me to *pictorialism*, i.e. the thought that *p*-imaginings just *are* mental pictures which are arrayed for viewing before the ‘mind’s eye’, or more specifically, internal analogue representations of scenes (e.g. Block 1983; Descartes 1641: Med., 3; §3). The reasoning goes: It is plausible that constitutively non-conceptual mental states have analogue content⁶⁸, i.e. content that has “a wealth of detail, and a degree of specificity” (Dretske 1999: 138) or is more fine-grained than the subject’s conceptual repertoire (e.g. I do not possess determinate colour concepts for every shade that I can see); a picture necessarily has analogue content since every point upon its surface is such that some qualitative property is instantiated there; so, *ex hypothesi*, constitutively non-conceptual *p*-imaginings are pictorial.

conceptual, then since it extends to *p*-imagining, we likewise have a *prima facie* case for thinking that *p*-imaginings are constitutively non-conceptual – certainly, it is theoretically simpler to treat *p*-imaginings and perceptual experiences as having the same type of content (whatever that ultimately turns out to be).

⁶⁷ For instance, animals typically display hallucinatory-like behaviour after being treated with hallucinogens (e.g. Ellison 1991; Siegel *et al.*, 1976) and usually respond to visual illusions (e.g. Heydt & Peterhans 1989; Nieder & Wagner 1999). It is also well-known that animals and pre-linguistic infants have r.e.m sleep, which is positively correlated with dreaming.

⁶⁸ Though not *vice-versa* since there might be analogue content that is conceptually capturable.

Clearly, there are not literal mental pictures ‘in the head.’ For the *No Seeum* objection (e.g. Ryle, 1949: 226; Sterelny 1986: 562) reminds us that, despite phenomenal intuition and our ordinary ways of talking, such pictures do not exist anywhere inside the brain – certainly, there are no spatially bounded objects that possess paradigmatic visual properties such as *colour* which can be seen with a ‘mind’s eye.’⁶⁹ Closely related is the *Paraphernalia* objection (e.g. Dennett 1969) which points out that the seeing of mental pictures necessarily requires a ‘mind’s eye’ (and perhaps other paraphernalia such as internal hands to manipulate them with) which is not to be found anywhere inside the brain.

I dispense with objectionable non-existent literal mental pictures and their associated non-existent paraphernalia by treating *p*-imaginings as functioning *as if* they are mental pictures. Call this view *Quasi-Pictorialism* (e.g. Cohen 1996; Kosslyn *et al.* 2004; Rollins 2001). Kosslyn’s (1980: 5-9; 1994: 12-20) influential version treats imagined objects as being functionally analogous to displays on a computer screen: Just as 2-D pictures on a computer screen are generated when non-pictorial information that is stored in memory is translated into a mathematical map (bitmap) of the screen that specifies the colour of each pixel on the screen itself, so 2-D imagined objects are generated when non-pictorial information that is stored in the subject’s long-term memory is translated into a functional picture in a special memory area called the ‘Visual Buffer’ where they become first-person accessible.⁷⁰ Applied to (I.D), Kosslyn’s model predicts that, in ‘Bad’ experience, cells in the visual buffer are activated which represent single spatial points on the surface of the *p*-imagined object, e.g. when someone hallucinates a mango, certain cells in her buffer ‘switch on’ which represent single spatial points on the surface of the imagined object. Consistent with this, mental rotation (e.g. Cooper 1976; Shepard & Metzler, 1971) and scanning (e.g. Borst *et al.* 2006; Kosslyn, Ball & Reiser 1978) experiments seem to show that subjects mentally ‘scan’ something pictorial whilst imagining. I thus have a conceptually and empirically consistent model that can explain the intuition that we often “call up a picture [...] by the use of mental images” (Aristotle 350 B.C. E: Bk 3, §3) which does not posit non-existent literal mental pictures ‘inside the head.’⁷¹

⁶⁹ Anyway, this (e.g. Tye 1991: 20) arguably entails an infinite regress: For if a ‘mind’s eye’ is required to see a mental picture, then, this episode of seeing must be a case of seeing with the ‘mind’s eye.’ But seeing with the ‘mind’s eye’ is an episode of imagining; hence, we must form an image of the original mental picture, and so on *ad infinitum*.

⁷⁰ Alternative quasi-pictorial models have been proposed by e.g. Julstrom & Baron (1985); Pinker (1988); and Glasgow (1993).

⁷¹ This is highly controversial, but I am *only* seeking to dispel the worry that I am committed to positing non-

3. *Any P-Imagining Simulates the Objective Phenomenal Character of Some Metaphysically Possible ‘Good’ Experience*

This is because the converse claim cannot explain the indiscriminability property that ‘Good’ and ‘Bad’ experiences share. Suppose that an actual ‘Bad’ experience is a *p*-imagining which simulates the objective phenomenal character of some metaphysically possible ‘Bad’ experience. Because that trivially treats ‘Bad’ experiences as being reflectively indiscriminable from *themselves*, we have no explanation of the remarkable phenomenal feature of *reflective indiscriminability*. Suppose I have a hallucination *as of* a mango in front of me, and that I explain this in terms of a *p*-imagining which simulates the objective phenomenal character of some metaphysically possible ‘Bad’ experience *as of* a mango in front of me. Because that possible ‘Bad’ experience is also said to be a *p*-imagining *as of* a mango, I have said nothing about why it is reflectively indiscriminable from the corresponding ‘Good’ experience *of* a mango in front of me. Since this is tantamount to disjunctive quietism which I have already rejected (§2.2.1, §2.2.2). I treat *p*-imagined ‘Bad’ experiences as simulations of metaphysically possible ‘Good’ experiences.

3.1.2 Summary

I have now introduced a version of *Basic Phenomenal Disjunctivism – Imaginative Disjunctivism* – that seeks to positively explain the objective phenomenal characters of ‘Bad’ experiences in terms of perception-like imaginings. I then claimed that these *p*-imaginings (i) are (probably) constitutively non-conceptual, (ii) are (probably) quasi-pictorial, and (iii) simulate the objective phenomenal characters of metaphysically possible ‘Good’ experiences. (I.D) must now be defended against four influential objections. I begin with two that claim to topple (I.D) *qua* theory of *p*-imagining.

3.2 The Argument from Force and Vivacity

existent literal mental pictures ‘inside the head.’ Rival theories include Descriptionalism (e.g. Pylyshyn 2003a) who claim that imaginings are complex language-like descriptions (standardly, propositional representations); ‘Hybrid’ accounts (e.g. Chambers 1993) which claim that imaginings are a fusion of pictorial and descriptive properties; and ‘Enactive accounts (e.g. Noë 2009) which claim that imagining involves actively seeking out some particular information. Some (e.g. Anderson 1979) even think that this debate cannot be empirically resolved. For my purposes, there is no harm in treating the fundamental format of *p*-imaginings as quasi-pictorial.

(I.D) is likely to strike the reader as being deeply counterintuitive. Certainly, dreams and hallucinations are intuitively described, and standardly characterized in both philosophy (e.g. Kant 1949: 275; Russell 1948: 214; Plato 360 B.C.E: 158b-d) and psychology (e.g. Revonsuo 2000: 878; Windt 2013: 2), as being *perceptual* experiences. And in the case of illusions, subjects typically take themselves to be *perceiving*, and not imagining e.g. ‘unequal’ Müller-Lyer lines or ‘flipping’ duck-rabbits. Call this pervasive phenomenal intuition the *Perceptual Assumption*:

Perceptual Assumption: For any standard Bad experience E_B had by a subject s , E_B has (i) a subjective perceptual phenomenal character, and, (ii) an objective perceptual phenomenal character.

The *Perceptual Assumption* is standardly motivated by a Humean inspired *Argument from Force and Vivacity* which runs thus: ‘Good’ and ‘Bad’ experiences are *reflectively indiscriminable*; hence, adequately explaining *reflective indiscriminability* requires that *p*-imaginings can convincingly simulate the objective phenomenal characters of metaphysically possible ‘Good’ perceptual experiences. But *p*-imaginings and ‘Good’ perceptual experiences are *reflectively discriminable* since the former lacks the phenomenal force and vivacity of the latter; hence, adequately explaining *reflective indiscriminability* requires that the objective phenomenal characters of ‘Bad’ experiences are also intrinsically perceptual.

Someone persuaded by this argument is presumably persuaded by Hume’s famous claim that,

“The difference betwixt [IMPRESSIONS and IDEAS] consists in the degrees of *force and liveliness*, with which they strike upon the mind, and make their way into our thought or consciousness. [...] That idea of red, which we form in the dark, and that impression, which strikes our eyes in sunshine, *differ only in degree*.”⁷² (1739/40 BK 1, Part 1: §1, my emphasis)

One intuitive way to understand Hume’s thought that an impression “which strikes our eyes in sunshine” is phenomenally more potent, or stronger, than any imagining of it which “we form in the dark” is in terms of intentional properties such as the degree of *brightness* and *saturation* of

⁷² Compare Berkeley’s *Philonous*: “The ideas formed by the imagination are faint and indistinct [...] But the ideas perceived by sense, that is, real things, are more vivid and clear” (1713: 3-30).

what is imagined. This is mistaken since we can obviously imagine seeing strikingly bright Aurora Borealis and then be disappointed when, on a cloudy night, we see a faint glow. Another interpretation is that perceptual experiences somehow occupy *more* – if indeed, that notion is intelligible – of our consciousness (analogy: Just as severe pain can ‘crowd out’ perceptual awareness of the world, so perceptual experiences can ‘crowd out’ imaginings). This is also mistaken since we can intently attend to some imagining whilst being distracted from reality as evidenced by the common experience of e.g. failing to notice someone enter the room whilst engaged in an imaginative reverie.

A more plausible notion of *force* and *vivacity* that props up the *Perceptual Assumption*, I suggest, is a perceptual experience’s *world-presentingness*, i.e. its *seeming* to present mind-independent objects and properties.⁷³ Hume seems to have suggested this criterion when he wrote that,

“All the colours of poetry, however splendid, can never paint natural objects in such a manner as to *make the descriptions be taken for a real landskip*. The most lively thought is still inferior to the dullest sensation.” (1748: §2, my emphasis)

To illustrate, before I visited Thingvellir National Park, I believed certain propositions about it such as *its rugged landscape is partly formed by the overground emergence of the North American and Eurasian tectonic plates*. As I walked around, my belief did not somehow become more obvious (I had read about its geological features); but, upon seeing the landscape, I certainly gained a sense of world-presentingness lacked by any “splendid” description. In contrast, it is said that imaginings cannot “indicate the [external] presence of objects and properties” (Farkas 2013: 105) since they are phenomenally presented as occupying an internal subjective space ‘within the head.’⁷⁴ This phenomenological difference, I take it, underlies the Humean claim that even the most vivid imagining of seeing Thingvellir’s rugged landscape “can never [...] be taken” for the real thing.⁷⁵

⁷³ Everson (1988) suggests that, for Hume, ‘force’ and ‘vivacity’ are functional terms: An impression is said to be more forceful and vivid than an imagining if it affects the mind more strongly. I reject this interpretation (§4.1.1, §4.2.1, §5.1.1) on the grounds that *p*-imaginings can affect the mind less strongly (since they are not *really* believed) than ‘Good’ experiences whilst nevertheless being reflectively indiscriminable from them.

⁷⁴ In Kantian terminology, we can say that this is because imaginings are internally generated by the subject’s *spontaneity* (i.e. her conceptual faculties), whereas those worldly items that impinge upon her perceptual machinery are a product of her *receptivity* (i.e. her mind’s ability to passively receive impressions).

⁷⁵ Of course, Hume also thought (1739/40 BK 1, Part 1: §1) that simple ideas (and hence the complex ideas that are composed of them) are causally derived from simple impressions that exactly resemble those simple ideas. So,

Understanding Humean *force* and *vivacity* in terms of *world-presentingness* suggests that the original argument is really this: ‘Good’ and ‘Bad’ experiences are *reflectively indiscriminable*; but *p*-imaginings and ‘Good’ perceptual experiences are *reflectively discriminable* since the former lacks the *world-presentingness* of the latter. The Imaginative Disjunctivist has not provided any obvious reason for thinking that *p*-imaginings are a special class of imaginings that can ground a ‘Bad’ experience’s *world-presentingness*; hence, adequately explaining *reflective indiscriminability* requires construing the objective phenomenal characters of ‘Bad’ experiences as being intrinsically perceptual.

The Imaginative Disjunctivist cannot exploit the response that *world-presentingness* is *neither* a necessary *nor* sufficient condition for reflectively discriminating between imaginings and perceptual experiences. It cannot be a necessary condition since Hume conceded that there exists a class of imaginings occurring during “sleep, in a fever, [or] in madness” (1739/40 BK 1, Part 1: §1) that can be mistaken for ‘Good’ experiences⁷⁶: Neither can it be a sufficient condition since Hume also conceded that “faint and low” (ibid) ‘Good’ experiences can be mistaken for imaginings. By the Humean’s own lights then there exist a class of imaginings which can be reflectively indiscriminable from ‘Good’ experiences, just as (I.D) insists.

This response is unhelpful since it presupposes that ‘Bad’ experiences are *p*-imaginings, when what (I.D) needs, in order to be conceptually and empirically intelligible, is *at least* one convincing real-world case in which the subject has mistaken imagined experiences for perceptual experiences *in virtue* of their world-presenting phenomenology.⁷⁷ As a way into this claim, it is helpful to first consider the well-documented phenomenon of *Imagination Inflation* in which subjects plausibly mistake imaginings for genuine experiential memories (e.g. Garry

it might be claimed that imaginings lack the phenomenal potency of perceptual experiences since they are decayed copies of some original impression. This tack is unconvincing since there is no logical reason why an imagining cannot be causally derived from a perceptual experience and yet be *more* forceful and vivid (however *force* and *vivacity* is understood).

⁷⁶ A concession that Hume thought does not undermine his criterion of *force* and *vivacity* since imaginings and perceptions are “in general so very different.” (ibid)

⁷⁷ The converse claim cannot help (I.D) since it is possible that perceptual experiences can be mistaken for imaginings, (e.g. as seems to have occurred in Perky’s (1910) famous experiment in which twenty four subjects mistook projected images of everyday objects onto a screen for their imaginings) without imaginings ever being mistaken for perceptual experiences.

& Polaschek 2000; Mazzoni & Memon 2003). Famously, Loftus & Pickrell (1995) found that 5 out of 24 subjects falsely remembered being lost in a shopping mall as a child after being presented with a story to that effect. Later, Wade *et al.* (2002) adapted the ‘Lost in the Mall’ methodology by replacing false stories with doctored photographs. It was found that, of 20 subjects who had not taken a hot air balloon ride as a child, 10 recalled something about the event after being shown a doctored photograph of themselves in a hot air balloon – their reports were often rich in detail with one subject recalling “mum [...] down on the ground taking a photo” and another recalling seeing “the road and people and a big paddock.” Such cases suggest that imagined experiences can be reflectively indiscriminable from genuine experiential memories.

If *Imagination Inflation* shows that imagined perceptual experiences can be mistaken for genuine experiential memories, then there is no principled reason for denying that they can also be mistaken for real perceptual experiences. Hence,

For all subjects *s*: If *s* has a Bad experience E_B , where E_B has a subjective perceptual phenomenal character, then it is metaphysically possible that E_B ’s objective phenomenal character is typed by a *p*-imagining. (Implication of *Imagination Inflation*, negation of the *Perceptual Assumption*)

This mismatch between subjective and objective phenomenal character plausibly occurs in some subjects with *visual anosognosia*⁷⁸ or *Anton-Babinski* syndrome, i.e. a neurological disorder in which cortically blind subjects deny their visual impairment. For instance, Kartsounis *et al.* (2009: 937) describes one such adult subject, ‘AST’, who claimed to see animals, people, and even expressed surprise to discover that a new village had been built outside her window. Since those areas of ‘AST’’s brain responsible for organizing visual input had been significantly damaged by radiation treatment, and since her visual imagery was largely intact, it was thought that she had confused *imagined* experiences of seeing with *perceptual* experiences of seeing. In other words, ‘AST’ denied her objective blindness since she was able to generate a number of imaginings that she mistook for bona fide visual experiences, just as (I.D) insists.

The mistake which underlies visual anosognosia is easily understood if the subject’s imagined experiences are *world-presenting*. The world-presenting phenomenology of ‘Good’ experiences

⁷⁸ Reports of anosognosias in other sensory modalities are rare, though Anton (1898) described two subjects who both denied their objective deafness.

suggests that someone with objective blindness who thinks she has them must likewise be in a mental state that has a world-presenting phenomenology. Now, ‘AST’'s claim that she had ‘Good’ experiences of everyday objects and scenes when she could not suggests that her ‘Bad’ mental state was indeed phenomenally world-presenting – for otherwise, its *non-world presentingness* would be a property *in virtue* of which she could reflectively discriminate it from ‘Good’ experience, and the problem is that she could not. This means that if ‘AST’ was really imagining having ‘Good’ experiences, then we have a real world case in which imagined perceptual experiences can convincingly simulate the objective phenomenal characters of metaphysically possible ‘Good’ experiences, just as (I.D) insists.

It might be objected that hinging (I.D) upon abnormal cases is a tenuous strategy. But it is usually only through such cases that we can see how there exist a class of imaginings which can be mistaken for ‘Good’ experiences. For most garden-variety imaginings – e.g. *emotional* imaginings such as an imaginative experience of the intense fear that might really be experienced in a plane crash or *cognitive* imaginings such as conceptually imagining your opponent's next possible move in a chess-game – indeed lack the Humean *force* and *vivacity* of, and so, are reflectively discriminable from, ‘Good’ experiences. And my modest aim here has *only* been to show that (I.D) is a conceptually and empirically consistent hypothesis.

A final objection is that *if* ‘Bad’ experiences are *p*-imaginings, and *if* *p*-imaginings can have a world-presenting phenomenology *in virtue* of which they are reflectively indiscriminable from metaphysically possible ‘Good’ experiences, then this shared *world-presentingness* is strong evidence that ‘Good’ and ‘Bad’ experiences are phenomenally typed by something non-naïve; hence, the *p.m.e* recurs. The answer to this, I think, is straightforward: namely, (I.D)'s insistence that a ‘Good’ experience's objective phenomenal character is relationally determined by worldly object-property couples ensures that it is naïve realist. In other words, (I.D)'s thought that only ‘Good’ experiences are intrinsically world-involving and world-acquainting suffices to ensure that, even though *p*-imagined ‘Bad’ experiences can be reflectively indiscriminable vis-à-vis their world-presenting phenomenology, they are nevertheless phenomenally type-distinct mental states.

3.2.1 The Argument from the Will

Undeterred, my objector might now deploy the *Argument from the Will* which denies that ‘Bad’ experiences are *p*-imaginings since they fail to meet a necessary condition on imagination

simpliciter: namely, that imaginings, unlike ‘Bad’ experiences, are “within our own power” (Aristotle 350 B.C.E: §3) or subject to the will. This objection is clearly articulated by White, who says that,

“While my imagining may, on any particular occasion, be something beyond my control, imagining is always something that I *do* [...] dreams [...] illusion, and hallucination [are] all cases where the subject has *minimal* or *no control* over the [experience].”⁷⁹ (1990: 91, my emphasis)

On the face of it, White’s argument is straightforward. First, since it is the disputed claim, let’s assume,

(1) ***Imaginative Disjunctivism***: For all subjects *s*:

- (i) If *s* has a Good experience E_G , then E_G ’s objective phenomenal character is of type *F*, where *F* is naïve realist; or,
- (ii) If *s* has a Bad experience E_B , then E_B ’s objective phenomenal character is of type *G*, where *G* is *p*-imagined.

Next, White’s remark that an “imagining is always something that I do” suggests that we should also accept,

(2) For all subjects *s*: Necessarily, if *s* imagines *P*, *P* is subject to *s*’s will. (Premise)

And since *p*-imaginings are obviously a species of the mental genus *imagination*, premise (2) is said to entail,

(3) For all subjects *s*: Necessarily, if *s* *p*-imagines *P*, *P* is subject to *s*’s will.
(Deductive implication of (2))

Now, White’s claim “the subject has minimal or no control” over her ‘Bad’ experiences implies,

⁷⁹ White’s argument is *primarily* intended to establish that *imagination* does not entail *imagery* – I have adapted it here since, unlike others (e.g. Sartre 1948: 18; Wittgenstein 1967: §627, §633), it is explicitly concerned with dreams, illusions, and hallucinations.

- (4) For all subjects s : Necessarily, if s has a Bad experience E_B (where E_B is *either* a dream or illusion or hallucination), E_B is not subject to s 's will. (Premise)

Clearly, if p -imaginings are necessarily subject to the will (Premise (3)), and if 'Bad' experiences are *not* subject to the will (Premise (4)), then the objective phenomenal characters of 'Bad' experiences cannot be typed by p -imaginings. Hence,

- (5) For any Bad experience E_B had by a subject s : E_B 's objective phenomenal character is not of phenomenal type F , where F is p -imagined. ((3) & (4), negation of (1))

I begin with premise (2) which is motivated by the intuitive assumption that imagining *simpliciter* is necessarily a mental *act*. Unlike the scene that is simply presented when you wake up, imagining necessarily involves your agency. As it stands, this formulation is too simple since the control that we have over our imaginings is not always absolute. For instance, we have (i) *failed* imaginings (e.g. you might, despite considerable mental effort, be unable to imagine someone's face), (ii) *partial* imaginings (e.g. when you imagine someone's face you might then mentally struggle to imagine its determinate details), (iii) *momentary* imaginings (e.g. as when you cannot imagine someone's face for more than a fleeting moment), and, (iv) *compulsive imaginings* (e.g. as when you compulsively imagine plummeting out of the sky whilst on an aeroplane). That (i)-(iv) exemplify imaginings that are occasionally "beyond [our] control" suggests a more charitable reading of premise (2) according to which it is intelligible to always mentally *try* to control, or direct the will, at our imaginings *even when we cannot*.⁸⁰ Premise (2) thus becomes,

- (2) For all subjects s : Necessarily, if s imagines P , P is always, in principle, *directly* (i.e. mentally) subject to s 's will.

Correspondingly, premise (3) becomes,

- (3) For all subjects s : Necessarily, if s p -imagines P , P is always, in principle, *directly* subject to s 's will. (Deductive implication of (2))

⁸⁰ Compare Ichikawa's remark that subjects "can try" (2009: 107) to control their imaginings.

Premise (2)'s charitable reformulation thus allows that those imaginings which instance (i)-(iv) are subject to the will since they are still mental actions: specifically, the thought is that (i) *failed*, *partial*, and *momentary* imaginings are subject to the will since we *could* attempt to sustain them in consciousness, and (ii) *compulsive* imaginings are subject to the will since we *could* attempt to influence their course or terminate them. It is useful to distinguish between three points at which imaginings can be subject to the will: namely, their *inception*, *course*, and *termination*. Though ordinary garden-variety imaginings are usually subject to the will at all three points, instances of (i)-(v) will resist it at one or more points. Still, such imaginings do not falsify premise (2) since it is always intelligible to mentally direct our will at them (even though this may require a substantive mental effort).

Premise (4) is motivated by the intuition that 'Bad', like 'Good', experiences are passively received or are simply presented to consciousness. For instance, the non-lucid dreamer simply accepts her dream events as appropriate, e.g. the philosopher-by-day is unlikely to be puzzled whilst dreaming that she is a super-hero (in fact, she may be momentarily puzzled upon waking to discover that she has *not* saved the populace from being brain-envatted). Now this passivity is not always total as evidenced by the phenomenon of r.e.m sleep-behaviour disorder in which subjects are said to 'act out' their dreams in reality, and then we have lucid dreamers who sometimes report being able to successfully influence their dream events. Still, dreams seem significantly less subject to the will than imaginings since it is usually futile to even *try* to mentally influence our dream events.

Hallucinations and illusions differ. For we can usually physically control our location, where to look, and where to tune our attention: it is just that, having done all that, we cannot then modify what is presented. Look at the 'Rotating Rays' illusion:

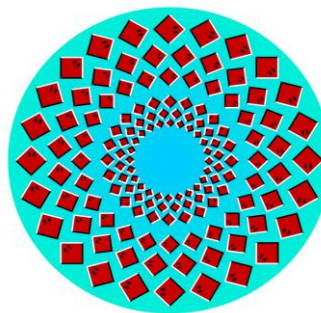


Image reproduced from <http://www.ritsumei.ac.jp/~akitaoka/index-e.html>

Normally sighted subjects usually report that the outer rays are rotating 'clockwise' whilst the

inner rays are rotating ‘counter-clockwise’ – the illusion being, of course, that the rays are objectively stationary. If this describes how things look to you, then you can stop seeing the rotating rays by performing voluntary physical actions such as closing your eyes or looking elsewhere: But what you cannot do, once you have decided to look at the rays, is to phenomenally influence their rotating look by mentally directing your will at them – as Ichikawa says, “The instruction, ‘stop having [the visual experience of rotating rays]’ is a confused one” (2009: 107).

‘Ambiguous’ illusions seem less straightforward. Look again at the ‘Duck-Rabbit.’



It might be thought that subjects who are aware of the figure’s opposing interpretations can simply choose to see it *as* a duck or *as* a rabbit. I am not convinced by this since we might be trying to see the figure *as* a duck and *either* be (i) surprised when it suddenly ‘flips’ and is seen *as* a rabbit (or *vice-versa*), or (ii) perplexed that we can only see it *as* a rabbit (or *vice-versa*), or (iii) annoyed that its frequent ‘flipping’ interrupts what we are trying to see it *as* (or *vice-versa*). The ‘Duck-Rabbit’ illusion thus seems significantly less subject to the will than imaginings since we cannot usually phenomenally influence what the figure is seen *as* by mentally trying to see it *as* a duck or *as* a rabbit.

These remarks suggest that my objector really has in mind,

- (4) For all subjects *s*: Necessarily, if *s* has a Bad experience E_B (where E_B is *either* a dream *or* illusion *or* hallucination), E_B can only ever be *indirectly* (i.e. physically) subject to *s*’s will.

The real force of the *argument from the will* thus consists in the thought that *p*-imaginings cannot type the objective phenomenal characters of ‘Bad’ experiences since they fail to meet a necessary condition on imagining *simpliciter*, viz., *direct* subjection to the will *in principle*.

Premise (2) is *neither* empirically *nor* conceptually watertight. Empirically, it is not obvious that

we can mentally try to control *all* of our imaginings. Compulsive imaginings are an obvious example. Dostoevsky's notorious observation that someone who attempts to mentally suppress thinking about a white bear will then very likely imagine "the cursed thing [...] every minute" (1997: 49) has been well-demonstrated (e.g. Wegner *et al.* 1987). In another extreme case, subjects who were instructed to avoid making colour associations associated with stimulus words often reported such associations even when threatened with shock (McGranahan 1940). And it is a familiar fact that compulsive imaginings partly characterize certain psychiatric disorders (e.g. witness the genocide survivor with post-traumatic stress disorder who compulsively imagines violent scenes). That subjects understand how to banish compulsive imaginings does not mean that they can, *in any significant sense*, attempt such banishment. Given the high likelihood of failure, any such attempt seems irrational at best and nonsensical at worst.

It is noteworthy that the compulsive imager is often imagining some possible perceptual experience, i.e. there are compulsive *p*-imaginings. Someone who refuses to board the aeroplane may well be compulsively imagining seeing it plummet out of the sky; someone who compulsively imagines colours even when threatened with shock is very likely to be imagining seeing those qualities; and someone suffering from limerence is very likely to be compulsively imagining seeing the object of her desire. Since *at least* some compulsive imaginings involve imagining having certain perceptual experiences, it cannot be a necessary condition on *p*-imaginings that they are directly subject to the will. Destabilizing premise (2) in this way thus destabilizes premise (3).

Tellingly, compulsive imaginings can be indirectly interrupted, or even banished, by performing voluntary physical actions. The observation (e.g. Spivey *et al.* 2000; Johansson *et al.* 2006) that subjects engaging in imaginative exercises generally produce saccadic eye-movements which mimic those they would make were they viewing the *actual* scene predicts that the disruption of such movements should causally disrupt the concomitant imagining. A prediction that is empirically supported by the observation (e.g. Andrade *et al.* 1997; Kavanagh *et al.* 2001) that subjects typically find it more difficult to sustain compulsive imaginings whilst performing voluntary visuospatial tasks that disrupt those involuntary eye-movements which partly sustain their existence. Beyond the visual cases, it is well-known that subjects can disrupt those unwanted imaginings which partly characterize panic attacks by activating the 'Dive Reflex' i.e. the activation of the parasympathetic nervous system by immersing oneself in cold water. These empirical observations plausibly show that compulsive imaginings are

indirectly subject to the will; and since the compulsive imager is usually *p*-imagining, we now find that *at least* some *p*-imaginings are indirectly subject to the will.⁸¹

Lest it be replied that the empirical jury remains open, it is not conceptually obvious that *all* imaginings must be directly subject to the will. My alternative orders species of the mental genus *imagining* along a continuum according to their different degrees of subjection to the will. At the ‘Direct Pole’ can be found those ordinary garden-variety imaginings whose course, inception, and termination subjects can mentally control. At the ‘Indirect Pole’ can be found those compulsive and *p*-imaginings which, like ‘Bad’ experiences, subjects can only physically control – *failed*, *partial*, and *momentary* imaginings can be found between the poles. Placing some *p*-imaginings at the ‘Indirect’ pole is not implausible since those that are directly subject to the will would not be convincing simulations of ‘Good’ experiences, and there is reason (§3.2) to think that they can. That my picture is conceptually coherent means that the sharp qualitative distinction between premises (2) and (4) is not conceptually watertight either.

A final objection is that *if* *p*-imaginings and ‘Good’ experiences share the property of *indirect subjection to the will*, then *indirect subjection to the will* is strong evidence that ‘Good’ and ‘Bad’ experiences are phenomenally typed by the same non-naïve realist ingredient, and the *p.m.e* recurs. The answer to this objection, I think, is again straightforward: namely, (I.D)’s thought that ‘Good’, unlike ‘Bad’, experiences are intrinsically world-involving and world-acquainting suffices to ensure that even though both directly resist the will, they are nevertheless phenomenally type-distinct mental states.

3.2.1.2 A Note on Belief Independence

The thought that *p*-imaginings are not directly subject to the will can explain the familiar puzzle of *belief-independence*, i.e. what is occurring when the subject doxastically resists her ‘Bad’ experience even though its misleading phenomenal appearance persists, e.g. knowing that the ‘rotating’ rays are stationary cannot stop their rotating look. For *if* the objective

⁸¹ Conversely, Thomas (2014: 140) argues that *at least* some perceptual experiences, like ordinary garden-variety imaginings, are directly subject to the will – I do not consider this strategy owing to a paucity of empirical evidence. A promising strategy, that space prevents considering, is to argue that imaginings which directly resist the will plausibly explain certain experiential phenomena such as *amodal perception* (i.e. the idea that perceptual experience can represent the occluded parts of objects) (e.g. Nanay 2010) or *cognitive penetration* (i.e. the idea that cognitive states can affect objective phenomenal characters) (e.g. Macpherson 2012).

phenomenal characters of ‘Bad’ experiences essentially consist in *p*-imaginings, and *if* these *p*-imaginings are not directly subject to the will, then clearly, mentally directing the will towards the ‘rotating’ rays (and other ‘Bad’ experiences) cannot change the illusory experience’s subjective phenomenal character.

3.2.2 Summary

I have now defended (I.D.)’s story of *p*-imagining against two influential objections. Against the *Argument from Force and Vivacity*, I argued that the *Perceptual Assumption* can be sensibly denied since there is no principled conceptual or empirical reason for thinking that *all* imaginings must lack the Humean force and vivacity of ‘Good’ experiences. Against, the *Argument from the Will*, I argued that since *p*-imaginings and ‘Bad’ experiences resist the will in a relevantly similar way (*viz.*, indirectly), it remains empirically and conceptually consistent that ‘Bad’ experiences are *p*-imaginings. I then exploited the notion of indirect subjection to the will to explain the puzzle of belief-independence. I turn now to two final objections that seek to topple (I.D) *qua* theory of phenomenal disjunctivism.

3.3 The Argument from Local Supervenience

For those lacking the intuition that reflectively indiscriminable ‘Good’ and ‘Bad’ experiences share *perceptual* objective phenomenal character, Hellie (2007: 271) deploys a version of *The Argument from Local Supervenience* (e.g. Foster 2000: 25; Robinson 1994: 151; Smith 2005: 198-9) which seeks to resurrect *Spreading* by exploiting what he claims are two pre-theoretical intuitions about the causal relationship between electrochemical brain activity (e.g. particular patterns of neuronal and synaptic firings) and phenomenal character.⁸² The first intuition – described as “intuitive bedrock” (Hawthorne 2004: 352) and “self-evident” (Horgan & Tienson 2002: n.23) – that Hellie invites us to accept is,

- (1) *Phenomenal Internalism*: “... the phenomenal character of an experience is necessitated [...] by the physiological features of the brain of the subject undergoing the experience.” (2007: 271)

This encapsulates the thought that phenomenal properties such as *seeing purple* or *hearing gunfire*

⁸² Since Hellie treats subjective and objective phenomenal character as being reductively identical, I will simply speak of *phenomenal character* in this section.

are intrinsic properties of experiencing subjects, i.e. properties that constitutively depend upon physical processes and events occurring within the experiencing subject. This means that it is metaphysically impossible for intrinsic physical duplicates to have experiences that differ in phenomenal character. *Phenomenal Internalism* can thus be re-stated as,

- (1) *Phenomenal Internalism*: For any two experiencing subjects S_1 and S_2 :
Necessarily, if S_1 and S_2 are intrinsic physical duplicates, their experiences are of phenomenal type F . (Premise)

Hellie drives *Phenomenal Internalism* by appeal to the ‘armchair’ intuition that, in an experiencing subject, there exists some complete causal-physical condition that is *minimally sufficient* for the instantiation of an experience with *that* type of phenomenal character, and specifically, a *perceptual* phenomenal character. This is why we find Robinson claiming that a “certain brain state” is nomologically sufficient for “seeing a table against a wall” (1994: 151) and Smith insisting that “activity [in] the optic nerve” suffices for seeing “something green *in a genuinely sensory manner*” (2005: 203). As Hellie and friends tell it then, a perceptual experience’s phenomenal character locally supervenes upon electrochemical properties of the subject’s brain, and so, is not relationally sensitive to its external distal cause(s).

The second intuition that Hellie invites us to accept is,

- (2) *Modal Claim*: “... for any possible experience (at least any experience in a subject with a brain) a duplicate of the experiencing brain could be undergoing neither veridical nor illusory experience.” (ibid)

Or more precisely,

- (2) *Modal Claim*: For any perceptual experience E_p had by a subject S (where S has a brain), it is metaphysically possible that an intrinsic physical duplicate of S ’s brain could be having a hallucinatory experience E_H .⁸³ (Premise)

Here, we are offered a thought-experiment which appeals to the intuition that, for any subject enjoying perceptual experiences in the actual world, it is metaphysically possible that there

⁸³ Though Hellie’s argument and the *Argument from Explanatory Screening Off* exploit hallucinations, my answer to both applies to all ‘Bad’ experiences.

exists an intrinsic physical duplicate of her brain that, when suitably stimulated (say, by a powerful artificial intelligence that feeds it electrical impulses as depicted in ‘The Matrix’) could hallucinate.

Conjoining *Phenomenal Internalism* and the *Modal Claim* clearly spells trouble for (I.D): For *if* a perceptual experience’s phenomenal character locally supervenes upon the subject’s internal physical constitution, and *if* her brain duplicate is hallucinating, then it too must be having a phenomenally type-identical experience – indeed, it is said to be intuitively obvious that “a *physical* duplicate of oneself would also be a *phenomenal* duplicate of oneself” (Horgan, Tienson & Graham 2004: 302) and that my brain duplicate would “would have to undergo the same conscious experience I undergo” (Kriegel 2009: 79). In this way, Hellie resurrects,

- (3) *Spreading**: For any two experiencing subjects S_1 and S_2 (where S_1 is a subject in the actual world having a perceptual experience E_p and S_2 an envatted-brain having an hallucinatory experience E_H): Necessarily, if S_1 and S_2 are intrinsic physical duplicates, E_p and E_H are of phenomenal type F , where F is perceptual.⁸⁴ ((1) & (2), Instance of *Spreading*, negation of *Imaginative Disjunctivism*)

Hallucinations thus turns out to be ‘Bad’ perceptual experiences, and so, not *p*-imaginings.

I have no objections to the *Modal Claim*. But Hellie’s attempt to establish *Phenomenal Internalism* from the armchair is not a dialectically effective, or as he claims, “a straightforward way” (2007: 271) to establish *Spreading** since it begs the question (e.g. Allen 2014: 12; Fish 2009: 121) against the Naïve Realist’s thought that *worldly object-property couples* or *non-causal conditions* “can form part of the [experience’s] causal nexus” (Martin 2006: 16) i.e. the thought that a ‘Good’ experience’s phenomenal character does not narrowly supervene upon the internal configuration of the subject, but rather, widely supervenes upon those worldly object-property couples with which she is directly acquainted. Thus, when you see a mango, your ‘Good’ experience’s phenomenal character widely supervenes upon your neurophysical state, the mango, and all of the phenomenal properties that you are directly aware of can belong to

⁸⁴ The argument standardly proceeds by reasoning that, since the experience had by the hallucinating brain lacks any naïve properties (the *Modal Claim* thus plays the role of *Base* in the original *p.m.e*), and since hallucinatory and ‘Good’ experiences are phenomenally type-identical mental states, naïve realism is false. I do not consider this extra move since, as we will see, it is sufficient to block *Spreading** by blocking *Phenomenal Internalism*.

the mango itself.

Here I am in agreement with Martin, who thinks that,

“[...] when one is veridically perceiving the objects of perception are constituents of the experiential episode. The given event could not have occurred without these entities existing and being constituents of it; in turn, *one could not have had such a kind of event without there being relevant candidate objects of perception to be apprehended.*” (2004: 56, my emphasis)

Our thought is that a perceptual experience’s phenomenal character constitutively depends upon the “entities” or external distal causes that are involved in its production; hence there is no reason to suppose that a ‘Good’ experience’s phenomenal character must locally supervene upon the internal configuration of the subject. What *makes* your visual experience *of* a mango perceptual is the actual presence of the mango within your immediate environment; remove that, and you enter a different type of mental state.

Hellie’s problem then, is that no independent argument has been provided for the background assumption upon which *Phenomenal Internalism* rests. This is,

(1.a) *Same-Cause Same Phenomenal Character Thesis*: Necessarily, if experiences E_1 and E_2 are produced by the same proximate neural cause, then E_1 and E_2 are of phenomenal type F . (Background assumption)

Let E_1 be my present ‘Good’ experience and E_2 be my brain duplicate’s hallucination. *Naïve realism’s disjunctivist stratagem* (§2.1) entails that, since E_1 ’s phenomenal character constitutively depends upon the presence of worldly objects within my immediate environment, and since there are no such objects to relationally determine E_2 ’s phenomenal character, my brain duplicate cannot be having the same phenomenal type of experience that I am now having, viz., perceptual. As E_2 ’s phenomenal character cannot be intrinsically perceptual, it cannot be straightforwardly denied that my brain duplicate is *p*-imagining.⁸⁵

The view that I am espousing is thus,

⁸⁵ The lingering worry that phenomenal internalism remains ‘intuitively obvious’ is addressed below.

Phenomenal Externalism: For any two experiencing S_1 and S_2 (where S_1 and S_2 are intrinsic physical duplicates): If the external distal cause of S_1 's experience E_1 is worldly-object, o_w , and if the external distal cause of S_2 's experience E_2 is not o_w , then it is metaphysically possible that E_1 and E_2 are tokens of different phenomenal types. (Negation of *Phenomenal Internalism*, metaphysical commitment of *Naïve Realism* and *Imaginative Disjunctivism*)

Hellie and friends will surely complain that the claim non-causal conditions are necessary for the occurrence of perceptual experience is a flagrant violation of intuition. But this complaint is only effective if *Phenomenal Externalism* is obviously counterintuitive. And it is not (e.g. Mehta 2013; Tye forthcoming). Consider Nonvert on Earth where the sky is blue and Invert on inverted-Earth where the sky is yellow, where Nonvert and Invert are exact molecular duplicates, i.e. type-identical with respect to their internal physical constitution. Since Nonvert and Invert are intrinsic physical duplicates, their brain states are identical as they look skywards. In this scenario, it is *not* obviously counterintuitive that Nonvert and Invert are having phenomenally type-distinct experiences of the sky because their brain states are appropriately caused by different external colours. Similarly, it is *not* obviously counterintuitive that I am having a perceptual experience and my hallucinating brain duplicate is *p*-imagining because our brain states are appropriately caused by different things.

This is no mere stand-off between internalist and externalist intuitions: For if *Phenomenal Internalism* is really “not open to serious question” (Smith 2005: 203), then the counterintuitiveness of naïve realism’s externalist conception of phenomenal character ought to be immediately self-evident, and it is not. There is nothing obviously counterintuitive about (I.D.)’s supposition that two intrinsic physical duplicates, one having ‘Good’ perceptual experiences and one hallucinating, are in phenomenally type-distinct mental states because only the former’s experiences are relationally determined and intrinsically constituted by worldly items.

In fact, it strikes me that an armchair argument more plausibly motivates *Phenomenal Externalism*. Consider this case: I am now alert, cognitively well-functioning, and looking at a paperweight on my desk in good light. When I confine myself to introspective reflection and ignore anything empirical that I know about the causal relationship between brain states and phenomenal character, intuition dictates that my experience’s phenomenally apparent properties such as *translucent-ness* and *spherical-ness* seem to be instantiated *in front of me* by a

particular worldly object and not ‘inside my head’ by neural activity. If this is not sufficiently convincing, then I invite you to similarly reflect upon your present visual experience’s phenomenally apparent properties whilst focusing on some object and see if you can change them simply by looking at something else (I’ll wager the ten coins that you don’t know about in my pocket that you can). And this naïve realist intuition entails *Phenomenal Externalism* because my intrinsic physical duplicate could be related to different physical (if not in my immediate environment) or mental (if hallucinating) items.

At this stage, Hellie and friends might argue that *Phenomenal Internalism* best explains some well-established empirical correlations between particular phenomenal properties and certain brain states. For instance, in humans, there is a strong positive correlation (e.g. Bartels & Zeki 2000; Lueck *et al.* 1989) between neural activity in the ventral occipitotemporal cortex (visual area V4) and colour perception, with significant damage to this area causing a condition called *cerebral achromatopsia* in which the world is experienced as varying shades of grey. Similarly, there is a strong positive correlation (e.g. Kourtzi & Kanwisher 2001; Spiridon *et al.* 2006) between neural activity in the lateral occipital complex (an area within the ‘ventral stream’) and shape perception, with significant damage to this area causing a condition called *visual form agnosia* in which subjects cannot recognize, and discriminate between, bounded shapes. These neural correlates of colour and shape experience suggest that there are fairly well-defined functional areas within the brain that are nomologically necessary for the occurrence of our colour and shape experiences.

That there are neural correlates of shape and colour experiences suggests that it is empirically plausible that neuroscientists will eventually discover even more detailed correlations between neurophysical states and perceptual phenomenal properties: specifically, the empirically plausible thought is that the instantiation of *any* phenomenal property within a particular perceptual experience is nomologically necessitated by a certain type of neurophysical state, i.e. a certain type of neurophysical state is sufficient for the perceptual experience of a particular phenomenal property. Call this the *Sufficiency of Neural Correlation Thesis*:

Sufficiency of Neural Correlation Thesis: For every perceptual phenomenal property *P* (where *P* is experienced by a subject *S* with a brain), there is some type of neurophysical state, *N*, such that *N* is nomologically sufficient for the instantiation of *P*. (Metaphysical commitment of *Phenomenal Internalism*)

For instance, it might be said (to keep things simple) that there is some particular neuronal firing pattern within V4 that is nomologically sufficient for the existence of the phenomenal property *purple-ness* within my perceptual experience's phenomenal character. My hallucinating brain-duplicate must thus be having a phenomenally type-identical experience of *purple-ness*, and so, not *p*-imagining.

The *Sufficiency of Neural Correlation Thesis* can be resisted by exploiting Robinson's (1994: 70) distinction between a *generative* and *selective* story of the role that neural activity plays in perceptual experience. On the phenomenal internalist's *generative* account, neural activity is singly sufficient to generate perceptual phenomenal character (hence her intuition that envatted-brains can have 'Bad' perceptual experiences); whereas on the *selective* account that I favour, neural activity does not generate perceptual phenomenal character, but rather, *enables* "the subject to experience particular external objects" (Campbell 2002: 118)⁸⁶, the perceptible properties of which then relationally determine and intrinsically constitute just that phenomenal character.

The claim now is that some particular neuronal firing pattern within V4 correlates with the existence of the phenomenal property *purple-ness* within my experience's phenomenal character because *that* pattern enables me to 'latch' onto, or detect, a worldly instance of *purple-ness* which just *is* the *purple-ness* of which I am phenomenally aware. We might see the brain as functioning somewhat like a weather radar: Just as a weather radar is attuned to select and detect meteorological phenomena (e.g. specific areas of the screen 'light up' in characteristic ways when thunderstorm activity is detected), so the brain is attuned to select and detect perceptible properties of worldly objects, with neurons in specific areas 'lighting up' in characteristic ways when those properties are experientially detected.

Construing the neuronal processes involved in perception as being *selective* allows (I.D) to adequately explain the neural correlates of consciousness. For the thought now is that the *purple-ness* of which I am directly aware is not an intrinsic property that is generated by particular neuronal firing pattern within V4: instead, it is that this neuronal activity selects and detects a worldly instance of *purple-ness* within my immediate environment; hence, significant damage to V4 will naturally impair the brain's ability to process incoming information about colour. This *selective* account is thus a natural extension of my earlier claim (§1.1.2) that a subject's perceptual abilities partly determine the naïve properties that figure in her

⁸⁶ Similar remarks can be found in e.g. Gibson (1966: 267); Matthen (2005: 13); and Zeki (1993: 241).

experience's phenomenal character.

The *selective* account can intelligibly resist *Spreading**: For if a 'Good' perceptual experience can only occur relative to a non-causal background condition (i.e. the presence of some candidate worldly object in the subject's immediate environment), and if that condition does not occur in hallucination, it cannot be straightforwardly denied that hallucinations are *p*-imaginings. Although the *best* empirical explanation of the neural correlates of consciousness is strictly neutral between the Phenomenal Internalist's generative account and my selective account, I submit that it is ultimately intuition which tips the balance in favour of the latter.

3.3.1 The Argument from Explanatory Screening Off

Hellie and friends have one weapon left in the form of the *Argument from Explanatory Screening Off* (e.g. Martin 2004: 46; Sollberger 2008: 12-16) which objects that (I.D)'s positive characterization of hallucination has the undesirable consequence of 'screening off' a 'Good' experience's naïve properties from constitutively explaining its phenomenal character, and hence, explaining its remarkable features. Their argument begins from the *prima facie* intuitively plausible claim that the occurrence of a hallucination and its assumed *p*-imagined phenomenal character is nomologically necessitated by electrochemical properties of the subject's brain. Hence,

- (1) *Local Supervenience of Hallucination Thesis*: For any hallucinatory experience E_H had by a subject S , there is some type of neurophysical state, \underline{N} , in S , such that \underline{N} is minimally sufficient for the occurrence of E_H , and the instantiation of E_H 's *p*-imagined phenomenal character. (Assumption)

Driving premise (1) is the argument that, since hallucinating subjects take themselves to be having perceptual experiences (*Perceptual Assumption*), and since hallucinatory experiences are neither intrinsically world-involving nor world-acquainting mental states (*Standard Hallucination Thesis*), the only condition that is necessary for the occurrence of a hallucinatory experience with a *p*-imagined phenomenal character is that a particular neurophysical state occurs within the subject.

Their next move is,

- (2) *Converse Modal Claim*: For any two subjects S_1 and S_2 (where S_1 is having a hallucinatory experience E_H and S_2 a Good experience E_G): It is metaphysically possible that the neurophysical state, \underline{N} , that is minimally sufficient for the occurrence of E_H , and the instantiation of E_H 's p -imagined phenomenal character, can occur in S_2 . (Premise)

For instance, if a certain type of neurophysical state is realized within the envatted-brain is minimally sufficient for the occurrence of its p -imagined hallucination *as of* a mango, then it is metaphysically possible that that same state is somehow realized within me when I am having a 'Good' experience *of* a mango.

Conjoining the *Local Supervenience of Hallucination Thesis* and the *Converse Modal Claim* spells trouble for (I.D). For *if* the p -imagined phenomenal character of the envatted brain's hallucinatory experience is a locally supervenient property, and *if* that state occurs within me when I am having a 'Good' experience, then I too must, or so the story goes, be having a phenomenally type-identical experience, viz. p -imagined. In other words, the *Local Supervenience of Hallucination Thesis* and the *Converse Modal Claim* are conjoined to resurrect,

- (3) *Spreading**: For any two experiencing subjects S_1 and S_2 (where S_1 is having a p -imagined hallucinatory experience E_H and S_2 a Good experience E_G): Necessarily, if S_1 and S_2 are in the same type of neurophysical state, \underline{N} (where \underline{N} is minimally sufficient for the occurrence of E_H , and the instantiation of its p -imagined phenomenal character), E_H and E_G are of phenomenal type F , where F is p -imagined. (Instance of *Spreading*, Metaphysical implication of (1) & (2))

A 'Good' experience's naïve properties are now rendered epiphenomenal: For *if* a subjects p -imaginings are sufficient to explain why her hallucinatory experience *as of* a mango has *that* phenomenal character, and in turn, certain remarkable features; then, *if* the phenomenal character of my 'Good' experience *of* a mango has those p -imaginings, they too must be sufficient to explain why it has *that* phenomenal character, and in turn, certain remarkable features. In this way, Hellie and friends arrive at:

- (4) *Principle of Explanatory Screening Off*: For any two experiencing subjects S_1 and S_2 , where S_1 is having a hallucinatory experience E_H and S_2 is having a Good

experience E_G : If E_H and E_G are phenomenally typed by p -imaginings $I_{P1}, I_{P2} \dots I_{PN}$, then $I_{P1}, I_{P2} \dots I_{PN}$ screen off any of E_G 's naïve properties $P_{N1}, P_{N2} \dots P_{NN}$ from constitutively explaining its phenomenal character, and hence, its remarkable features.⁸⁷ (Metaphysical implication of (3))

I reject the *Local Supervenience of Hallucination Thesis* on the grounds that an additional condition is necessary for the occurrence of a hallucinatory experience: namely, the *absence* of any candidate worldly object within the hallucinator's immediate environment to relationally determine and intrinsically constitute its phenomenal character⁸⁸ – I am thus in agreement with Allen who claims that hallucinatory experience “depends *both* on the subject's neurophysiological state and the absence of the object” (2014: 14, my emphasis). Our thought is that just as a ‘Good’ experience's phenomenal character widely supervenes upon the internal configuration of the subject and the *presence* of some candidate worldly object within her immediate environment, so conversely, a hallucinatory experience's phenomenal character widely supervenes upon the internal configuration of the subject and the *absence* of some candidate worldly object within her immediate environment, e.g. the occurrence of my mango-hallucination is nomologically necessitated by my being in a certain type of neurophysical state *and* the absence of a mango as opposed to, say, an apple within my immediate environment.

Our suggestion can intelligibly resist *Spreading**: For *if* a p -imagined hallucinatory experience can only occur relative to a non-causal background condition (i.e. the absence of some candidate worldly object in the subject's immediate environment), and *if* that condition does not occur in ‘Good’ experience (since the candidate worldly object is present), then those p -imaginings which type its phenomenal character cannot ‘spread’ themselves over to ‘Good’

⁸⁷ Though this conclusion does not flatly negate naïve realism, we can reasonably doubt that ‘Good’ experience, if naïve properties are explanatorily redundant, is intrinsically *world-involving* and *world-acquainting*.

⁸⁸ The Negative Disjunctivist denies this, and thus allows that the same kind of experience which occurs during hallucination also occurs during ‘Good’ experience, where what occurs during hallucination does not screen off naïve properties from playing their distinctive explanatory role. For Martin (2004: 68) this is because there is *no more* to hallucination than the negative epistemic property of being *reflectively indiscriminable* from some causally matching ‘Good’ experience, and so, *reflective indiscriminability's* explanatory power is entirely inherited from the property of being *that* ‘Good’ experience. For Fish (2009: 94) this is because hallucinations lack objective phenomenal character, with hallucinating subjects forming the false belief that it is like something to hallucinate. This tack is unappealing since, as I have argued, it comes at the unacceptable cost of being unable to explain the remarkable features of hallucinations.

experience, and hence, screen off naïve properties from playing their distinctive explanatory role.

“Not so quick”, Hellie and friends will reply, “Your supposition that [objective] phenomenal characters are relationally sensitive to the absence or presence of worldly objects problematically entails ‘spooky’ action at a distance”; hence Foster’s insistence that experiences contain “no physical record” (2000: 28) of their external distal causes and Robinson demanding to know how a “table, when present, [can] inhibit the production of [a *p*-imagining] by some sort of action at a distance” (1994: 154). It is, they say, plainly counterintuitive to suppose that a spatially remote cause (viz., a candidate absent object) can somehow ‘leap frog’ past a proximate neural cause to relationally determine a hallucinatory experience’s phenomenal type. Lurking behind this objection is the following causal principle:

(CP) For any experience *E* had by a subject *S* at time *t*: If *E*’s distal cause *c_D* does not causally effect *S*’s neurophysical state, *N*, at *t*, then *c_D* cannot relationally determine *E*’s phenomenal type.

Suppose that I have a hallucinatory experience (*E_H*) *as of* a mango in front of me at time *T₁* and a ‘Good’ experience (*E_G*) *of* a mango in front of me at time *T₂*, and that I am in the same neurophysical state at *T₁* and *T₂*. The objection is that my supposition that the presence or absence of a mango within my immediate environment did not causally affect my neurophysical state at either *T₁* or *T₂* is flatly inconsistent with my supposition that *E_H* and *E_G* differ in phenomenal type. For my supposition that a mango’s absence *makes* *E_H* a *p*-imagining and its presence *makes* *E_G* a ‘Good’ experience unacceptably entails that an experience’s spatially remote cause can ‘bypass’ its proximate neural cause to relationally determine its phenomenal type. As ‘spooky’ action at a distance has no serious place in explaining the nature of mental states⁸⁹, it is concluded that *Spreading** stands.

Though I have argued that denying (CP)’s consequent is neither obviously counterintuitive nor empirically consistent (§3.3), this objection does push me towards further clarifying *how* the same neurophysical state can occur within me when I am having a hallucinatory experience *as of* a mango in front of me (*E_H*) and when having the corresponding ‘Good’ experience (*E_G*) without *E_H* and *E_G* being phenomenally type-identical mental states. Lockard (2008: 107) provides an illuminative analogy. Imagine a country which uses genuine photographs of the

⁸⁹ Burge (2005) forcefully argues this point.

king as its currency, where every such photograph is worth one ‘Pictodollar.’ Now, consider two situations: first, someone takes a photograph of the king, and thus has one Pictodollar (Pictodollar #1); and second, that the king is absent but the camera’s shutter fires just as rays of light strike its lens in exactly the same pattern as before, where this physical activity produces a photographic image that has exactly the same physical properties as Pictodollar #1 – call this physical duplicate ‘Pseudodollar.’ In this scenario, Pictodollar #1 and Pseudodollar are produced by the same proximate causes (since the same patterns of light entered the camera, which operated in the same way on both occasions) but do not share any monetary properties (trivially, since Pseudodollar has no such properties).

This scenario does not obviously involve action at a distance. In the first situation, the king’s presence before the camera was not a causal prerequisite of the camera’s ability to produce a piece of paper with certain physical properties (e.g. a certain pattern of colour upon its surface) since a piece of paper with the same physical properties was produced by the same proximate cause when the king was absent. But, and this is the important point, the king’s presence before the camera is a non-causal constitutive condition on the production of Pictodollar #1, i.e. the monetary properties of pieces of paper within this community constitutively depend upon this purely distal condition.

I claim that a ‘Good’ experience’s phenomenal type is analogous to Pictodollar #1 in the sense that, just as Pictodollar #1’s monetary properties constitutively depend upon the presence of the king before the camera, so a ‘Good’ experience’s phenomenal type constitutively depends upon the presence of a candidate worldly object within the subject’s immediate environment: Conversely, just as Pseudodollar’s *not* having monetary properties constitutively depends upon the absence of the king before the camera, so a ‘Bad’ experience’s phenomenal type constitutively depends upon the absence of a candidate worldly object within the subject’s immediate environment. Pictodollar #1 and Pseudodollar were produced by the same proximate causes, and I likewise allow that the same neurophysical state occurred within me during my mango-hallucination (E_H) and corresponding ‘Good’ experience (E_G). But just as the intrinsic physical similarities between Pictodollar #1 and Pseudodollar do not entail that they are of the same *monetary* type, so the neurophysical similarities between E_H and E_G do not entail that they are of the same *phenomenal* type, i.e. have the same objective phenomenal character. That is, E_H and E_G can have the same proximate cause but differ in phenomenal type since their objective phenomenal characters constitutively depend upon different non-causal conditions.

The residual question remains of why it is plausible that the absence of a mango within my immediate environment plausibly makes my hallucination a *p*-imagining rather than an experience of another phenomenal type. The answer is surely that *p*-imagining (and indeed, imagining *simpliciter*) is a mode of consciousness by which objects appear to us as absent or non-existent; hence Hobbes characterized the imagination as “nothing else but sense decaying, or weakened, by the absence of the object” (1654: §25.7) and Sartre spoke of objects that are “given to intuition as absent” (1948: 18). I do not mean that what is *p*-imagined is *spatially* absent: clearly, we often see spatially remote objects such as astronomical bodies and distant ships on the horizon; conversely, we cease to see spatially proximate objects when we close our eyes. The point is that what is *p*-imagined has no determinate spatio-temporal location *at all* (even if that is how things seem): when I close my eyes and imagine seeing the present scene, the objects of my *p*-imagining have no intrinsic spatial relatedness to either myself or that of other worldly objects unlike those that I see when I re-open my eyes.

The state of play is now this: since a hallucinatory experience widely supervenes upon the absence of any candidate worldly object, and since a ‘Good’ experience widely supervenes upon the presence of a candidate worldly object, the type of mental state that occurs when hallucinating cannot occur when having the corresponding ‘Good’ experience; hence a ‘Good’ experience’s naïve properties can constitutively explain its phenomenal character. Because there is no general reason to assume that the conditions upon which the cause of an experience’s phenomenal character depends must be proximate neural conditions, we need not be troubled that my picture entails ‘spooky’ action at a distance. Finally, since hallucinatory experiences and *p*-imaginings are modes of consciousness of absent objects, it remains plausible that hallucinatory experiences are typed by *p*-imaginings.

3.4 Conclusion

In this chapter, I have claimed that the objective phenomenal characters of ‘Bad’ experiences are typed by perception-like imaginings that can convincingly simulate the objective phenomenal characters of metaphysically possible ‘Good’ experiences, where these *p*-imaginings are (probably) constitutively non-conceptual and quasi-pictorial. I then defended my story of *p*-imagining against two objections: First, I answered *The Argument from Force and Vivacity* by arguing that there is no obvious conceptual or empirical reason for denying that *p*-imaginings can have a world-presenting phenomenology *in virtue* of which they are reflectively

indiscriminable from ‘Good’ experiences; and second, I answered *The Argument from the Will* by arguing that direct, or mental, subjection to the will is not a necessary condition on *p*-imagining. I then defended my story of phenomenal disjunctivism against two objections: First, I answered *The Argument from Local Supervenience* by arguing that there are no obvious conceptual or empirical reasons for denying that ‘Good’ and hallucinatory experiences are phenomenally type-distinct mental states since the former widely supervenes upon the presence of worldly items; and second, I answered *The Argument from Explanatory Screening Off* by arguing that since ‘Good’ and hallucinatory experiences have different jointly necessary and sufficient conditions for their occurrence, those *p*-imaginings which phenomenally type the latter cannot then screen off the former’s naïve properties from playing their distinctive explanatory role.

4

Imaginative Disjunctivism and Dreaming

In this chapter, I explain and defend the claim that the objective phenomenal characters of dreams are *p*-imaginings which are presented to consciousness (usually⁹⁰) during sleep. I begin by showing how (I.D) can answer the *p.m.e qua* dreaming (§4.1) and explain the remarkable features of dreams (§4.1.1). Two rival theories are then discussed and rejected. The first (§4.2) is the *received view* (e.g. Russell 1948: 214; Sebastián 2014) according to which dreams are ‘Bad’ belief-causing perceptual experiences that (usually) occur during sleep. I reject the *received view* by first (§4.2.1) sketching five considerations that collectively tell against the claim that dreams are *perceptual* experiences; and second (§4.2.2), by arguing that dream beliefs cannot be *real* beliefs since they have radically different properties from waking beliefs⁹¹ – I then suggest that dreamers have *belief-like* imaginings, i.e. the imaginative analogues of real beliefs (e.g. Currie & Ravenscroft 2002: 12; Ichikawa 2009: 111). This claim is then defended (§4.2.3) against the worry that only real beliefs can explain our emotional responses to dreams (e.g. Beuno 2009: 199; McGinn 2004: 112).

The second rival theory is the *dream fabrication view* (§4.3, §4.3.1) according to which dreams are *nothing more* than false memories of real experiences that were not presented to consciousness during sleep (e.g. Dennett 1976; Stoneham 2013). I reject the *dream fabrication view* by arguing first (§4.3.2) that (I.D) is not, *contra* Dennett’s insistence, forced to ascribe implausible precognitive powers to dreamers in order to explain anecdotal reports of dream incorporation; and second (§4.3.3), that (I.D) has a more convincing explanation of two phenomenological characteristics of reported lucid dreams, viz., their *first-person* and *temporally extended* phenomenology. I conclude that as (I.D) has wider explanatory scope than both the *received view* and the *dream fabrication view*, it remains the preferred theory of dreaming.

4.1 Imaginative Disjunctivism and the Problem of Dreaming

⁹⁰ I discuss lucid dreams in §4.3.3. Until then, I will simply speak of *dreaming*, understood as incorporating non-lucid and lucid dreams.

⁹¹ The objection that treating dreams and ‘Good’ experiences as being phenomenally type-identical mental states (viz., perceptual) banishes naïve realism gets no grip since friends of the *received view* are unlikely to be Naïve Realist’s in the first place – indeed, they are likely to exploit this claimed type-identity to raise familiar sceptical worries. I thus take this assumption for granted and argue instead that it cannot convincingly explain various features of dreams.

(I.D)'s first, and most straightforward, task is to answer Hellie's *p.m.e qua* dreaming without spreading *p*-imaginings over to *all* 'Good' experience. First, since it is what the existence of dreams are said to threaten, we can assume:

- (1) **Naïve Realism**: For all subjects *s*: If *s* has a non-misleading experience E_{NM} , then (i) E_{NM} 's subjective and objective phenomenal character is intrinsically constituted by the same naïve properties $P_{N1}, P_{N2} \dots P_{NN}$, and, (ii) *s* stands in a direct *sui generis* acquaintance relation *r* to a worldly object, \underline{o}_w 's, perceptible properties $P_{P1}, P_{P2} \dots P_{PN}$, where $P_{P1}, P_{P2} \dots P_{PN}$, directly metaphysically ground E_{NM} 's naïve properties $P_{N1}, P_{N2} \dots P_{NN}$.

And since, or so I claim, the objective phenomenal characters of dreams essentially consist in *p*-imaginings, we can also assume:

- (2) **Base***: For all subjects *s*: If a subject *s* has a dream experience E_D , then E_D 's objective phenomenal character is typed by *p*-imaginings $I_{P1}, I_{P2} \dots I_{PN}$.
(Positive instance of *Base*)

My objector now points out that the phenomenal appearances of dreams lack any property (or properties) *in virtue* of which dreamers can reflectively discriminate them from the phenomenal appearances of metaphysically possible 'Good' experiences, or *vice-versa*, e.g. consider Plato's remark that the phenomenal appearances in both cases "precisely correspond" (360BC: 158b-d), or the common experience of waking and thinking "How could I have been fooled into thinking *that*?" – Answer: Because I could not reflectively discriminate my dream from that of some corresponding 'Good' experience). Hence,

- (3) **Reflective Indiscriminability***: For all subjects *s*: It is phenomenally possible that *s* cannot reflectively discriminate between (i) a Good experience E_G 's phenomenal appearance from some metaphysically possible dream experience E_D 's phenomenal appearance, and, (ii) a dream experience E_D 's phenomenal appearance from some metaphysically possible Good experience E_G 's phenomenal appearance. (Instance of *Reflective Indiscriminability*)

In a familiar move, my objector now argues that, since reflectively indiscriminable experiences are tokens of the same phenomenal type, and since it is non-controversial that dreams and ‘Good’ experiences are reflectively indiscriminable, *Spreading* vis-à-vis dreaming is true. Hence,

- (4) ***Spreading****: For all subjects *s*: If *s* cannot reflectively discriminate (i) a Good experience E_G ’s phenomenal appearance from some possible dream experience E_D ’s phenomenal appearance, or, (ii) a dream experience E_D ’s phenomenal appearance from some possible Good experience E_G ’s phenomenal appearance, then E_G and E_D are of phenomenal type *F*.
(Abductive implication of (3), instance of *Spreading*)

And since ***Base**** tells us that dreams are phenomenally typed by *p*-imaginings, it is concluded that ‘Good’ experiences must also be phenomenally typed by *p*-imaginings.

As expected, (I.D) blocks the *prima facie* abductive move from ***Reflective Indiscriminability**** to ***Spreading**** by replacing the latter with,

- (5) ***Imaginative Disjunctivism****: For all subjects *s*:
- (i) If *s* has a Good experience E_G , then E_G ’s objective phenomenal character is of type *F*, where *F* is naïve realist; or,
 - (ii) If *s* has a dream experience E_D , then E_D ’s objective phenomenal character is of type *G*, where *G* is *p*-imagined. (Instance of *Imaginative Disjunctivism*)

Naïve realism, if it is to be toppled, is not to be toppled by the non-naïve realist spectre of dreams.

4.1.1 Imaginative Disjunctivism and The Remarkable Features of Dreams

(I.D)’s second task is to satisfactorily meet Sturgeon’s *Adequacy Condition* on dreaming, which is,

Adequacy Condition*: A theory t of experience is explanatorily adequate iff t explains why a Good experience E_G and dream experience E_D are (i) *reflectively indiscriminable* ($E_G \equiv_{RI} E_D$) (ii) *scene-immediate* ($E_G \equiv_{SI} E_D$) (iii) *subjectively equivalent* ($E_G \equiv_{SE} E_D$) (iv) *rationally equivalent* ($E_G \equiv_{RE} E_D$), and, (iv) *behaviourally equivalent* ($E_G \equiv_{BE} E_D$). (Instance of *Adequacy Condition*)

At this early stage, I am not claiming that (I.D) can explain features (i)-(v) *better* than its rivals⁹², only that, *if* dreams are p -imaginings, then (I.D) can consistently explain their remarkable features.

Beginning with dream *scene-immediacy*, I claim that when,

- (1) A subject s has a dream experience E_D which is phenomenally scene-immediate.

It is because,

- (2) E_D 's objective phenomenal character is typed by p -imaginings $I_{P1}, I_{P2} \dots I_{PN}$, where $I_{P1}, I_{P2} \dots I_{PN}$ are phenomenally scene-immediate.

Here is a simple argument: p -imaginings, as I have argued (§3.2), convincingly simulate the objective phenomenal characters of metaphysically possible 'Good' experiences; the objective phenomenal characters of 'Good' experiences are phenomenally scene-immediate, i.e. subjects are immediately presented with naïve properties; so, *if* dreams are phenomenally typed by p -imaginings, then they too must be phenomenally scene-immediate. Though I think this is essentially correct, something must be said about from where the scene-immediacy of p -imaginings springs. I suggest that it jointly springs from their *attention-dependence* (i.e. the fact that what is p -imagined constitutively depends upon the subject's attention (e.g. Thomas, 2014: 151) and *world-presenting* phenomenology.

Try this simple test. Focus upon this page and try to imagine seeing a banana. Now, look at something else whilst attempting to sustain your imagining. I suspect that you will fail (at least,

⁹² Friends of the *received view* can simply say that since 'Good' perceptual experiences have remarkable features, perceptual *dream* experiences obviously have remarkable features. This theoretically simple story is undercut, or so I will argue (§4.2.1, §4.2.2) by the *received view*'s wider implausibility.

what happens when I attempt this is that the object of my imagining vanishes). Or try to focus on just one aspect of the ‘banana’ in something like the way that you can attentionally isolate *this* sentence on the page. I suspect that what happens now is that the original ‘banana’ is replaced by a new imagining of part of a banana. In neither case did the object of your imagining survive these mental shifts of attention.⁹³ And its attention-dependent nature conceptually entails that it was presented to consciousness in *some* scene-immediacy way since it is nonsensical to speak of imaginatively attending to that which has no immediate mental presence.

Thus far we have *a* scene-immediacy but not the *world-presenting* scene-immediacy characteristic of dreams. This surely springs from the fact that, or so I have argued (§3.2), *p*-imaginings have all the Humean *force* and *vivacity* or world-presentingness of ‘Good’ experiences. Conjoin this with the thought that it is the attention-dependent nature of *p*-imaginings which secures a scene-immediacy, and it is unsurprising that, *if* dreams are *p*-imaginings⁹⁴, they too have a world-presenting scene-immediacy.

I claim that this world-presenting scene-immediacy can secure dream *reflective indiscriminability*.

That is, I claim that when,

- (1) A subject *s* has a dream experience E_D which is reflectively indiscriminable from a Good experience E_G .

It is because,

- (2) E_D ’s objective phenomenal character is typed by *p*-imaginings $I_{P1}, I_{P2} \dots I_{PN}$, where $I_{P1}, I_{P2} \dots I_{PN}$ convincingly simulate E_G ’s world-presenting scene-immediate objective phenomenal character.⁹⁵

⁹³ This is plausibly why unwanted imaginings can be banished by performing voluntary physical actions that interrupt the subject’s mental attention (§3.2.1).

⁹⁴ Construing dreams as being attention-dependent *p*-imaginings nicely explains why (i) you cannot, within the dream, simultaneously have an experience of e.g. dragon slaying and thinking about tomorrow’s more mundane tasks (the dream demands too much of your mental attention), and, (ii) waking up destroys the dream (the external world now demands your mental attention).

⁹⁵ Hence another reason for the failure of Langsam-style disjunctivism to explain ‘Bad’ remarkable features: For it is not that *reflective indiscriminability* secures remaining remarkable features; rather, it is that a certain type of scene-immediacy (viz., *world-presenting*) is employed to secure *reflective indiscriminability*. And there is no

Suppose I dream that hungry p -zombies are charging towards me. *If* my dream is p -imagined, and *if* p -imaginings have a world-presenting scene-immediacy, it is unsurprising that I cannot – during my dream and when later recalling it – reflectively discriminate it from some corresponding ‘Good’ experience that likewise has a world-presenting scene-immediacy.

Onto *subjective equivalence*, I claim that when,

- (1) A subject s has a dream experience E_D which has a subjective perceptual phenomenal character.

It is because,

- (2) E_D ’s objective phenomenal character is typed by p -imaginings $I_{P1}, I_{P2} \dots I_{PN}$, where $I_{P1}, I_{P2} \dots I_{PN}$ have a subjective perceptual phenomenal character.

My claim is simply this: Definitionally, p -imaginings have a subjective perceptual phenomenal character; so *if* dreams are p -imaginings, then they too must have subjective perceptual phenomenal characters. Thus, *if* my p -zombie dream really is p -imagined, then since my p -imagining is a successful simulation of the corresponding ‘Good’ experience, it is unsurprising that it has a subjective perceptual phenomenal character – and even those who deny that (2) is (1)’s truth-maker do not deny that dreams have a subjective perceptual phenomenal character (indeed, this is what someone who denies that dreams are intrinsically perceptual must explain).

Concerning *rational equivalence*, I want to distinguish between a *strong* and *weak* version. A proponent of the former claims that when,

- (1) A subject s has a dream experience E_D which rationally occasions a belief *that* p .

It is because,

- (2) E_D ’s objective phenomenal character is of phenomenal type F , where E_D is a

objectionable Fish-y circularity here since p -imaginings are not remarkable features themselves.

particular token of F that rationally occasions s 's belief *that* p .

The idea is that (2) is (1)'s truth-maker since the objective phenomenal characters of dreams are typed by something – standardly, a perceptual experience or perhaps a belief-causing imagining (e.g. McGinn, 2004: Ch.6) – that rationally occasions a real belief. I believe that p -zombies are quarantined to philosophical fiction whilst awake; but when I dream that hungry p -zombies are chasing me, whatever ingredient fundamentally types my dream rationally occasions my real belief *that hungry p -zombies are chasing me*, or so the story standardly goes.

Instead, I favour a *weak* rational equivalence which claims that when,

- (1) A subject s has a dream experience E_D which *seems* to rationally occasion a belief *that* p .

It is because,

- (2) E_D 's objective phenomenal character is typed by p -imaginings $I_{P1}, I_{P2} \dots I_{PN}$, where $I_{P1}, I_{P2} \dots I_{PN}$ rationally occasion s 's belief-like imagining *that* p .

I claim that (2) is (1)'s truth-maker since p -imagined dreams can rationally occasion *propositional* or *belief-like* imaginings⁹⁶ (*i*-beliefs), where the subject's inability to reflectively discriminate her p -imagined dreams from their 'Good' counterparts that *would* rationally occasion the same real beliefs then grounds the erroneous intuition that dreams are strongly rationally equivalent to 'Good' experiences. When I dream that hungry p -zombies are chasing me, I am imagining seeing hungry p -zombies, and this p -imagining rationally occasions my *i*-belief *that I am in danger*. But because I cannot reflectively discriminate my dream from the corresponding 'Good' experience that would rationally occasion the real belief *that I am in danger*, I mistakenly think that I really believed my dream⁹⁷, or so my alternative story goes.

⁹⁶ Introducing *i*-beliefs thus renders me what Liao & Doggett call a "cognitive splitter" (2014: 3); whereas "cognitive lumpers" (e.g. Langland-Hassan 2012) insist that imaginings produce real beliefs. I do not deny the latter claim (§6.1.1, §6.1.2), only that it is not a good model for dreams.

⁹⁷ The claim that there are situations in which subjects mistakenly think that they have real beliefs is surely no stranger than the claim that there are situations in which subjects mistakenly think that they are having perceptual experiences, given that real beliefs and perceptual experiences are mental states.

The main advantage of *weak* rational equivalence will emerge in (§4.2.1). Until then, I simply draw attention to the fact that whilst real beliefs have an action-guiding character, dreamers are rarely compelled to act out their dreams.⁹⁸ I do not *really* leap out of bed and sprint from my bedroom when I dream that hungry *p*-zombies are chasing me, as I most likely would if I really believed that I am in danger of being devoured; hence, we have a *prima facie* case for denying strong rational equivalence.

Onto *behavioural equivalence*. Again, it is fruitful to distinguish between a *strong* and *weak* version. A proponent of the former claims that when,

- (1) A subject *s* has a dream experience E_D which rationally occasions her action *a*.

It is because,

- (2) E_D 's objective phenomenal character is of type *F*, where E_D is a particular token of *F* that rationally occasions *s*'s action *a*.

The idea is that (2) is (1)'s truth-maker since dreams are typed by something – standardly, a belief-causing perceptual experience that conjoins with the subject's real desires, or perhaps an imagining that has motivational properties (e.g. Velleman 2000) – that rationally occasion actions. When I dream that hungry *p*-zombies are chasing me, whatever ingredient fundamentally types my dream rationally occasions my fleeing in reality, or so the story standardly goes.

Now, dreams and 'Good' experiences are not usually strongly behaviourally equivalent since most subjects do not act out their dreams. For this reason, I favour a *weak* behavioural equivalence which claims that when,

- (1) A subject *s* has a dream experience E_D which rationally occasions an imagined action.

It is because,

⁹⁸ Clearly, there is a physiological explanation of the dreamer's near-paralysis; but here, I want to make sense of the dreamer's mental state.

- (2) *S*'s *i*-belief *that p* conjoins with an existing desire⁹⁹ to rationally occasion an imagined action *a*.

I claim that (2) is (1)'s truth-maker since a dreamer's *i*-belief conjoins with some real desire to rationally occasion an imagined action that is a part of her dream. When my *p*-imagined *p*-zombie dream rationally occasions my *i*-belief *that I am in danger*, this *i*-belief conjoins with my desire not to become *p*-zombie lunch and I imagine fleeing within my dream. I do not flee in reality since one condition that is *usually* necessary for action is absent, viz., the presence of real beliefs – I am thus clearly in agreement with Carruthers who thinks that “real desires will normally lead to real actions only when interacting with real beliefs” (2006: 99).

An immediate worry is that I am overcomplicating matters by introducing imagined actions. But the dreamer's predicament differs from that which occurs during partial hallucination or illusion since, or so I claim, she is attentionally immersed in a “virtual, spatiotemporally organized world-model” (Revonsuo *et al.* 2015: 4) *within* which she interacts with various objects and characters. Consider how when playing the video-game ‘Skyrim’ I become partially immersed in a 3-D virtual reality within which my character explores labyrinthine ruins and slays dragons: Dreaming seems to be something like this, except that my immersion into the dream world is greater and I *am* the character that interacts with various things. Because *p*-imaginings simulate perceptual experiences and not actions, I thus need to explain this sense of acting within the dream world. I am suggesting that the conjunction of *i*-beliefs and real desires can do the trick.

A more pressing worry is this: Desires, Currie claims, “can be shown to be unreasonable, or at least unjustified, if they fail to connect in various ways with the facts” (2002: 211), i.e. desires are rationally answerable to facts about what is objectively the case; but dream desires are not likewise rationally answerable to facts about what is objectively the case; so, dreamers cannot have *real* desires. Instead, it might be said that dreamers have *desire-like* imaginings, i.e. desire-like states that are the imaginative analogues of real desires. For instance, I once returned home to discover that an egg had apparently been thrown at my kitchen window and reasonably desired that the perpetrator be suitably punished. My subsequent discovery that a bird was responsible undercut the apparent reasonableness of my desire since no human

⁹⁹ I allow that the dreamer's emotional state is, in many cases, a contributory factor; but here, I only want to offer a *minimal* condition on action within the *p*-imagined dream world.

perpetrator existed. But the reasonableness of my desire to slaughter *p*-zombies in my dream is not undercut by their non-existence since it is only rationally answerable to facts about what they are doing within my dream, viz., malevolently chasing me. Because my dream desire is not subject to the usual normative constraints that govern desires, it is concluded that I merely imaginatively want to slaughter *p*-zombies in my dream.

This is not troubling since we often “have all sorts of genuine desires about things that are not actual” (Kind, 2011: 245): I might desire that the Conservative Party had not won the last U.K. General Election (knowing that I cannot change the past) or to (in light of the latter fact) join the Nasa Mars Mission (knowing that I am excluded). That these situations are non-actual does not undercut the reasonableness of my desires. And if these desires are too prosaic to be especially puzzled about them, then there is no puzzle about ascribing real desires to dreamers. We can do without desire-like imaginings, at least for dreams.

Still, something must be said about *strong* behavioural equivalence. Let’s grant that subjects occasionally act out the corresponding dream experience in reality. Now such subjects usually report experiencing particularly strong (usually negative¹⁰⁰) emotions such as *apprehension* and *terror* (e.g. Pillmann 2009; Uguccioni *et al.* 2013) that are appropriate to the dream. Oudiette *et al* describe a subject who had ...

“[...] dreamlike mentations resembling horror films [...]. She saw dead heads falling, people hanged in her room [...] and children from her school slaughtered by a madman. When she had these types of dreamlike mentations, she screamed (waking up her neighborhood), ran to the bathroom, and locked the door.”
(2009: 1627)

Drawing on this, I claim that subjects ‘act out’ their dreams when the dream generates a particularly strong emotion¹⁰¹ that, together with the dreamer’s *i*-beliefs and desires, rationally occasion some action in reality. In the example above, the thought is that the subject’s dreams of death and violent scenes naturally caused her to experience a heightened degree of fear; this emotion, together with some *i*-belief (e.g. *that I am in danger*) and the strong desire to escape, then rationally occasioned her running into the perceived relative safety of the bathroom, or so

¹⁰⁰ Intriguingly, Revonsuo (2000) suggests that this is because the evolutionary function of dreams is to simulate threatening events in order to better prepare us for encountering similar scenarios in waking life.

¹⁰¹ I defend this claim in §4.2.3.

my alternative story goes.

My story of the remarkable features of dreams can now be summarized thus: It is the attention-dependent nature of *p*-imaginings, together with their world-presenting phenomenology, that secures dream *scene-immediacy*, and, in turn, this secures *reflective indiscriminability*. Dream *subjective equivalence* simply consists in the fact that *p*-imaginings have a subjective perceptual phenomenal character. Dream *rational equivalence* was understood *weakly*, where the dreamer's *i*-beliefs, together with *reflective indiscriminability*, secures the erroneous intuition of *strong* rational equivalence. Dream *behavioural equivalence* comes in two varieties: first, a *weak* version whereby the conjunction of the dreamer's *i*-beliefs and real desires rationally occasion imagined dream actions; and second, a *strong* version whereby the *p*-imagined dream evokes a particularly strong emotion that conjoins with the dreamer's *i*-beliefs and desires to rationally occasion some action in reality.

4.1.2 Summary

I have now explained how (I.D) can (i) answer the *p.m.e* vis-à-vis dreaming, and, (ii) explain the remarkable features of dreams. In what follows, I develop (I.D)'s *overall* theory of dreaming by 'testing' it against its main rivals, and so take the first steps towards telling a unified story of 'Bad' experience. I begin with the *received view*.

4.2 The Received View

Nothing I have said thus far will convince friends of the *received view* (r.v) who think that dreams are 'Bad' *perceptual* experiences which are presented to the subject's consciousness (usually) during sleep. For instance, Aristotle wrote that,

“[...] the dream is a sort of presentation, and, more particularly, one which occurs in sleep.” (*On Dreams* 350 B.C.E: Part 3)

These mental presentations, Armstrong claims, intuitively involve,

“[...] the having of perceptual experiences. These perceptual experiences involve belief.” (2002: 303)

Three distinct theses which encapsulate (r.v)'s core commitments can be extracted from these brief remarks. First, Aristotle's claim that a dream "is a [...] presentation" suggests what I will call (r.v)'s *Presentation Thesis*:

Presentation Thesis: For all subjects s : If s is dreaming at time t , then dream experiences E_{D1} , E_{D2} ... E_{DN} are being presented to s 's consciousness at t .
(Metaphysical commitment of the *Received View*)

Certainly, there is a strong intuition that, when we recall a dream, it phenomenologically *seems* that we are recalling some type of experience that occurred during sleep. This intuition is grounded in the following *prima facie* plausible principle:

(P) For all subjects s : If it seems to have been like something for s at time t , then *ceteris paribus*, it was like something for s at t .

For instance, if you recall feeling hungover at the early-morning philosophy conference, then you probably *were* (there being a well-established positive causal correlation between wine-drinking at conference dinners and early-morning hangovers) feeling hungover at that time. Now, someone persuaded by (P) might extend it to dreams on the grounds that dream recollections likewise strongly seem to be recollections of real experiences. Hence,

(P*) For all subjects s : If it seems to have been like something for s to dream at t , then it was like something for s to dream at t .¹⁰² (Abductive implication of (P))

I am now recalling a recent dream in which I was chased by a malevolent entity, and this memory strongly seems to me to be *of some type* of experience that occurred during sleep. Now, since I have no obvious reason for denying that my ordinary experiential memories are caused by real waking experiences, and since dream memories are not obviously special cases, the natural conclusion is that I really did have some type of experience during sleep.

¹⁰² Though the present-tense version 'If it is like something for s to dream at t , then it is like something for s to dream at t ' seems unassailable, it is difficult to fully articulate since dreamers cannot report that they are now dreaming; hence the *Presentation Thesis* is primarily supported by dream reports – Malcolm (1962) famously exploited this fact to deny that dreaming is like anything at all.

The *Presentation Thesis* is also the standard explanation of the strong positive correlation that has been observed between all stages of sleep and dream reports (e.g. Dement & Kleitman 1957: 341; Nielson 2000): specifically, awakenings from (i) r.e.m sleep (a sleep-phase that is characterized by rapid eye movements) about 80% of the time, (ii) non-r.e.m sleep stage 1 (the stage that occurs once we close our eyes and decide to sleep) elicit dream reports about 80-90% of the time, and (iii) non-r.e.m sleep stages 2 ('light' sleep) and 3 ('deep' sleep) elicit dream reports about 50-70% of the time. And lucid dreamers, of course, report first-person awareness of dreaming. Hence, we have a *prima facie* conceptual and empirical case for accepting the *Presentation Thesis*.

Second, Armstrong's remark that dream presentations seem to involve the "having of perceptual experiences" suggests what I will call (r.v)'s *Perceptual Dream Experience Thesis*:

Perceptual Dream Experience Thesis: For any dream experience E_D had by a subject s , E_D (i) phenomenally *seems* to s to have a subjective perceptual phenomenal character, and, (ii) *has* an objective perceptual phenomenal character. (Instance of the *Perceptual Assumption*, metaphysical commitment of the *Received View*)

The reasoning here is that since the subjective phenomenal characters of 'Good' perceptual experiences do *not* mislead with respect to their objective phenomenal characters, and since there is no obvious reason for thinking that a dream's subjective perceptual phenomenal character *does* mislead with respect to its objective phenomenal character, dreams likewise have objective perceptual phenomenal characters. So where (r.v) treats the objective and subjective phenomenal characters of dreams as being type-identical (a dream subjectively seems to be a perceptual experience because it *is* a perceptual experience), I treat them as being type-distinct (a dream subjectively seems to be a perceptual experience because it is a successful *p*-imagining).

Third, Armstrong's remark that perceptual dream presentations "involve belief" suggests what I will call (r.v)'s *Belief Thesis*:

Belief Thesis: For any dream experience E_D had by a subject s , E_D can rationally occasion s 's beliefs $B_1, B_2 \dots B_n$. (Implication of the *Perceptual Experience Thesis*, doxastic commitment of the *Received View*)

The thought here is that dreamers have real beliefs since they base them upon perceptual experiences, just as they do in waking life. Conjoining the *Presentation*, *Perceptual Dream Experience* and *Belief* theses thus yields:

Received View: For all subjects s : If s is dreaming at time t , then;

- (i) Dream experiences $E_{D1}, E_{D2} \dots E_{DN}$ are being presented to s 's consciousness at t ; and,
- (ii) $E_{D1}, E_{D2} \dots E_{DN}$'s subjective and objective phenomenal characters are of type F , where F is perceptual; and,
- (iii) $E_{D1}, E_{D2} \dots E_{DN}$ can rationally occasion s 's beliefs $B_1, B_2 \dots B_n$.

This then, is (I.D)'s first rival theory of dreaming.

4.2.1 Five Strikes against Perceptual Dream Experiences

In what follows, I sketch five considerations – three conceptual, one from psychology, and one from neuroscience – that collectively tell against (r.v)'s *Perceptual Dream Experience Thesis*.

1. Black and White vs. Colourized Dream Reports

Early dream reports presupposed that dreams were predominantly colourized. For instance, Aristotle (*On Dreams* 350B.C.E: Part 1, Part 3) included colours amongst the qualities that are presented in dreams, and Descartes (1641: second meditation) described a piece of wax that looked to change colour, and granted that that same appearance could be presented to him during sleep. But studies during the 1940's and 50's converged upon the thought that dreaming was predominantly a black and white phenomenon (e.g. De Martino 1953; Middleton 1942) – indeed, some even thought that colourized dreams were indicative of psychiatric problems (e.g. Tapia *et al.* 1958). The present consensus is once more, that dreaming is a predominantly colourized phenomenon (e.g. Kahn *et al.* 1962; Schwitzgebel 2003).

Friends of (r.v) might explain this discrepancy by suggesting that the rapid spread of black and

white media caused most of our dreams to become black and white, e.g. a cinemagoer who watched Hitchcock's *Psycho* in 1960 might have then had a nightmare in which she is murdered by a black and white figure. But it would be very surprising, as Ichikawa (2009: 6) and Schwitzgebel (2002: 653) point out, to discover that the relatively small proportion of time people spent watching black and white media could drastically influence a fundamental phenomenological aspect of their dreams. Of course, someone who watched *Casablanca* numerous times in the 1940's might have then dreamed about Bogart and Bergmann in black and white; but that is *one* dream, and my point is that it would be highly unusual if watching black and white films caused *many* different black and white dreams given that most of us experience real life in colour.

The alternative suggestion is that, in at least one period, subjects were radically mistaken about a fundamental phenomenological aspect of their dreams. But then friends of (r.v) begin to lose their grip on the *Perceptual Dream Experience Thesis*: For introspection is said to reveal that dreams are intrinsically *perceptual*; but if introspection cannot be trusted to reveal whether or not we dream in colour, then it is not obvious why we should trust it to reveal that we have perceptual experiences during sleep either. Friends of (r.v) are thus *either* committed to an improbable story about the causal influence of black and white media on our dreams *or* risk putting themselves out of oneiric business.

(I.D) can happily accept that we are radically mistaken about whether or not we dream in colour: For if we mistakenly think that our dreams are perceptual experiences, then it is not unreasonable to suspect that we can be mistaken about other fundamental phenomenological aspects of our dreams. Now, I suspect that dreams are predominantly colourized, with dream reports in the 1940's and 50's being influenced by the black and white media with which subjects naturally compared their dreams: But alternatively, it might be that dreams are really predominantly black and white or even, like most scenes in novels, indeterminate in colour (e.g. Schwitzgebel 2002: 656).

2. *Dreams Do Not Interrupt Sleep*

I fall asleep and am later woken by Scrabble, the terrier, pawing my face. The natural explanation is that Scrabble's pawing caused haptic experiences that, in turn, woke me up. But suppose I dream that Scrabble is pawing my face. According to (r.v)'s *Perceptual Dream Experience Thesis*, I have a phenomenally type-identical haptic experience; hence, my dream

experience should likewise wake me up. But my slumber is undisturbed. Friends of (r.v) must thus explain why perceptual dream experiences lack this causal power that is possessed by their waking counterparts.¹⁰³

One suggestion is that what caused me to wake up were not haptic experiences but certain physical forces such as *pressure* against my skin; and since endogenously generated dream experiences obviously do not causally impinge against my skin, I remained asleep. But that just moves the problem around: For now it must be explained why the same worldly event can cause a perceptual experience that interrupts me whilst awake and yet fails to do so whilst I am asleep. I am thinking about whether or not Brown is in Barcelona when the doorbell rings and causes an auditory experience that interrupts my train of thought: But when I am asleep that same event is said to wake me as a result of sound waves striking my eardrum. This is an inelegant solution given (r.v)'s insistence that 'Good' experiences and dreams are phenomenally type-identical mental states. Perhaps it can be made elegant by claiming that I was likewise interrupted by sound waves striking my eardrum whilst awake. But that still moves the problem around: For now it must be explained why I usually have a series of continuous 'Good' experiences whilst awake *except* for when my attention is interrupted by physical forces striking my body. Friends of (r.v) surely cannot adopt Stoneham's (2008) denial that I have perceptual experiences *at all* given their insistence that such things intrinsically constitute dreams. (R.v)'s denial that perceptual experiences can interrupt sleep thus *either* results in a series of increasingly desperate *ad hoc* moves designed to save the *Perceptual Dream Experience Thesis* or risks putting itself out of oneiric business.

Another suggestion is that perceptual dream experiences do not interrupt sleep since they are special cases. But they cannot be special cases *in virtue* of being *dreamed* since this is what requires explanation. Perhaps friends of (r.v) think it is because certain physical equipment that is necessary for the occurrence of 'Good' experience goes 'off-line' when we dream (e.g. neural activity in the primary visual and somatosensory cortexes significantly diminishes during sleep); and since dreams do not constitutively depend upon the same equipment (indeed, lesion studies suggest that an intact temporo-parietal-occipital junction is required for dreaming (e.g. Solms 1997; 2000)), I remained asleep. But that still moves the problem around: For now it must be explained why critical perceptual equipment 'switches off' and a brain area that supports various cognitive functions related to imagining (e.g. Kosslyn 1994) 'switches on' when I have phenomenally type-identical dreams. Friends of (r.v) obviously

¹⁰³ Ichikawa (2009: 108) presses this point from a different angle, viz., its empirical implausibility.

cannot say (as I would) that this is because dreams are *p*-imagined. The claim that perceptual dream experiences are special cases again *either* results in a series of increasingly desperate *ad hoc* moves designed to save the *Perceptual Dream Experience Thesis* or risks putting itself out of oneiric business.

(I.D) naturally steps into the breach. For when I dream that Scrabble is pawing my face, I have a convincing simulation of the corresponding ‘Good’ haptic experience; and since that simulation characteristically lacks the causal power of its waking counterpart, I remained asleep. Consider an analogy with a flight simulator: when a pilot rehearses how to safely land in the event of a rapid decompression, she leaves the simulator unharmed since a simulated decompression lacks the causal powers of the real event. Likewise, my *p*-imagined dream *in which* Scrabble is pawing my face is a simulation that lacks the causal powers of the corresponding ‘Good’ experience, and so, it is unsurprising that I remain asleep.

3. *Daydreams Occasionally Segue into Dreams*

I am deliberately daydreaming about the holiday that I intend to take next month when my daydream segues into a dream. According to (r.v)’s *Perceptual Dream Experience Thesis*, my dream is a perceptual experience even though it naturally evolved from my *p*-imagined daydream. Friends of (r.v) must thus explain why there is a smooth experiential transition between my deliberate daydream and dream when the two experiences are said to be phenomenally type-distinct mental states.

One suggestion is that deliberate daydreams are also perceptual experiences; hence, a smooth experiential transition is to be expected between my deliberate daydream and dream. This is not promising since subjects usually understand that they are intentionally *p*-imagining whilst deliberately daydreaming, e.g. I understood that I was intentionally imagining seeing a beach and the Aegean Sea. But if this intuition is mistaken, then friends of (r.v) begin to lose their grip on the *Perceptual Dream Experience Thesis*: For introspection is said to reveal that dreams are perceptual experiences; but if introspection cannot be trusted to reveal that deliberate daydreams are perceptual experiences, then it is not obvious why we should trust it to reveal that dreams are perceptual experiences either.

Another suggestion is that if there can be experientially smooth transitions between perceptual experiences and *p*-imaginings, then conversely, there can be experientially smooth transitions

between *p*-imagined daydreams and dreams. But it is unclear what example friends of (r.v) can offer here: For instance, it cannot be that I begin to imagine seeing a chainsaw wielding villain whilst watching a horror film since my perceptual experience of seeing and imagined experience of seeing are occurring concurrently, when what is needed is a case in which the subject's *p*-imagining smoothly replaces the perceptual experience without her notice. Friends of (r.v) obviously cannot say (as I would) that we sometimes mentally transition from perceptually experiencing the world to *p*-imagined dreams since that immediately concedes defeat.

(I.D) has a theoretically attractive explanation: namely, that a smooth experiential transition is to be expected between my deliberate daydream and dream since both mental states are typed by *p*-imaginings. When I am deliberately daydreaming about my forthcoming holiday, I am imagining seeing a beach and the Aegean Sea; but as my *p*-imaginings become more elaborate and vivid, my daydream naturally evolves into a dream. The situation is thus one of mentally transitioning from unsuccessfully *p*-imagining (since I can originally reflectively discriminate my daydream from my concurrent 'Good' experience) to successfully *p*-imagining (since I can no longer reflectively discriminate the *p*-imagined dream world from 'Good' experience).

4. Children's Dream Development Positively Correlates with the Development of the Visual-Spatial Imagination

Dreaming seems to be a gradual cognitive development that positively correlates with the gradual development of the visual-spatial imagination, i.e. the ability to visualize spatial relationships between objects. Foulkes (1999) found that children's dream reports were usually of static, simple scenes between ages 3-5 (e.g. "I was asleep and in the bathtub" (1999: 159)) with more complex reports involving action-sequences and interactions between characters emerging around ages 5-8 (e.g. "Another boy, a made-up one, and I were on a mountain, hiking" (1999: 160)). Finally, emotional preoccupations emerged from around age 9 (e.g. "I had some sort of disease or something on my tonsils. [...] I guess I was kind of worried about the disease" (1999: 170)). Of note is that children who scored highly on the Weschler Block Design Test (i.e. a visual-spatial task in which the subject looks at pictures of red and white patterns and then attempts to recreate them with red and white blocks) were – even if they had relatively poor verbal and memory skills – more likely to report the most complex dreams. These observations led Foulkes to conclude that "dreaming inherently implies some imaginal irreality, taken to be real" (1999: 118).

Friends of (r.v) must thus explain why children's dream reports increase in complexity as their visual-spatial imagination develops and do not usually, in children age ≤ 5 , describe things (e.g. moving objects, social interactions) that commonly occur in waking life, given their insistence that dreams and 'Good' experiences are phenomenally type-identical mental states. Now, whatever explanation this might be, (I.D) has theoretical simplicity on side: For if dreams are *p*-imagined, then, since *p*-imagining necessarily utilizes the subjects visual-spatial skills (e.g. even a simple *p*-imagining of seeing, say, a static square requires that the subject can visualize the spatial relations between its constituent parts), it is to be expected that children with relatively well-developed visual-spatial skills are naturally disposed to report more complex dreams.¹⁰⁴

5. *Dreaming and P-Imagining Share Neurological Architecture*

Studies show that there are fairly well-defined functional areas within the brain that are correlatable with dreaming (e.g. Cathala *et al.* 1983; Kerr & Foulkes 1981). For instance, Murri *et al* (1985) observed 19 patients with unilateral lesions in different brain areas and found that those with a damaged occipito-temporo-parietal junction reported rarely, and sometimes never, dreaming; a finding that was later confirmed by Solms (2000) in his studies of 321 patients with various brain lesions. But damage to this area also impairs waking visual and spatial mental imagery (e.g. Levine *et al.* 1985; Milner & Goodale 1995). Furthermore, damage to the primary visual cortex (i.e. the part of the neocortex that receives visual input from the retina) causes visual impairment but does not affect the subject's ability to dream (e.g. de Gelder *et al.* 2014; Nir & Tononi 2010: 5). Dreaming and *p*-imagining thus seem to share important neurological architecture.

Friends of (r.v) must thus explain why damage to a brain area that is heavily involved in *p*-imagining impairs dreaming but why damage to a brain area that is necessary for seeing does not likewise affect the visual character of dreams, given their insistence that dreams and

¹⁰⁴ This line of reasoning might be developed by considering dreaming in autistic children since they usually score relatively highly on visual-spatial tests (e.g. Mitchell & Ropar 2004) but typically experience difficulties imagining counterfactual scenarios. In which case, autistic children might have early and relatively complex dreams but will ultimately be left with fragmentary dreams since they lack the imaginative ability to 'stitch' simple scenes together into a more complex narrative that seems to be of some possible perceptual experience. This is presently under researched, although Daoust *et al.* (2008) have found that autistic, in comparison to neurotypical, subjects usually report dreams that have fewer scenes, objects and characters, as well as dreaming less frequently.

‘Good’ experiences are phenomenally type-identical mental states. Now, whatever this explanation might be, (I.D), once more, has theoretical simplicity on side: For if dreams are *p*-imagined, then damage to a brain area that is heavily involved in *p*-imagining naturally impairs the subject’s ability to dream; whereas damage to a brain area that is necessary for seeing will leave the quasi-visual character of her dreams intact.

Though none of these individual considerations constitute a ‘knock down’ argument against (r.v)’s *Perceptual Dream Experience Thesis*, I collectively take them to make highly plausible the thought that dreams are *p*-imaginings.

4.2.2 The Argument from Real Dream Belief

Let’s suppose that the *Perceptual Dream Experience Thesis* is true. Then friends of (r.v) still have the problem of explaining why dream beliefs have radically different properties from waking beliefs. Suppose I dream that I time travel to 1985 and instruct my younger self not to pursue a philosophy PhD. According to the *Belief Thesis*, I really believe *that I have time travelled to the past (P)* whilst dreaming. Meanwhile, something must happen to my long-standing waking belief *that I cannot time travel to the past (not-P)*: specifically, I must *either* (i) temporarily *acquire* an additional logically inconsistent belief during my dream that is consciously rejected upon waking (i.e. I simultaneously believe *P* and *not-P* whilst dreaming, and rationally reject *P* upon waking), *or*, (ii) temporarily *abandon* my long-standing waking belief (i.e. I cease to believe *not-P* for the duration of my dream).

Option (i) is undesirable since, as Ichikawa (2009: 9) points out, we do not usually introspectively reject our newly acquired inconsistent beliefs on waking. I do not wake up and become consciously reacquainted with my long-standing belief *not-P*, infer that this belief contradicts my temporarily acquired belief *P*, and then consciously reject *P* since I simply cease to believe *P* once my dream ends. This is not to deny that subjects can have contradictory beliefs (e.g. the Dialetheist who thinks that the sentence ‘I am lying’ is true *and* false is perhaps one such case): rather, I am objecting that friends of (r.v) have not explained why real dream beliefs are special cases that are radically dissimilar from other situations in which we might have contradictory beliefs.

Option (ii) is also undesirable since cognitively sound subjects do not usually abandon their long-standing beliefs without what they think is good reason. The situation in which I would

abandon my long-standing belief not-*P* is likely to be one in which physicists have discovered compelling empirical evidence for thinking that backwards time travel is more than just a theoretical possibility exploited by mischievous philosophers and science fiction scenarios. But when I dream that I time-travel to 1985 and meet my younger self, it is said that I happily abandon my long-standing waking belief and uncritically accept a new one as being true – of course, I may dream that compelling evidence for backwards time travel has been discovered which rationally warrants the belief *that I can time travel to the past*; but that does not negate the fact that I may unreflectively accept backwards time travel as a normal component of my dream (indeed, uncritical acceptance of dream events is a striking feature of most dreams). This is not to deny that subjects can abandon their long-standing beliefs (e.g. consider someone who suffers a traumatic brain injury and subsequently loses long-standing beliefs about her identity): rather, I am objecting that friends of (r.v) have not explained why real dream beliefs are special cases that are not subject to the usual patterns of belief revision.

Friends of (r.v) now face the following undesirable dilemma: *If* it is claimed that dreamers temporarily *acquire* inconsistent beliefs, then dreams must be radically dissimilar from other situations in which they might hold inconsistent beliefs; whereas *if* it is claimed that dreamers temporarily *abandon* their long-standing waking beliefs, then dream beliefs must be exempt from the usual justificatory norms that govern the abandonment and acquisition of beliefs. Either way, dream beliefs have radically different properties from their waking counterparts, and we have no explanation of why this is the case.

This dilemma cannot be resolved by insisting that dreams are a special class of perceptual experiences that lack the doxastic force of their waking counterparts, i.e. to insist that dreamers do not temporarily acquire or abandon real beliefs since (r.v)'s *Perceptual Dream Experience Thesis* does not imply its *Belief Thesis*. Suppose that <in reality I experience *p*> implies <in reality I believe *that p*> whereas <in my dream I experience *p*> does not likewise imply <in reality I believe *that p*>. Friends of (r.v) must now explain why perceptual dream experiences fail to rationally occasion beliefs that would be held by anyone rational. If backwards time-travel became a reality and I am thwarted from killing my younger self by a guardian of the external timeline¹⁰⁵, then that experience would rationally occasion my belief *that I cannot change the past*. But when I dream that I am thwarted from killing my younger self, it is now said that my structurally identical perceptual dream experience does not rationally occasion the belief *that I cannot change the past*; hence Sosa's charge that I am "guilty

¹⁰⁵ Surely, David Lewis himself.

of massive of irrationality” (2009: 8). Perhaps dreamers really are epistemically irresponsible agents (e.g. McGinn 2004: 113); but that still fails to explain *what* feature(s) of perceptual experience rationally occasions our beliefs whilst awake and renders us epistemically irresponsible whilst asleep – it surely cannot be that ‘Good’ belief-causing experiences are intrinsically *world-involving* given (r.v)’s insistence that dreams and ‘Good’ experiences are phenomenally type-identical mental states.

As foreshadowed (§4.1.1), (I.D) denies that dreamers temporarily acquire or abandon real beliefs since they have *i*-beliefs that naturally spring from their *p*-imagined dreams. This should not be confused with Sosa’s view which denies (r.v)’s *Belief Thesis* on the grounds that dream beliefs are relativized to the dream world. He writes:

“No physical proposition about the layout of the world around me is true in actuality just because it is true in my dream. [...] even if *in my dream* I believe that a lion is after me, and even if *in my dream* I intend to keep running, *in actuality* I have no such belief or intention.” (2009: 3-4)

Sosa’s suggestion is that <in my dream I believe *that p*> does not entail <in reality I believe *that p*> since dream beliefs are quarantined to the dream. The *in my dream* operator is thus said to function like the *in the fiction* operator that is employed to explain fictional truths: Just as the proposition *that Marty McFly time travelled from 1985 to 1955* is true in the fictional world of *Back to the Future*, so my dream belief *that I can change the past* is true in the fictional world of my time-travel dream. When I dream that I kill my younger self I do not, Sosa thinks, acquire a logically inconsistent belief or suddenly abandon my long-standing waking belief *that I cannot change the past* since my belief *that I can change the past* is not *really* held in mind-independent reality.

I do not follow Sosa’s relativist strategy since it is unclear how to understand the relation between dream worlds and the actual world. Suppose that my dog barks whilst I am dreaming, and that this sound is incorporated into my dream *as* an alarm that alerts me to a malfunction in my time-machine. In this scenario, I must have had *some* degree of awareness of my dog barking in order to incorporate that sound into my dream. But then I am tasked with explaining how my consciousness can simultaneously straddle two worlds that are independent of one another, viz., my *p*-imagined dream world and the actual world. Or suppose that I wake up and experience *relief* that I am alive having dreamt that I successfully killed my

younger self. I am then tasked with explaining why my imagined belief *that I can change the past* is quarantined to my dream whilst the emotion that springs from it is experienced in reality. Now if my *p*-imagined dream world and the actual world are independent from one another, then I am tasked with explaining why my imagined belief *that I can change the past* is quarantined to my dream in the first place. These explanatory demands make unnecessarily heavy work for (I.D) with any such answer risking *ad hocness*; hence it is theoretically preferable to say that dreamers hold *i*-beliefs in the actual world (of which the *p*-imagined dream world is a part).

I previously said (§4.1) that dream beliefs are not real beliefs since they lack the motivational properties of the former, and I have now strengthened that claim by showing that they are also exempt from the usual justificatory norms that govern the abandonment and acquisition of real beliefs. Since *i*-beliefs lack the motivational properties of real beliefs and are not rationally responsive to objective evidence, it is plausible that dreamers are disposed to form *i*-beliefs in response to their *p*-imagined dream experiences. These *i*-beliefs are not relativized to dream worlds since it is unclear how to understand the relation between dream worlds and the actual world – they are thus held in reality.

4.2.3 The Argument from Emotion

Friends of (r.v) might now object that only real beliefs can explain why subjects become emotionally involved with their dreams. For instance, Bueno argues that it is,

“[...] difficult to reconcile the claim that no [...] beliefs are involved in a dream with the fact that dreams do seem to move us, bother us, and in some cases frighten us. [...] Without our believing [...] that we are experiencing these things in our dreams, it’s hard to understand how we can form such response to dreams.”¹⁰⁶ (2009: 199)

The *Argument from Emotion* is that since dreamers have emotional responses to their dreams, and since these responses presuppose that dreamers have real beliefs, dreamers must have real beliefs. Suppose I have a particularly vivid dream *in which* I am overwhelmed by a tidal wave and wake up afraid – at least I think that I am afraid, and I have the concomitant physical signs

¹⁰⁶ Compare McGinn’s claim that “The sure test that dreams are suffused with belief is their ability to generate emotions that are conditional on belief” (2004: 112).

such as a pounding heartbeat and sweating. Bueno's worry is that my emotional response is very difficult to understand unless I really believed, whilst dreaming, that I was in danger.

One response is to deny that dreamers have real emotions. This would be to construe the dreamer as being like Walton's (1996: 196) Charles who is said to experience *quasi-fear* (i.e. fear produced by beliefs about what is make-believedly true) whilst watching a horror film about a malevolent slime oozing around the neighbourhood: specifically, it will be said that Charles and I experience quasi-fear as a result of imagining *that we are afraid*. But this does not seem quite right: For the reason that Charles is said to experience quasi-fear is that he is consciously anchored to mind-independent reality, and so knows that the slime is fictional; whereas it is the profound disconnection of my consciousness from mind-independent reality that facilitates my attentional immersion into "the imaginative illusion of the dream" (Sosa, 2009: 8). I am not claiming that this immersion is *complete*¹⁰⁷, only that it primarily explains why dreamers have real emotions and only emotionally reorient themselves once they mentally exit the simulation and realize that it was 'just a dream.'

I am thus denying that our emotional responses to dreams are conditional upon possessing real beliefs. As Currie and Ravenscroft note, it is,

"[...] very common for people to have [...] of emotions in response to imagined situations; try imagining something terrible happening to your loved ones. The object of the experience is imaginary, yet the distress caused is real enough."¹⁰⁸
(2002: 200)

For instance, when walking my dog last winter she ran onto a frozen river and fell through the ice (fortunately, the water was shallow). On recounting the story, I imagined seeing Matilda drowning and experienced a degree of distress. Or consider how imagining how hearing a particular tune can evoke a degree of happiness or how imagining tasting a fried centipede can evoke disgust. Consistent with this conceptual claim, studies show that imagined perceptual experiences usually cause emotional responses. For instance, Holmes & Matthew (2005) found that subjects who imagined dangerous events experienced increased anxiety relative to those who read descriptions of those same events; and more recently, Seuss & Rahman (2015) found that subjects had similar emotional responses to seeing photographs of happy or angry faces as

¹⁰⁷ I argue that it is not in §4.3.2.

¹⁰⁸ See also, e.g. Goldie (2005: 133) and Matheson & Schroeder (2006: 4).

they did when imagining seeing those same faces. It is thus conceptually and empirically plausible that *p*-imaginings can generate emotional responses.¹⁰⁹

Friends of (r.v) can happily accept that *p*-imaginings generate real emotions in waking life since what they deny is that dreams are *p*-imaginings. But once we accept that *p*-imaginings can evoke emotional responses in waking life, we cannot sensibly deny that *p*-imagined dreams can also evoke emotional responses – indeed, such responses are likely to be stronger given our attentional immersion in the dream world. Real beliefs are not required.¹¹⁰

4.2.4 Summary

I have argued that (r.v) is ultimately unworkable. Its *Perceptual Dream Experience Thesis* is unworkable since it cannot convincingly explain why (i) there exists a large scale discrepancy between reports of colour in dreams, (ii) perceptual dream experiences do not wake us up, (iii) deliberate daydreams occasionally segue into dreams, (iv) children's dream development positively correlates with the development of their visual-spatial skills without recourse to an unnecessarily complex theory, and (v) dreaming and *p*-imagining share, but dreaming and perceptual experience do not, important neurological architecture without recourse to an unnecessarily complex theory. Its *Belief Thesis* is unworkable since it cannot convincingly explain why dream beliefs have radically different properties from waking beliefs. I submit that these collective explanatory difficulties, coupled with (I.D)'s ability to explain our emotional responses to dreams, are enough to put (r.v) out of oneiric business. I turn now to Dennett's version of the *dream fabrication view*.

4.3 The Dream Fabrication View (Dennett's Version)

According to Dennett,

¹⁰⁹ How this occurs is controversial, e.g. perhaps emotionally responding to imagined scenarios confers an evolutionary advantage (e.g. Currie & Ravenscroft 2002: 198) or involves 'reactivating' autobiographical memories with an emotional component (e.g. Conway & Pleydell-Pearce 2000). For present purposes, it only matters that such responses do in fact occur.

¹¹⁰ The reader might now ask: what role do *i*-beliefs play in our emotional responses to dreams? Answer: *i*-beliefs can modify our emotional responses to dreams but are not the primary sources of the responses themselves, e.g. when I dream that I am being overwhelmed by a tidal wave I am likely to experience fear whether or not *i*-believe that *I am in danger* – it is just that the presence of this *i*-belief is likely to increase my fear. *I*-beliefs are thus the secondary sources of our emotional responses to dreams.

“[...] dreams are never *dreamed* at all, but just spuriously “recalled” on waking.” (1976: 159, my emphasis) [...] “If asked what it is like to dream one *ought* to say (because it would be the truth): “It is not like anything. I go to sleep and when I wake up I find I have a tale to tell, a ‘recollection’ as it were.” (Dennett, 1976: 161)

The basic idea is that dreams are *no more* than “tales” or false memories of experiences that occurred during sleep. By way of developing this thought, Dennett suggests that future dream researchers might conceivably isolate the following three processes:

Presentation: “Dreams are *presented* [to the subject’s consciousness during sleep]” (1976: 154)

Composition: “Dream composition utilizes the dreamer’s general and particular knowledge, her recent and distant experience, and is guided in familiar ways by her fears and desires [...] this process exhibits intelligence.” (1976: 156)

Memory-loading: “During [the composition] process there is a second, memory-loading process so that these events can be recalled on waking [...] Dreams are [...] *recorded* in memory.” (1976: 154)

Dennett’s contention is that it is a conceptually and empirically consistent implication of our present knowledge about dreaming that *composition* and *memory-loading* are non-conscious processes (compare: we do not have on-going conscious experiences of certain internal physiological processes such as *cell division* and *neuronal activity*), and that the insertion of a non-consciously composed dream into memory on waking is sufficient to explain our phenomenal intuition that *it is like something* to dream, i.e. the conjunction of *composition* and *memory-loading* are sufficient to explain *presentation*’s intuitive force.¹¹¹

This version of the *dream fabrication view* – the *cassette view* (c.t) – is indeed *prima facie*

¹¹¹ Dennett (1976: 161) rightly notes that positing one less process is theoretically attractive: But I see no reason for separating *composition* and *presentation*, i.e. dreamers compose, and are simultaneously presented with, a *p*-imagined dream. Still, even if I must posit three processes instead of two, (I.D) remains theoretically preferable given Dennett’s failure to convincingly explain the phenomenology of lucid dreams (§4.3.3).

conceptually and empirically consistent. On the conceptual side, Dennett (1976: 161) supplies an analogy with sleep-learning.¹¹² Consider the less than diligent student who times an audio recording of Descartes' 'Meditations on First Philosophy' to play as she sleeps in an attempt to quickly revise for tomorrow's exam. On waking, she may sincerely report (because she believes this to be true): "It was unlike *anything* to learn about a chiliagon. I fell asleep and woke up understanding Descartes argument for the distinction between ideas and images." Likewise, Dennett suggests that we *ought* to report (because this is the truth): "It was unlike *anything* to dream. I fell asleep and woke up remembering [because a non-consciously composed memory cassette was inserted into consciousness and played back upon waking] a dream in which I was being chased by hungry *p*-zombies."

On the empirical side, Dennett sketches an explanation of (i) the positive correlation between dream reports and r.e.m sleep, and (ii) why there are intra and-inter personal differences between our dream recall abilities.¹¹³ Of (i), it is suggested that r.e.m's are *by-products* of a non-conscious composition process (Dennett, 1976: 60): his thought is presumably that r.e.m's just *are* the 'background noise' that often accompanies non-conscious dream cassette composition in something like the way that low-level background noise is often a by-product of ordinary cassette composition. Thus subjects roused from r.e.m sleep will often report being roused from dreaming since they have recently non-consciously composed a dream into memory that has been falsely remembered upon waking – a thought evidenced by Dennett's (ibid) remark that "normally the dream one "recalls" on waking was composed just minutes earlier."¹¹⁴

¹¹² This analogy is not undermined by the fact that sleep-learning is empirically unsubstantiated since what matters is the subject's *belief* that sleep-learning is unlike anything.

¹¹³ Dream incorporation is discussed in §4.3.2 since Dennett thinks this poses a special problem for any view which cleaves to *presentation*.

¹¹⁴ Though Dennett thinks that dreams are *probably* composed during r.e.m sleep, he also countenances (1976: 160) that *composition* can be a temporally extended process that occurs over many waking hours or even innate in the sense that we are born with a 'library' of pre-composed dreams. Thus subjects roused from non-r.e.m sleep will often report being roused from dreaming since a dream that was non-consciously composed at some time in the past has only just then been falsely remembered on waking.

Alternatively, I treat r.e.m's as the background noise that often accompanies more complex *p*-imaginings: specifically, dreamers will often orient their gaze to 'scan' the *p*-imagined dream world just as they orient their gaze in response to environmental stimuli when awake: in contrast, less 'scanning' occurs during non-r.e.m sleep since dream reports elicited from those stages usually describe simple, less visual scenes (e.g. Nir & Tononi 2010: 8). Thus subjects roused from non-r.e.m sleep will often report being roused from dreaming since their consciousness has just been disconnected from a *p*-imagined dream world. Nothing significant hinges upon this

Of (ii), it is suggested that the quality of the cassette recording can strongly influence our dream recall abilities¹¹⁵ (Dennett 1976: 156): Dennett's thought is presumably that (i) a complete, or nearly complete, dream recording can facilitate a detailed dream report (e.g., "I dreamed that a frizzy-haired mad-scientist wearing a white coat brain-envatted me"), (ii) a partial dream recording can facilitate a partial dream report (e.g. "I dreamed that someone brain-envatted me but the details are vague"), and (iii) no dream recording, or one that fails to be inserted into memory on waking, facilitates a denial of having dreamed.

On Dennett's view then, the following principle represents a conceptually and empirically consistent state of affairs:

"It was not like anything [to dream], but it *seems to me* to have been like something [to have dreamed]." (1976: 164, my emphasis)

Or,

For all subjects *s*: It is objectively unlike anything for *s* to dream at *t*, but it seems to have been like something for *s* to dream at *t*. (Negation of *Presentation*)

Clearly, *if* a non-conscious composition process prepares 'dream cassettes' for insertion into our memory mechanisms on waking, then dreams cannot be *p*-imaginings that are presented to consciousness as we slumber.

4.3.1 The Dream Fabrication View (Stoneham's Version)

According to Stoneham,

"[...] the basic human psychological capacity to *make up stories* to explain odd and unusual things kicks in *to explain the experience of waking occasionally*, then our fascination develops the dream culture and extends it." ('Interview: The

particular disagreement.

¹¹⁵ Unsurprisingly, I think that dream recall abilities mainly spring from natural variations in, and psychological-physical factors (e.g. our emotional state, certain drugs) that commonly affect, our imaginative abilities. Though again, this particular disagreement is not decisive.

Construction of Dreams', with Unknown Magazine, 29th Nov., 2013, my emphasis)

The basic idea is that dreams are *no more* than “stories” or narrative fabrications that are created by waking minds which are then mistaken for real experiences that occurred during sleep. Stoneham identifies two situations in which we conceivably fabricate dreams. One is during r.e.m sleep: specifically, it is suggested that r.e.m sleep, since electroencephalograph traces (EEG) for brain activity during this time and wakefulness show very similar patterns (a combination of alpha, beta, and desynchronous waves¹¹⁶), involves “periods of partial awakenings” (ibid) during which we engage in imaginative activity. Thus subjects roused from r.e.m sleep will often report being roused from dreaming since they are recalling imaginative activity that occurred during some recent partial awakening(s), where memories of that activity are then mistaken for real experiences that occurred during sleep.

The second, and more usual, situation in which Stoneham thinks dream fabrication occurs is during the discombobulatory experience of waking from sleep. Stoneham’s idea seems to be this: when I initially wake up, I am not usually completely mentally oriented to time (e.g. I do not know the time until I look at my alarm clock), place (e.g. I may not initially realize that I am in bed), and perhaps even person (e.g. my initial ‘grogginess’ may preclude immediate knowledge of my name). Because this experience is profoundly disturbing, I naturally imagine a story that enables me to psychologically come to terms with my confused mental state: it is this story that, when I become mentally oriented in all three dimensions, I understandably mistake for a real experience that occurred during sleep. Clearly, *if* a mnemonic quality has attached to those imaginings that “kick in” during the psychologically unsettling process of waking up that makes it seem as though I am recalling an experience that never occurred, then dreams cannot be *p*-imaginings that are presented to consciousness as we slumber.

A parallel can be drawn between Stoneham’s dreamer and the ‘dupe’s’ predicament in Dennett’s (1991: 11) party game of psychoanalysis who is told that whilst he is out of the room, one member of the party will relate a recent dream to the group. When the dupe returns, he is to reconstruct the dream by asking yes/no questions and use psychoanalysis to

¹¹⁶ I do not take this to be decisive for two reasons: First, it is unclear why imaginative activity that begins whilst partially awake should cease when we enter ‘deep’ non-r.e.m sleep; and second, there are subtle, yet significant, differences between EEG patterns during r.e.m’s and wakefulness which suggest that they are distinct states (e.g. Massimini *et al.* 2010).

identify the dreamer. Unbeknownst to the dupe, there is no dream to be told and his questions are answered according to three simple rules that are unrelated to their content: if the question ends with a word whose letter is from the first half of the alphabet the answer is “Yes” and all other questions “No”, with the proviso that when following this rule would contradict the answer to an earlier question. What usually unfolds is a “bizarre [...] story of ludicrous misadventure” (ibid) that is unwittingly composed by the dupe himself.

Though Stoneham’s dreamer is not consciously constructing a dream like the dupe, she can be understood as similarly attempting to “assuage [her] epistemic hunger” (Dennett 1991: 16) or satisfy her curiosity by implicitly asking questions that naturally reflect her emotional preoccupations, interests, and future expectations, where the imagined answers to these questions constitute, and direct, the storyline of the dream that is falsely remembered – indeed, this process could explain why we often report emotionally charged dreams, and the recurrence of certain themes and familiar characters (e.g. the hypochondriac who thinks that her headaches are symptoms of a malignant brain tumour may, on waking, often implicitly ask herself questions that reflect this waking concern and fabricate various dreams involving her feared illness and death). As I read him then, Stoneham’s proposal is that the stories we imaginatively concoct in an attempt to come to terms with the psychologically unsettling process of waking up – either during the r.e.m cycle or from non-r.e.m sleep – often express our ongoing concerns, and memories of this confabulatory activity are then understandably mistaken for real experiences that were presented to consciousness during sleep.

Two versions of the *dream fabrication view* are now on offer: Dennett’s which asserts that dreams are (probably) non-consciously composed during the r.e.m cycle and uploaded into short-term memory on waking; and Stoneham’s which asserts that dreams are narrative fabrications generated by waking minds during r.e.m’s or as a means of making sense of their environment upon emerging from sleep. Either way, it is said that we wake up with false memories of having dreamed, where such memories can explain our intuitive commitment to,

Presentation Thesis: For all subjects s : If s is dreaming at time t , then dream experiences $E_{D1}, E_{D2} \dots E_{DN}$ are being presented to s ’s consciousness at t .

One way to decide between (I.D) and the dream fabrication view is to see which theory best explains some unusual oneiric phenomena (so-called ‘test cases’). I begin with *dream incorporation*.

4.3.2 Dennett's Argument from Precognitive Dreams

Suppose that I fall asleep and dream that my time machine begins to malfunction *en route* to 1985. I begin pressing various buttons in an attempt to prevent a temporal catastrophe, until finally a klaxon sounds signalling an imminent explosion – I then wake up to find this sound merging smoothly with the buzzing of my alarm clock. According to Dennett (1976: 158), since the *Presentation Thesis* entails that my dream occurred over some time, and since my alarm clock buzzed only briefly, I am forced to assume *pre-cognition*: I must have somehow predicted that my alarm clock was about to buzz, and my dream prepared for this pre-cognized event.¹¹⁷ Pre-cognitive dreams are obviously highly implausible; hence my claim that dreams are *p*-imaginings which are presented to consciousness during sleep is highly implausible.

Dennett (1976: 158) suggests that dream incorporation occurs when *either* (i) a dream is rapidly composed and presented during the short interval between the occurrence of a worldly event and full wakefulness (thus when my alarm clock buzzed, I quickly composed a dream *in which* a klaxon signalled imminent doom, and this was presented just as I became aware of my alarm clock buzzing), *or*, (ii) the occurrence of a worldly event ‘triggers’ the retrieval of a precomposed dream cassette from an innate ‘library’ of undreamed dreams with particular endings (thus the sound of my alarm clock caused a precomposed dream that ended with a klaxon signalling imminent doom to be inserted into short-term memory just as I became aware of my alarm clock buzzing). Alternatively, Stoneham might suggest that, since I was already partially awake when my alarm clock buzzed, I was able to fluidly incorporate that event into the storyline of my fabricated dream. Either way, dream incorporation can be explained without positing a presentation process which implausibly predicts a worldly event that has not yet occurred.

I do not see why dreamers cannot have some degree of awareness of a future event that they anticipate will occur. Consider Dennett's own anecdote:

“In a recent dream of mine I searched long and far for a neighbor's goat; when at last I found her she bleated *baa-a-a* — and I awoke to find her bleat merging

¹¹⁷ Stoneham does not discuss dream incorporation, although I see no reason why he would not also pose this objection.

perfectly with the buzz of an electric alarm clock that I had not used or heard for months.” (1976: 157)

It strikes me that if Dennett had set his alarm clock to buzz at a certain time, then the timing and sound might have been anticipated and symbolically incorporated into his dream *as* the sound of a bleating goat: in other words, his expectation of being awoken by the buzz of his alarm clock causally influenced the content of his dream – had his alarm not buzzed, his dream goat may well still have bleated. And in my scenario, my expectation of being awoken by a buzzing alarm clock would allow me to symbolically incorporate it into my dream *as* the sound of a warning klaxon – had my alarm clock not buzzed, the dream klaxon may well still have sounded and I might have woken up relieved that I am still alive.

Or consider this actual case: My own alarm clock emits a 113 decibel tone, beams of light, and sends vibrations to a pad under my pillow (I am a heavy sleeper); but it rarely rouses me nowadays as I quickly developed the ability to wake up moments before it was due to go off (as I suspect most people who anticipate being woken by what is billed as the world’s loudest alarm clock would) – just in time to press the snooze button and fall back to sleep. My ability is surely better explained by the simple desire not to be abruptly woken by a multi-pronged sensory assault rather than by any mysterious precognitive power. If my ability to wake up as a result of anticipating the sound of my alarm clock does not require precognitive powers, then there is likewise nothing especially puzzling about the ability to incorporate its anticipated sound into a dream.

This explanation can accommodate another well-known anecdote, namely that of Alfred Maury’s ‘Guillotine’ dream as described by Freud:

“He mounted the scaffold; the executioner tied him to the plank, it tipped over, and the knife of the guillotine fell. He felt his head severed from his trunk, and awakened in terrible anxiety, only to find that the head-board of the bed had fallen, and had actually struck the cervical vertebrae just where the knife of the guillotine would have fallen.” (1900 Ch.1: Part 1)

Although Maury presumably did not anticipate that he would be woken up by a headboard striking his neck before falling asleep, I suggest that he had some low-level awareness of its movement before it fell (dreamers surely retain *some* awareness of their surroundings as

evidenced by e.g. their ability not to fall out of bed and to wake up just before powerful alarm clocks sound), and symbolically incorporated this movement into his dream *as* a guillotine from the French Revolution. Perhaps what occurred was this: Maury was *already* dreaming that he was being led towards the scaffold when the headboard began to wobble; his being led to the scaffold naturally caused him to perform some minor bodily actions (e.g. ‘tossing and turning’) in response to his imminent decapitation, and this caused the headboard to fall and wake him up.

One *prima facie* problematic anecdote remains: namely, that of someone who has a dream which culminates in her being shot, whereupon she wakes up and is told that a car has just backfired outside her open window (Dennett 1976: 157). This anecdote seems problematic since, unlike someone who might anticipate their alarm clock buzzing or has some low-level awareness of the headboard that is about to fall, the event of the car backfiring could have occurred at any time. But this anecdote is only problematic until we realize that it is invented by Dennett in order to support (c.t) rather than representing an actual dream report: For when we look at *actual* reports, it seems that we can indeed explain them by appeal to the dreamer having had some anticipatory awareness of a future event, where such awareness occasionally influences the content of her dreams.¹¹⁸ As (I.D) can explain Dennett’s anecdotal reports of dream incorporation without ascribing implausible precognitive powers to dreamers, the *Presentation Thesis* remains in play.

4.3.3 The Argument from Lucid Dreaming

I want to conclude by arguing that what ultimately favours (I.D)’s theory of dreaming is its ability to better explain our phenomenal commitment to the standard conception of lucid dreaming according to which subjects occasionally have first-person awareness or conscious recognition of the fact that they are presently dreaming. For instance, Aristotle thought that,

¹¹⁸ Various studies show that external stimuli can causally influence reported dream content. For instance, Nielsen (1993) found that subjects who wore a pressure cuff on their leg which was inflated during r.e.m sleep often reported dreams that incorporated the sensation of leg pressure (e.g. ‘tingling in the leg’); and recently, Schredl *et al.* (2009) found that sleeping subjects who were exposed to positive and negative odours often reported their incorporation into a dream. I suggest that these cases have the same type of explanation as Dennett’s actual anecdotes, viz., the subject has low-level awareness of events in her immediate environment and occasionally fluidly incorporates them into the storyline of her dream.

“[...] when one is asleep, there is something in consciousness *which tells us* that what presents itself is but a dream.” (350 B.C.E: Part 3, my emphasis)

One such case is described by the physicist, Richard Feynman:

“One night, while I was having a dream, I realized I was observing myself in the dream. I had gotten all the way down, into the sleep itself! [...] I discovered that I could turn around, and walk back through the train. [...] I get back to the car with the special window, and I see three old guys playing violins but they turned back into girls! So I could modify the direction of my dream, but not perfectly.” (1985: 18)

Feynman’s conscious recognition that he had “gotten [...] into the sleep itself” meant that he did not subsequently mistake “three old guys playing violins [turning] back into girls” for a ‘Good’ experience, whereas the non-lucid dreamer would have uncritically accepted this bizarre event as a normal component of her dream. Call this phenomenal intuition the *Standard Lucid Dreaming Thesis*:

Standard Lucid Dreaming Thesis: For any lucid dream had by a subject *s* at time *t*, *s* has first-person conscious awareness that she is dreaming at *t*.

Anyone that denies lucid dreams are what they seem must convincingly explain our pre-theoretical commitment to this conception (compare: (I.D) must convincingly explain our pre-theoretical commitment to the *Perceptual Assumption*)¹¹⁹ – lucid dreams are thus ‘test cases’ that, *ceteris paribus*, can be exploited to choose between (I.D)’s contention that dreams are *p*-imaginings which are presented to consciousness and the *dream fabrication view*.

Dennett and Stoneham seek to explain the subject’s sense of lucidity as an ordinary part of the dream content. First, Dennett:

¹¹⁹ La Berge *et al.* (1981) purportedly found that lucid dreamers can ‘signal’ that they are dreaming by performing a series of pre-arranged eye movements. Though such evidence would straightforwardly refute the *dream fabrication view*, there are a number of serious methodological concerns – chief among them being that La Berge himself seems to be a test subject, and that his organization (‘The Lucidity Institute’) is largely funded by those with a vested interest in confirming that lucid dreams are what they seem. I thus set this study aside and focus upon the phenomenology of lucid dreams.

“[Lucid dreams] can be accommodated easily [by c.t.]: although the composition and recording processes are entirely unconscious, on occasion the composition process inserts traces of itself into the recording via the literary conceit of a *dream within a dream*.” (1976: 161, my emphasis)

And now Stoneham:

“If I am explaining dream reports, I am explaining why you had a dream where you thought you were being chased by a tiger. I can use the same mechanism as when you’re reporting a dream when you thought you were dreaming [that you were] being chased by a tiger. All that has happened is, *there is this additional claim that you were dreaming and this has become part of the dream*.” (‘Interview: The Construction of Dreams’, with Unknown Magazine, 29th Nov., 2013, my emphasis)

Suppose that I wake up and report a lucid dream in which I was being chased by a tiger. Dennett’s thought is that I had non-consciously composed a dream *in which* I dreamed that I was being chased by a tiger, which I mistook for a bona fide lucid dream when it was inserted into memory on waking: I did not *really* have awareness of dreaming (for there is none to be had), but rather a sense when I woke up that the non-consciously generated dream cassette had an element of lucidity. Stoneham’s thought is that I imagined *that I was dreaming that I was being chased by a tiger* during some period(s) of partial waking¹²⁰, and, on waking, mistook my memory of this imaginative activity for a bona fide lucid dream: I did not *really* have awareness of dreaming (for there is none to be had), but rather a sense when I woke up that my

¹²⁰ In conversation, Stoneham has suggested that lucid dream reports might have their origins in micro-awakenings (i.e. very short awakenings that typically last a few seconds or less, and are not consciously recognized as such or remembered) that have been found (e.g. Kato *et al.* 2004; Schwartz & Lefebvre 1973) to occur during the r.e.m cycle. The idea seems to be that a burst of imaginative activity occurs during some micro-awakening(s), memories of which are mistaken for an experience that occurred whilst we were ‘awake in our sleep.’ Now, I cannot see how those imaginings which are said to occur during some micro-awakening(s) have time to even *begin*; and granting that, I cannot then see how we are able to recall these ‘flashes’ of lucidity that are not consciously registered as such (compare: we rarely recall micro-sleeps, i.e. temporary episodes of sleep that typically last just a few seconds). For present purposes, I only require the conceptual claim that subjects imaginatively concoct a dream within a dream during some partial waking(s) (however such episodes are understood).

fabricated dream had an element of lucidity. Whatever the underlying mechanism, their core idea is the same: I had no conscious awareness of dreaming, but simply have a false memory of a dream *in which* I dreamed that I was dreaming.

I think that there are two phenomenological characteristics of lucid dream reports that Dennett and Stoneham's core idea cannot convincingly explain. I begin with the obvious one.

1. *First-Person Phenomenology*

It strikes me that there is a clear phenomenological distinction between a dream of being awake and the sense of lucidity that characterizes lucid dreams since someone who dreams that she has a dream *in which* she is awake remains "ignorant of the fact that she is still dreaming" (Emmett 1977: 448). Consider the case of Yves Delage who described being woken by someone knocking on his door – it was the caretaker telling him to get up because his friend was ill. On getting up, he splashed his face with cold water, and when that woke him up he realized that he had been dreaming. Delage reported that this same sequence repeated four times before he actually woke up – surprised to discover that he was still in bed (1919: 451). Now I cannot see how the sense of lucidity that characterizes lucid dreams can be phenomenologically extracted from non-lucid false awakenings: For someone who reports a lucid dream reports judging that 'I am *now* dreaming' (consider Fenyman's description of "observing [himself] in the dream"), whereas Delage reported that he thought he had actually woken up and was experiencing events in reality – true, he judged that he *had* been dreaming at the end of each sequence (when the cold water 'woke' him up), but this is not the present-tense judgement that he *was* dreaming as each sequence played out.

Perhaps Dennett and Stoneham will reply that I am presupposing that the sense of lucidity which dreamers occasionally report can *only* be explained by positing on-going experiences that are presented to consciousness, when the whole point of phenomenologically grounding the subject's sense of lucidity in an "ordinary dream in which [she is] aware [that she is] dreaming" (Dennett 1979: 316) is to explain her intuition that she was really lucid without recourse to the *Presentation Thesis*. But that still does not explain the phenomenological difference between the sense of lucidity that subjects occasionally report and the pseudo-sense of lucidity that reportedly characterizes non-lucid false awakenings. Consider this actual dream report in which the subject's false awakening catalyses a sense of lucidity:

“I wake and look through my open bedroom door into my study. There I see a stranger standing in the room. I am frightened, but then realize I am not awake after all, but am still dreaming. I see that the stranger has his back to me, and since I now know I’m dreaming, I decide who this person will be. I decide it will be my brother. When the man turns around it is indeed my brother. I say, “Come on, let’s fly. It’s easy.” So my brother and I fly down the stairs to the front door.” (Khan and Gover 2010: 192)

This subject described mentally moving from a state in which she originally lacked insight into her predicament to one in which she was able to discount her dream events as real *whilst they were occurring*: First, it subjectively seemed to her that she had woken up to discover an intruder in her study (just as it subjectively seemed to Delage that he had woken up to assist his friend), and then she described discounting this frightening event as real and being able to direct the subsequent course of her dream (unlike Delage who reported that the false-awakening began again). In this respect, she is not unlike the epistemically naïve subject who mentally moves from a state in which she believes that the Müller-Lyer lines are of equal lengths to one in which she is able to discount that look whilst it continues to phenomenally persist.

(I.D) has a conceptually attractive explanation of the reported first-person phenomenology of lucid dreams: all that has happened is that the dreamer has gained first-person awareness – perhaps triggered by a particularly incongruous non-lucid dream event or a false-awakening (as occurred in the example above) – of the *p*-imagined dream world, and indeed, she may even be able to mentally influence what occurs within that world (hence Fenyman’s decision to walk through the train). Certainly, there is no puzzle about how to phenomenologically extract the subject’s reported sense of lucidity from a non-lucid false awakening, given their distinctive subjective phenomenology (e.g. “I am frightened, but then realize I am [...] still dreaming” vs. “I wake and [unreflectively accept that] a stranger [is] standing in the room.”)

2. Temporally Extended Phenomenology

Consider again Fenyman’s lucid dream report in which he described choosing to walk through a train and watching male violin player’s turn into girls, where these reported dream events had a temporally extended phenomenology, i.e. it subjectively seemed to Fenyman that his dream events occurred over some time. According to Dennett and Stoneham, Fenyman awoke

with a false memory of a lucid dream that never occurred. But that memory lacks a similar temporally extended phenomenology since it seems to rapidly ‘replay’ the dream in something like the way that a film can be rapidly replayed by fast-forwarding through its constituent scenes (consider, for instance, how my experiential memory of a ten mile drive that took around twenty minutes is temporally compressed into several seconds). Friends of the *dream fabrication view* must thus explain how a subject’s temporally compressed false memory of a lucid dream can phenomenologically capture her sense of having been ‘awake in her sleep’ for a considerably longer temporal duration.¹²¹

Perhaps Dennett will ground the subject’s sense of having had a temporally extended lucid dream in the temporally extended non-conscious composition process (it took Fenyman some time to non-consciously compose his dream *in which* he dreamed that he was lucid) – indeed, he might claim that this explains the close correlation between reported ‘dream time’ and the time that subjects have been observed to spend in r.e.m sleep before waking (e.g. Stickgold *et al.* 2001). But this tack is implausible on two counts. First, it is conceptually inconsistent to say that Fenyman had *conscious* awareness of one aspect of a process (viz., its temporal extension) that is definitionally *non-conscious*. Second, admitting that Fenyman had conscious awareness of the time taken to compose his dream then renders the denial that he had first-person awareness of the dream that was being composed *ad hoc*: if his sense of it having taken some time to experience his apparent dream events sprang from the temporally extended nature of the composition process, then it is not unreasonable to think that his sense of having lucidly entered “the sleep itself” sprang from his having first-person awareness of the dream that was being composed and simultaneously presented to consciousness. Grounding the subject’s sense of having had a lucid dream that occurred over some time in a non-conscious composition process thus *either* results in conceptual inconsistency *or* risks reintroducing the presentation process that (c.t) wants to avoid.

Perhaps Stoneham will ground the subject’s sense of having had a temporally extended lucid dream in some temporally extended period(s) of partial waking (perhaps it will be said that Fenyman imaginatively composed his dream *in which* he dreamed that he was lucid during some partial waking(s) that occurred in the r.e.m cycle or during the mentally disorientating period that occurred when he woke up). But this tack faces the same problem as Dennett’s: if Fenyman’s sense of it having taken some time to experience his apparent dream events sprang

¹²¹ This objection also extends to Dennett and Stoneham’s account of non-lucid dreams (though I do not press this here).

from his conscious awareness of the temporally extended nature of some partial awakening(s), then it is not unreasonable to think that his sense of lucidity sprang from his having first-person awareness of the dream that was being imaginatively composed and simultaneously presented to consciousness. Grounding the subject's sense of having had a temporally extended lucid dream in some temporally extended partial wakening(s) still risks reintroducing the presentation process that Stoneham wants to avoid.

(I.D) has a conceptually attractive explanation of the reported temporally extended phenomenology of lucid dreams: For if Fenyman's *p*-imaginings were composed and simultaneously presented to consciousness over some time, then it is unsurprising that his apparent dream events seemed to occur over some time (they *did*). I am not claiming that the temporal match between subjective 'dream time' and external 'clock' time must be *exact* – that would be surprising, and it is certainly possible to dream that something takes many hours whilst occurring very quickly in reality or to dream that something occurs very quickly whilst occurring over a longer time in reality: it is just that such cases are not the norm as evidenced by e.g. the positive correlation between time in r.e.m sleep and reported 'dream time', and our surprise when they do occur – "I dreamed that the aeroplane journey took many hours and look! Just two minutes has elapsed." The point is that positing a presentation process which broadly corresponds to external time goes some way towards diffusing the puzzle about how to phenomenologically extract the subject's sense of having had a temporally extended lucid dream from a temporally compressed false memory.

I want to conclude by relating (I.D)'s explanation of lucid dream reports to the recent discovery (Voss *et al.* 2014) that the EEG's of subject's who report lucid, in contrast to those who report non-lucid, dreams display around 40-Hz Gamma frequencies in the dorso-lateral-prefrontal-cortex, i.e. a brain area that is heavily involved in higher cognitive processes such as *attention* and *motor planning*. Voss's methodology seemed sound: Her team applied stimulation to the frontal and temporal lobes of 27 healthy adult volunteers (all of whom denied having lucid dreams) on four successive nights; but neither experimenter nor volunteer knew which frequency was used, or whether a current was applied. Several seconds later, the volunteers were roused from sleep and asked to report any dreams. The main finding was that those who were 'zapped' at 40-Hz reported lucid dreams 77% of the time (and to a lesser extent at 25-Hz) in comparison to those who received electrical stimulation at higher and lower frequencies or nil current. Now since this Gamma band is the same frequency that is associated with high-level conscious processing, its predominance in those subjects who reported lucid dreaming is

empirically consistent with (I.D)’s hypothesis that conscious processing of *p*-imagined dream events is taking place, where this processing leads the subject to realize that she is indeed ‘awake in her sleep.’

4.3.4 Summary

In Ch.2, I argued that a successful naïve realist answer to the *p.m.e* is constrained by three desiderata. Clearly, the *dream fabrication view* exemplifies an instance of *Basic Phenomenal Disjunctivism* (dreams cannot be phenomenally type-identical to ‘Good’ experiences since they are not *experiences* at all), and I can allow that it may even have some story to tell of the remarkable features of dreams (e.g. perhaps it will be said that dream *reflective indiscriminability* consists in the indiscriminability of false memories of experiences that have not occurred from memories of ‘Good’ experiences that have occurred). The problem I have raised here is that that story cannot even begin since the *dream fabrication view* cannot convincingly satisfy a specific instance of the *unificatory* constraint, viz., the ability to offer a unified theory of dreams. As (I.D)’s theory of dreaming convincingly satisfies all three desiderata, it remains the preferred theory of dreams.

4.4 Conclusion

In this chapter, I have argued that the objective phenomenal characters of dreams are typed by perception-like imaginings that convincingly simulate the objective phenomenal characters of metaphysically possible ‘Good’ experiences, where this claim can block the *p.m.e qua* dreaming and explain the remarkable features of dreams. I then defended my account of dreaming against two competitors. I resisted the *received view* on three counts: first, that its *Perceptual Dream Experience Thesis* lacked the explanatory power of *p*-imaginings vis-à-vis a range of oneiric phenomena; second, that its *Belief Thesis* lacked the explanatory power of *i*-beliefs vis-à-vis the radically different properties of dream and waking beliefs; and third, that *p*-imaginings can phenomenologically capture our emotional responses to dreams. I resisted the *dream fabrication view* on two counts: first, that (I.D)’s commitment to a presentation process does not implausibly entail that dreamers have mysterious precognitive powers; and second, that it lacked the ability to explain two phenomenological characteristics of reported lucid dreams, and so, has narrower explanatory scope than (I.D).

5

Imaginative Disjunctivism and Hallucination

In this chapter, I explain and defend the claim that the objective phenomenal characters of hallucinatory experiences are *p*-imaginings. I begin by showing how (I.D) can (i) answer the *p.m.e qua* hallucination (§5.1), and, (ii) explain the remarkable features of hallucinations (§5.1.1). I then develop this basic story by answering Johnston's objection that "no satisfactory disjunctivist account [explains why] hallucination can provide subjects with original *de re* knowledge of quality but not original *de re* knowledge of particulars" (2004: 131): that is, the objection that there is no form of disjunctivism currently available which can adequately explain why hallucination *cannot* (i) be a source of original *de re* or singular thought about particulars (i.e. thoughts that are referentially *about* particular things), but *can*, (ii) be a source of original *de re* knowledge of qualities. Of (i), I argue that since a subject's ability to *p*-imagine a particular thing is contingent upon her having had *at least* one (in a sense to be explained) 'Good' experience of that thing, it is unsurprising that hallucination cannot be a source of original *de re* thought about particulars (§5.2). Of (ii), I argue that since *p*-imaginings can (in a sense to be explained) be a source of original *de re* knowledge of quality, it is unsurprising that hallucination can be a source of original *de re* knowledge of quality (§5.2.1).

I then (§5.3) sketch Johnston's rival *Sensible Profile* theory of hallucination according to which reflectively indiscriminable 'Good' and hallucinatory experiences are phenomenally typed by the *same* structured arrangement of qualities and relations (viz., a Sensible Profile), where the latter's qualitative and relational ingredients are not instantiated by any candidate worldly object. Though Johnston's story is obviously similar to Conduct's (§2.1.1) in its treatment of hallucinations as relational mental states, I consider it here since Conduct does not elaborate the nature of any possible experience-independent object that might phenomenally type hallucinatory experience, and it is worth seeing if there is indeed any such object that is shared with 'Good' experience which is consistent with the latter being intrinsically naïve realist. I argue that although Johnston's story has a positive explanation of hallucination's remarkable features and potentially extends to dreams and illusions (§5.3.1), it is not sufficiently disjunctivist to successfully avoid the *Problem of Explanatory Screening Off* (§5.3.2); that is, Johnston's story is ultimately unsuccessful since it cannot block *Spreading's* return, and so, does not meet the *metaphysical* constraint on a successful naïve realist solution to the *p.m.e*. As (I.D) is not likewise felled by the *Problem of Explanatory Screening Off*, it remains the preferred theory

of hallucination.

5.1 Imaginative Disjunctivism and the Problem of Hallucination

(I.D)'s first, and most straightforward, task is to answer Hellie's *p.m.e qua* hallucination without spreading *p*-imaginings over to *all* 'Good' experience. First, since it is what the existence of hallucinations are said to threaten, we can assume:

- (1) **Naïve Realism**: For all subjects *s*: If *s* has a non-misleading experience E_{NM} , then (i) E_{NM} 's subjective and objective phenomenal character is intrinsically constituted by the same naïve properties $P_{N1}, P_{N2}, \dots P_{NN}$, and, (ii) *s* stands in a direct *sui generis* acquaintance relation *r* to a worldly object, \underline{o}_w 's, perceptible properties $P_{P1}, P_{P2} \dots P_{PN}$, where $P_{P1}, P_{P2} \dots P_{PN}$, directly ground E_{NM} 's naïve properties $P_{N1}, P_{N2} \dots P_{NN}$.

And since, or so I claim, the objective phenomenal characters of hallucinations essentially consist in *p*-imaginings, we can also assume:

- (2) **Base***: For all subjects *s*: If a subject *s* has a hallucinatory experience E_H , then E_H 's objective phenomenal character is typed by *p*-imaginings $I_{P1}, I_{P2} \dots I_{PN}$.
(Positive instance of *Base*)

My objector now points out that the phenomenal appearances of hallucinations lack any property (or properties) *in virtue* of which hallucinating subjects can reflectively discriminate them from the phenomenal appearances of metaphysically possible 'Good' experiences, or *vice-versa*, e.g. consider Smith's claim that, for any 'Good' experience of reading a book, there can be a hallucinatory experience that has "exactly the same subjective character" (2005: 194). Hence,

- (3) **Reflective Indiscriminability***: For all subjects *s*: It is phenomenally possible that *s* cannot reflectively discriminate between (i) a Good experience E_G 's phenomenal appearance from some metaphysically possible hallucinatory experience E_H 's phenomenal appearance, and, (ii) a hallucinatory experience E_H 's phenomenal appearance from some

metaphysically possible Good experience E_G 's phenomenal appearance.
(Instance of *Reflective Indiscriminability*)

Again, my objector argues that, since reflectively indiscriminable experiences are tokens of the same phenomenal type, and since it is non-controversial that hallucinatory and 'Good' experiences are reflectively indiscriminable, *Spreading* vis-à-vis hallucination is true. Hence,

- (4) ***Spreading****: For all subjects s : If s cannot reflectively discriminate (i) a Good experience E_G 's phenomenal appearance from some metaphysically possible hallucinatory experience E_H 's phenomenal appearance, *or*, (ii) a hallucinatory experience E_H 's phenomenal appearance from some metaphysically possible Good experience E_G 's phenomenal appearance, then E_G and E_H are of phenomenal type F . (Abductive implication of (3), Instance of *Spreading*)

And since ***Base**** tells us that hallucinations are phenomenally typed by p -imaginings, it is concluded that 'Good' experiences must also be phenomenally typed by p -imaginings.

As expected, (I.D) blocks the *prima facie* abductive move from ***Reflective Indiscriminability**** to ***Spreading**** by replacing the latter with ***Apparent Spreading*** vis-à-vis hallucinatory experience. Hence,

- (5) ***Apparent Spreading****: For all subjects s : If s cannot reflectively discriminate (i) a Good experience E_G 's phenomenal appearance from some metaphysically possible hallucinatory experience E_H 's phenomenal appearance, *or*, (ii) a hallucinatory experience E_H 's phenomenal appearance from some metaphysically possible Good experience E_G 's phenomenal appearance, then E_G and E_H can appear to s to be of phenomenal type F (where E_G and E_H are tokens of different phenomenal types).

Naïve realism, if it is to be toppled, is not to be toppled by the non-naïve realist spectre of hallucination.

5.1.1 Imaginative Disjunctivism and the Remarkable Features of Hallucination

(I.D)'s second task is to satisfactorily meet Sturgeon's *Adequacy Condition* on hallucination,

which is,

Adequacy Condition*: A theory t of experience is explanatorily adequate *iff* t explains why a Good experience E_G and hallucinatory experience E_H are (i) *reflectively indiscriminable* ($E_G \equiv_{RI} E_H$) (ii) *scene-immediate* ($E_G \equiv_{SI} E_H$) (iii) *subjectively equivalent* ($E_G \equiv_{SE} E_H$) (iv) *rationally equivalent* ($E_G \equiv_{RE} E_H$), and, (iv) *behaviourally equivalent* ($E_G \equiv_{BE} E_H$). (Instance of Adequacy Condition)

At this early stage, I am not claiming that (I.D) can explain features (i)-(v) *better* than its rivals¹²², only that, *if* hallucinations are p -imaginings, then (I.D) can consistently explain their remarkable features.

Beginning with hallucinatory *scene-immediacy*, I claim that when,

- (1) A subject s has a hallucinatory experience E_H which is phenomenally scene-immediate.

It is because,

- (2) E_H 's objective phenomenal character is typed by p -imaginings $I_{P1}, I_{P2} \dots I_{PN}$, where $I_{P1}, I_{P2} \dots I_{PN}$ are phenomenally scene-immediate.

I claim that what goes for dream scene-immediacy straightforwardly goes for hallucinatory scene-immediacy. That is, since p -imaginings have all the Humean *force* and *vivacity* or *world-presentingness* of 'Good' perceptual experiences, and since their attention-dependent nature secures a scene-immediacy, it is unsurprising that, *if* hallucinations are p -imaginings, they too have a world-presenting scene-immediacy.

Someone might object that attention-dependent p -imaginings cannot secure hallucinatory scene-immediacy since, unlike dreams, not all hallucinations are attention-dependent. But it is unclear what these hallucinations might be: For instance, subjects with Charles Bonnet Syndrome can banish their hallucinations by rapidly moving their eyes left and right, where this banishment occurs because such movements force them to mentally attend to something else;

¹²² I consider Johnston's account of hallucination's remarkable features in §5.3.1.

and subjects can banish auditory hallucinations by performing various tasks that engage their attention, e.g. mentally instructing the ‘voices’ to disappear is often effective. Actual hallucinations, at least, do not seem to survive the subject’s successful mental shifts of attention.

I claim that this *world-presenting* scene-immediacy is what secures hallucinatory *reflective indiscriminability*. That is, I claim that when,

- (1) A subject s has a hallucinatory experience E_H which is reflectively indiscriminable from a Good experience E_G .

It is because,

- (2) E_H ’s objective phenomenal character is typed by p -imaginings $I_{P1}, I_{P2} \dots I_{PN}$, where $I_{P1}, I_{P2} \dots I_{PN}$ convincingly simulate E_G ’s world-presenting scene-immediate objective phenomenal character.

Suppose that I hallucinate a mango. *If* my hallucination is p -imagined, and *if* p -imaginings have a world-presenting scene-immediacy, it is unsurprising that I cannot reflectively discriminate it from some corresponding ‘Good’ experience that likewise has a world-presenting scene-immediacy.

Onto *subjective equivalence*, I claim that when,

- (1) A subject s has a hallucinatory experience E_H which has a subjective perceptual phenomenal character.

It is because,

- (2) E_H ’s objective phenomenal character is typed by p -imaginings $I_{P1}, I_{P2} \dots I_{PN}$, where $I_{P1}, I_{P2} \dots I_{PN}$ have a subjective perceptual phenomenal character.

My claim is simply this: Definitionally, p -imaginings have a subjective perceptual phenomenal character; so *if* hallucinations are p -imaginings, then they too must have subjective perceptual phenomenal characters. Thus, *if* my mango-hallucination really is p -imagined, then since my p -

imagining is a successful simulation of the corresponding ‘Good’ experience, it is unsurprising that it has a subjective perceptual phenomenal character – and even those who deny that (2) is (1)’s truth-maker do not deny that hallucinations have a subjective perceptual phenomenal character (indeed, this is what someone who denies that hallucinations are intrinsically perceptual must explain).

Concerning *rational equivalence*, I want to distinguish between a *strong* and *weak* version. A proponent of the former claims that when,

- (1) A subject *s* has a hallucinatory experience E_H which rationally occasions a belief *that p*.

It is because,

- (2) E_H ’s objective phenomenal character is of phenomenal type *F*, where E_H is a particular token of *F* that rationally occasions *s*’s belief *that p*.

The idea is that (2) is (1)’s truth-maker since the objective phenomenal characters of hallucinations are typed by something – standardly, a perceptual experience – that rationally occasions a real belief. I hallucinate a mango and naturally form the belief *that there is a mango in front of me*; or if I have reason to think that I am hallucinating, the more cautious belief *that it as if I am seeing a mango in front of me*, so the story standardly goes.

Unlike non-lucid dreamer’s, most hallucinator’s realize that they are hallucinating. Most subjects with Charles Bonnet Syndrome, for instance, are untroubled by their hallucinations (e.g. Jacob *et al.* (2004: 238) describe a typical case in which an 87 year old man was untroubled by the apparent presence of bears and cows in his house); voice-hearers usually understand that the ‘voices’ are unreal (e.g. Brian Wilson of ‘The Beach Boys’ no longer takes the ‘voices’ which threaten his family at face-value); and those who have drug-induced hallucinations usually understand their atiology (e.g. Huxley realized that “a slow dance of golden lights” (1954: 4) was induced by his taking mescaline). Or consider *peduncular* hallucinations (i.e. vivid hallucinations that usually occur during dark environments) that, although are typically of ordinary scenes and are thus likely candidates for being believed, are rarely taken at face-value (e.g. Penney & Gallarneau describe a typical case in which a 59 year old woman was untroubled by the apparent presence of “animals and people that ranged from

shadows to bright colours” (2014: 450)). In these cases, subjects have real beliefs of the form: I believe that [it is *as if* I experience that {P is the case}], where these beliefs are strongly rationally equivalent to those that are rationally occasioned by doxastically resisted ‘Good’ experiences, i.e. situations in which the subject has a ‘Good’ experience that she suspects is really ‘Bad.’

What is at issue is whether subjects who seem to believe their hallucinations have real beliefs. Now since I think that dreams are a species of hallucination, and since I claim that dreamers have *i*-beliefs, I am conceptually committed to a *weak* rational equivalence which claims that when,

- (1) A subject *s* has a hallucinatory experience E_H which seems to rationally occasion a belief *that p*.

It is because,

- (2) E_H ’s objective phenomenal character is typed by *p*-imaginings $I_{P1}, I_{P2} \dots I_{PN}$, where $I_{P1}, I_{P2} \dots I_{PN}$ rationally occasion *s*’s *i*-belief *that p*.

I claim that (2) is (1)’s truth-maker since *p*-imagined hallucinations can rationally occasion *i*-beliefs, where the subject’s inability to reflectively discriminate her *p*-imagined hallucination from the corresponding ‘Good’ experience that *would* rationally occasion the same real belief then grounds the erroneous intuition that her hallucination is strongly rationally equivalent to that ‘Good’ experience. When I hallucinate a mango in front of me, I am imagining seeing a mango, and this *p*-imagining rationally occasions my *i*-belief *that there is a mango in front of me*. And because I cannot reflectively discriminate my hallucination from the corresponding ‘Good’ experience that would rationally occasion the real belief *that there is a mango in front of me*, I mistakenly think that I really believe *that there is a mango in front of me*, or so my alternative story goes.

For *weak* rational equivalence to be made plausible, I must explain what is occurring in cases where subjects do not simply “stand and marvel” (Dennett 1991: 9) but reportedly act upon their hallucinations. The answer to this is obviously an explanation of *behavioural equivalence*. I claim that when,

- (1) A subject s has a hallucinatory experience E_H which rationally occasions her action a .

It is because,

- (2) E_H rationally occasions s 's i -belief which conjoins with a desire and emotion to rationally occasion an action a .

To see how this works, consider the following case report of a hallucination that the subject thought predicted the death of her Grandmother:

"She could see her grandmother's dead body lying on her funeral bed in the drawing room of her house [...] and people sitting around her weeping. [...] She herself would begin weeping on witnessing the sight and had to leave the room. [...] This scene of the grandmother's death on other hand was (as if) happening in reality, where she clearly saw all the people and objects in the room in full detail and could interact with them." (Chakrabarty & Reddy 2011: 71)

My explanation of the subject's behaviour is that her hallucination *as of* her "grandmother's dead body" naturally generated a grief-like emotion; this emotion, together with some i -belief (e.g. *that I am foreseeing my Grandmother's death*) and the desire not to 'see' the funereal scene, rationally occasioned her leaving the room, or so my story goes.

This model can also explain cases in which subjects reportedly act upon their *command* hallucinations, i.e. hallucinations which command them to act in specific ways. One famous example is that of Joan of Arc who reported being instructed by the Archangel Saint Michael to "Go raise the siege, which is being made before the city of Orleans" (second public examination, 22 February, 1431). Assuming that this was a genuine command hallucination, the thought is that the 'voice' generated an emotion (e.g. at her trial, Joan described feeling guarded by the voices), which together with some i -belief (e.g. *that Saint Michael is commanding me to assist the Dauphin*) and desire (e.g. to thwart the English besiegers), rationally occasioned her travelling to Orleans and playing a decisive role in ending the siege.

My story of the remarkable features of hallucinations can now be summarized thus: It is the attention-dependent nature of p -imaginings, together with their *world-presenting*

phenomenology, that secures hallucinatory *scene-immediacy*, and, in turn, this secures *reflective indiscriminability*. Hallucinatory *subjective equivalence* simply consists in the fact that *p*-imaginings have a subjective perceptual phenomenal character. Hallucinatory *rational equivalence* was understood *weakly*, where the subject's *i*-beliefs, together with *reflective indiscriminability*, secures the erroneous intuition of *strong* rational equivalence. Hallucinatory *behavioural equivalence* occurs when the subject's *p*-imagining evokes an emotion that conjoins with her *i*-beliefs and desires to rationally occasion a certain action.

5.1.2 Summary

I have now explained how (I.D) can (i) answer the *p.m.e* vis-à-vis hallucination, and, (ii) explain the remarkable features of hallucination. In what follows, I develop (I.D)'s *overall* theory of hallucination by 'testing' it against Johnston's rival Sensible Profile theory of hallucination. I begin by arguing that (I.D) can meet Johnston's demand to explain two interesting features of hallucination.

5.2 Hallucination and Original *De Re* Thought

Hallucination's first interesting feature, Johnston (2004: 127) points out, is that it cannot be an *original* source of *de re* thought¹²³, i.e. thoughts which are referentially *about* particular things in contrast to *de dicto* thoughts which merely characterize them.¹²⁴ To illustrate, I presently seem to see Scrabble the terrier, sunbathing in the garden. This look rationally occasions my belief that I am thinking about *that* particular dog, hence, I am plausibly entertaining a *de re* thought about Scrabble, the terrier sunbathing in the garden. But suppose I have no particular dog in mind and think instead under the description 'The terrier sunbathing in the garden.' Then I am thinking about *any* dog that happens to satisfy that description, and so, plausibly entertaining a *de dicto* thought that refers to anything which satisfies its extension, e.g. my neighbour's dog. Crucially, 'Good' experience can referentially ground *original de re* thoughts about worldly objects. For should I peer out of the window and see a sunbathing canine-interloper that I have

¹²³ Independent arguments (e.g. Kripkean (1980) *modal arguments*; Perry's (2001) *indexical argument*; and Strawson's (1959: 20–22) *reduplication argument*) for the existence of *de re* thoughts are sidestepped since someone (e.g. Hinchliff, 1988) who disputes their existence will presumably agree that hallucination cannot be an original source of them.

¹²⁴ This distinction is the least controversial gloss, though it has been argued (e.g. Donellan 1966) that definite descriptions can sometimes have both a *de re* and *de dicto* use.

never seen before, my experience still allows me to entertain original *de re* thoughts about it such as *that dog sunbathing in the garden*.

But suppose that the mad-scientist is lurking nearby and somehow causes me to have a reflectively indiscriminable hallucination *as of* Scrabble, the terrier sunbathing in the garden. In this scenario, it is conceptually very difficult to see how I could hallucinate Scrabble *qua* Scrabble without some antecedent “way of making singular reference” (Johnston 2004: 129) to her. Absent some prior ‘Good’ experience, my hallucination is no more *of* Scrabble than it is *of* another dog that happens to satisfy the same qualitative description. A necessary condition on the hallucination of particular objects thus seems to be that the subject has had *at least* one antecedent ‘Good’ experience of that particular which she hallucinates.

An apparent counterexample supposes that the mad-scientist has extensively brain-washed me to the effect that, one year from now, I will be caused to hallucinate a particular philosopher whose existence I am unaware of but will soon meet. In this scenario, my objector reasons that since my hallucination successfully referred to the philosopher that I met, hallucination can be a source of original *de re* thought. Following Johnston (2004: 130), I reply that this example neglects the distinction between the referential intentions of the *brainwasher* and the *content* of my hallucination. My hallucination only seems to be an original source of *de re* thought about *that* particular philosopher because that is just what the mad-scientist referentially intended. But the actual content of my hallucination is *nothing more* than some descriptive template that that philosopher serendipitously satisfies. Again, it is antecedent acquaintance with particular things which referentially guarantees that hallucinations are genuinely *de re*.

That the ability to hallucinate particular things is parasitic upon antecedent ‘Good’ experiences of them is unsurprising should hallucinations be *p*-imaginings. Suppose that I imagine seeing Scrabble, the terrier, sunbathing in the garden. Unless I have had some antecedent ‘Good’ experience *of* Scrabble, my *p*-imagining is just some descriptive template that she happens to satisfy: in other words, I have a *de dicto* *p*-imagining that is not referentially tied to the identity of any particular dog – indeed, I may be surprised to meet the real Scrabble and think ‘I visualized a dog that looked remarkably like you.’ For the supposition that I can have a genuinely *de re* *p*-imagining without having had some antecedent ‘Good’ experience of Scrabble problematically presupposes that I can successfully refer to something of which I lack knowledge – alas, there is no compelling reason for thinking that I possess fantastic referential powers. A necessary condition on *p*-imagining particular objects thus seems to be that the

subject has had *at least* one antecedent ‘Good’ experience of that particular which she *p*-imagines.

This conception of antecedent ‘Good’ experience admits of one refinement. Suppose that I have a hallucinatory experience as of *a* Siren from Greek mythology; it might be suspected that my hallucination cannot be parasitic upon some antecedent ‘Good’ experience since Sirens are fictional entities. In this scenario, I suggest that my hallucination will be parasitic upon an antecedent ‘Good’ experience of *either* (i) a *depicted* Siren (e.g. the animated entity that has repeatedly slain my avatar in the video-game, ‘God of War’), *or*, (ii) particular objects that have been previously seen separately (viz., a woman and a bird), where imaginatively combining my ideas of these individual objects allows me to have a hallucinatory experience *as of* a Siren.

I can now explain Johnston’s first interesting feature of hallucination. For *if* the objective phenomenal characters of hallucinatory experiences are typed by *p*-imaginings, then, since such imaginings cannot be an original source of *de re* thought, it is conceptually unremarkable that hallucinatory experiences cannot be an original source of *de re* thought.

5.2.1 Hallucination and Original *De Re* Knowledge of Quality

Hallucination’s second interesting feature, Johnston claims, is that it can be an original source of *de re* knowledge of quality. He writes,

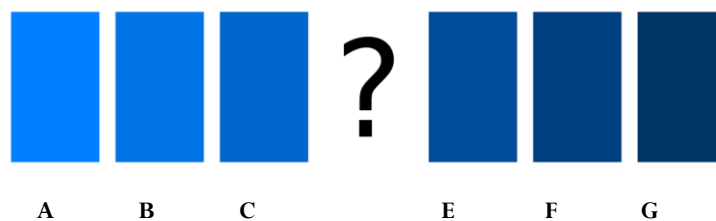
“I can secure my first singular reference to the quality cherry red or to the structural property C major by way of hallucinating a scene or tune. [...] a painter might discover in hallucination a strange, alluring color, which he then produces samples of by mixing paints in a novel way.” (2004: 130)

A *prima facie* objection is that a subject cannot truly have first-order knowledge of a quality that she hallucinates unless that knowledge has been antecedently secured by some ‘Good’ experience. Thus someone who hallucinates “the structural property C-major” cannot conceptually recognize that property *as* C-major unless she has had *at least* one antecedent ‘Good’ experience *of*, and conceptually recognized, the property C-major. The worry then, is that only ‘Good’ experience, together with conceptual recognition of those qualities that are presented, can secure original *de re* knowledge of quality.

I suggest that this objection points to a plausible refinement of Johnston's position, namely, that we should distinguish between a subject's ability to conceptually recognize a hallucinated quality Q *as* being F and her hallucinating Q *simpliciter*, i.e. between Q 's manner of presentation and Q itself. Employing this distinction, my suggestion is that a subject can *first* acquire *de re* knowledge of a quality Q in hallucination and then (though there is no requirement that this must occur) subsequently conceptually recognize Q *as* F in 'Good' experience. There is nothing conceptually inchoate about the thought that a subject could secure original *de re* knowledge of the quality cherry red through hallucination, and then when she sees cherry red, thinks, "A-ha! So *that* is what I hallucinated." Though should no such 'Good' experience ever occur, it remains the case that her hallucination provided her with original *de re* knowledge of the quality cherry red. On my view, a subject need not have any antecedent 'Good' experience of a quality that she hallucinates – *she simply hallucinates*, and this is sufficient for original *de re* knowledge of quality.

To sustain the claim that hallucinations are *p*-imaginings, it must be shown that *p*-imaginings can likewise be an original source of *de re* knowledge of quality. Now I am not claiming that hallucinations which provide original *de re* knowledge of quality *do* occur (reports of actual hallucinations often describe qualities that the subject has previously experienced): I am claiming rather, that *if* such a hallucination were to occur, then (I.D) has conceptual space to accommodate it. To see how, consider Hume's 'missing' shade of blue in which we are presented with a spectrum of blue colours that are ordered according to their degree of brightness and invited to "raise up to [ourselves] the idea of that particular shade" (1748: §2). *To illustrate:*

Hume's 'missing' shade of blue



I claim that a normally sighted subject can *p*-imagine the missing shade by imaginatively combining her ideas of the surrounding shades of blue – the most likely combination being 'C' and 'E', though perhaps other combinations are possible. To see how, consider the widely

accepted distinction¹²⁵ between *unique* and *binary* hues – unique hues (red, green, yellow, and blue) are phenomenally unmixed hues that look to contain no other chromatic component, whereas binary hues are phenomenally mixed hues that look to be composed of two unique hues: *turquoise*, for instance, looks to be an admixture of *blue* and *green*, and *psychedelic purple* looks to be an admixture of *red* and *blue* (see, e.g. Allen 2010a: 13). Exploiting this distinction, I suggest that it is possible to successfully *p*-imagine the missing shade of blue by imaginatively combining the binary hues that are previously seen (compare: someone who imagines a centaur has plausibly combined her ideas of worldly objects that have previously been seen separately, viz., a man and a horse).¹²⁶

Applying my model to Johnston's examples, the suggestion is that someone who secures original *de re* knowledge of the quality *cherry red* through hallucination has imaginatively combined her ideas of some antecedently experienced similar shades (e.g. perhaps a dark purple and a dark red); and someone who secures original *de re* knowledge of the quality C-major through hallucination has imaginatively combined her ideas of some antecedently experienced similar sounds (e.g. perhaps B-major and C-minor). Johnston's original position has now been refined even further: For novel qualities are not somehow conjured up *ex nihilo*; in all cases, the quality in question is essentially related to other qualities that the subject has previously experienced. But this does not endanger my claim that *p*-imaginings can be an original source of *de re* knowledge of quality since there is no requirement that such knowledge must be acquired *ex nihilo*. It is significant enough that the subject can expand her knowledge of qualities by *p*-imagining, even if she cannot *p*-imagine novel qualities from scratch.

My model can conceptually accommodate Johnston's example of 'supersaturated red' which, he thinks, is a quality that is *only* knowable through hallucination. He writes:

"There is a state that a subject can get into by being exposed to bright monochromatic unique green light [...] in an otherwise dark room for about twenty minutes. If we then turn the stimulus off, illuminate the room, and have the subject look at a small, not-too-bright achromatic surface, he will see a red

¹²⁵ I lack space to defend this distinction. For present purposes, it is sufficient that normally sighted subjects can conceptually grasp it.

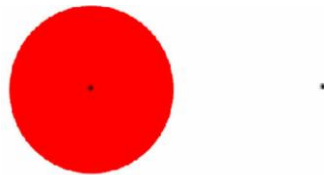
¹²⁶ Perhaps a sufficiently imaginative and sedulous person could successfully *p*-imagine the missing shade by imaginatively extending her idea of e.g. 'C' in the spectrum above – though admittedly, this seems less likely than imaginatively combining her ideas of *at least* two shades.

afterimage. If the subject turns so that the afterimage is then superimposed on a small red background then [he will] be after-imaging a supersaturated red [...] a red purer than the purest spectral red light.” (2004: 141-2)

Now, it is far from obvious that this really exemplifies a hallucination¹²⁷; however, it is worth granting Johnston this assumption since he denies that any brand of disjunctivism can explain it (2004: 131). I think that it can be explained along the same lines as Hume’s missing shade of blue: specifically, the thought would be that the successive presentation of the unique green light in a dark room, an achromatic surface, and the small red background perceptually-cognitively, prime¹²⁸ the subject to imaginatively combine her ideas of these antecedently experienced qualities to successfully *p*-imagine supersaturated red.

I can now explain our second interesting feature of hallucination: For *if* the objective phenomenal characters of hallucinatory experiences are typed by *p*-imaginings, then since such imaginings can be an original source of *de re* quality, it is conceptually unremarkable that

¹²⁷ I suspect that this set-up enables the normally sighted subject to have a ‘Good’ experience of a naïve colour property that is ordinarily visually inaccessible owing to the behaviour of her photoreceptors. To see how this works, consider this simpler case: First, stare at the dot in the red circle for ten seconds and then transfer your gaze to the black dot on the right.



You are likely to see a greenish-blue afterimage. Here is what I think occurred: when you fixated on the dot in the red circle, an area of your retina was stimulated by red light; hence there is an adaptation by your photoreceptor cells that are more sensitive to red light. Then, when you looked at the white surface, the area of your retina which adapted to red light was less sensitive to the red than green and blue properties of the white surface (white being a phenomenal mixture of all visible wavelengths): in short, you effectively become blind to red but not green and blue; hence you saw a greenish-blue patch. I am suggesting that this greenish-blue patch is a naïve colour property that was instantiated by the green and blue properties of the white surface.

Now in Johnston’s example, I suspect that normally sighted subjects adapt to see *magenta* and not supersaturated red (see Manzotti 2014) – still, whatever colour one adapts to see will be a naïve property that is instantiated by the small red background. And whether I treat afterimages as *p*-imaginings or awareness of naïve colour properties that are normally hidden, what matters is that I am not committed to treating them as perceptual experiences, and so, do not risk resurrecting the *p.m.e.*

¹²⁸ I elaborate this notion of *priming* in §6.1.1 and §6.1.2.

hallucination can be an original source of *de re* knowledge of quality.

5.2.2 Summary

I have now shown how (I.D) can explain hallucination's two interesting features. I suspect that Johnston's complaint that no form of disjunctivism can accomplish this stems from his concentrating on the view's more problematic forms: For he considers a Martin-esque negative form which simply denies that hallucination and seeing involve a common "act of awareness" (2004: 121) and a Fish-y positive form according to which "hallucinating a dagger is falsely seeming to oneself to be seeing a dagger" (2004: 124). But the former is naturally too deflationary to secure hallucination's two interesting features (§2.2.1), whereas the latter objectionably identifies the *explanans* (a dagger-hallucination) with the *explanandum* (why it falsely seems to the subject that she sees a dagger) (§2.2.2). Johnston is quite right to complain about the "irritating unhelpfulness" (2004: 131) of these two forms: But it is the conception of hallucinatory experience as being *p*-imagined that is the more helpful form which he has overlooked. With this conception elaborated, it is now time to test it against Johnston's Sensible Profile Theory of hallucination.

5.3 Johnston's Sensible Profile Theory of Hallucination

Johnston's Sensible Profile theory of hallucination can be seen as springing from the need to explain its two interesting features.¹²⁹ He reasons that since hallucination cannot be a source of original *de re* knowledge about particulars, but can be a source of original *de re* knowledge about qualities "the primary object of hallucination is individuated in terms of properties rather than particulars" (2004: 131).¹³⁰ Construing the direct object of hallucination as being purely

¹²⁹ Johnston's other motivation is that any adequate theory of hallucination must "combine the common object of awareness that is [...] present in hallucination and seeing with the no less "direct" awareness of external objects that is definitive of seeing" (2004: 120). For disjunctivism, Johnston objects, "has nothing satisfactory to say" (2004: 124) about those experientially seamless transitions that can occur between 'Good' and 'Bad' experiences which abductively imply that they are phenomenally type-identical mental states; whereas conjunctivism, Johnston also objects, counterintuitively entails that, in 'Good' experience, worldly objects are "less" (2004: 119) present than the non-worldly objects of hallucination. A robust theory of hallucination should thus, Johnston insists, explain what is common to 'Good' and 'Bad' experience whilst preserving the former's *world-acquaintingness*.

¹³⁰ This implies that there can be *secondary* objects of hallucination which are "determined by how the primary object immediately strikes" (Johnston 2004: 132) one, e.g. if you hallucinate a qualitative complex that "strikes"

qualitative thus explains why hallucination can be an original source of *de re* knowledge of quality (subjects are directly acquainted with qualities) but not of particulars (no particulars are directly presented). This qualitative object, Johnston tells us, is a complex of purely qualitative and relational ingredients called a *Sensible Profile*. He writes:

“Consider the [...] scene before your eyes. Now attend to the relational and qualitative structure that is visibly instantiated there in the scene. It consists of just the properties and relations of which you are visually aware, when you are seeing the scene. It is a [...] *sensible profile*, a complex, partly qualitative, and partly relational property, which exhausts the way the particular scene before your eyes is if your present experience is veridical.” (2004: 134)

But in hallucination, no candidate worldly objects exist to instantiate those qualities and relations of which the subject is directly aware.¹³¹ Hence she is left,

“[...] *simply aware of the partly qualitative, partly relational profile*. [...] When the visual system misfires, as in hallucination, it presents *uninstantiated* complexes of sensible qualities and relations, at least complexes not instantiated there in the scene before the eyes.” (2004: 135, my emphasis)

These remarks suggest,

Johnston’s Hallucination Thesis: For any hallucinatory experience E_H had by a subject s at time t , the primary object of awareness is a Sensible Profile SP , where SP is (i) a complex property that is structured out of an array of uninstantiated universal sensible $Q_{s1}, Q_{s2} \dots Q_{sn}$ and relations $R_1, R_2 \dots R_N$, and, (ii) immediately presented to s ’s consciousness at t .

Johnston (2004: 147) illustrates his *Hallucination Thesis* by analogy with the complex property

you *as* being of Ares, the Greek God of war, then Ares is the secondary object of your hallucination. Hallucinations will lack secondary objects when the Sensible Profile does not strike the subject as being about *any* particular thing. I discuss the difficulty with this distinction in §5.3.2.

¹³¹ Though I share Thompson’s suspicion that uninstantiated qualities and relations cannot “do the metaphysical job of constituting phenomenal character” (2008: 402), I lack space to argue for this claim here. In the present context, what matters is that Johnston’s account is not, or so I shall argue (§5.3.2), disjunctivist enough to block the resurrection of *Spreading*.

of *being-a-HCl-molecule*, i.e. the complex property of *being-a-hydrogen-ion-that-is-covalently-bonded-to-a-chlorine-ion*. Chemistry tells us that the instantiation of this complex property necessarily requires the instantiation of two basic properties and one relation: namely, (i) *being-a-hydrogen-ion* (P_1), (ii) *being-a-chlorine-ion* (P_2) and (iii) the relation of covalent bonding (R_1), which holds between P_1 and P_2 . Johnston claims that those necessary connections which hold between the instantiation of the complex property of *being-a-HCl-molecule* and the instantiation of these more fundamental qualitative and relational properties are *best* explained by the fact that these ingredients are not themselves “wholly distinct from the complex property” (ibid) that is ontologically structured out of them. The complex property of *being-a-HCl-molecule* is thus understood as fundamentally consisting in the basic properties P_1 and P_2 and a particular type of relation, R_1 , that holds between them.

Johnston’s analogy is that, just as the complex property of *being-a-HCl-molecule* fundamentally consists in three basic ingredients, so the direct object of a hallucinatory experience is a complex property (viz., a Sensible Profile) that fundamentally consists in *uninstantiated* sensible qualities and relations. Take my present, presumably ‘Good’, experience. As I visually attend to the “relational and qualitative structure” that is “visibly instantiated” by various candidate worldly objects, I am presented with a range of sensible qualities and relations such as *a-rectangular-shape-in-front-of-me* and *a-green-colour-to-my-right*, where these qualities and relations are experientially instantiated by my *computer monitor* and *Scrabble*, the terrier’s *tennis ball* respectively. As Johnston tells it, a ‘Good’ experience’s phenomenal character¹³² is typed by a complex Sensible Profile that *is* experientially instantiated¹³³ by those worldly objects with which the subject is directly acquainted.

Particularly important is Johnston’s claim that a Sensible Profile’s qualities and relations are, since “different things could instantiate the same spatio-temporal layout” (2004: 135), mind-

¹³² As Johnston treats the objective and subjective phenomenal characters of both ‘Good’ and hallucinatory experiences as being identical, I will simply speak of *phenomenal character* throughout the remainder of this chapter unless otherwise indicated.

¹³³ Johnston does not clarify if ‘Good’ experience involves awareness of *instantiations* of Sensible Profiles or just Sensible Profiles that are *instantiated*. I assume that he means the former: For otherwise, as Dunn (2008: 379) notes, a Sensible Profile might be instantiated even when it is the primary object of a hallucination, since I could hallucinate a Sensible Profile that is not instantiated by any candidate worldly object in my immediate environment (e.g. *as of* a mango) but which happens to be instantiated thousands of miles away. If ‘Good’ experience involves awareness of Sensible Profiles that are instantiated (somewhere), then I would, absurdly, be veridically seeing a mango.

independent *universals* as standardly conceived, i.e. mind-independent properties that can be instantiated by numerically distinct things. Such universality is said to explain why the hallucinating subject can only ever be directly aware of “the partly qualitative, partly relational profile.” Suppose that I am now having a reflectively indiscriminable hallucination *as of* Scrabble, the terrier, sunbathing in the garden. Johnston’s thought is that I am directly aware of *the very same* qualities and relations as those that I would be directly aware of the corresponding ‘Good’ experience: it is just that they cannot, since hallucination is neither world-involving nor world-acquainting, be experientially instantiated by any candidate worldly object.¹³⁴ As Johnston tells it, a hallucinatory experience’s phenomenal character is typed by a complex Sensible Profile that is *not* experientially instantiated by candidate worldly objects.

We can now see that Johnston’s story of hallucination differs from (I.D)’s in two key ways. First, I think that a hallucinatory experience’s qualitative and relational properties are *p*-imaginings, whereas Johnston thinks that they are uninstantiated universals. Second, it is neither purely *Conjunctivist* nor purely *Disjunctivist*, but amalgamates ingredients from both rival theories. The conjunctivist ingredient that ‘Good’ and hallucinatory experiences share is, of course, a reflectively indiscriminable Sensible Profile; whereas its disjunctivist ingredient consists in the fact that a hallucination’s Sensible Profile is not experientially instantiated by candidate worldly objects, thus explaining the intuition that “Any case of hallucination is thus a case of “direct” visual awareness of less than one would be “directly” aware of in the corresponding case of seeing” (Johnston 2004: 137). That is, ‘Good’ and hallucinatory experiences are phenomenally typed by the same Sensible Profiles, whilst it is the presence of candidate worldly items to experientially instantiate the former’s qualities and relations which ensures that it is world-involving and world-acquainting in just the way that naïve realism requires.

5.3.1 Two (Out of Three) Constraints on Hallucinatory Experience isn’t Bad

Johnston’s Sensible Profile theory of hallucination can plausibly explain two out of our three constraints on any explanatory adequate theory of hallucinatory experience.

¹³⁴ Suppose that I doxastically resist my hallucination. Assuming that my resistance does not stem from being told that I am hallucinating, then it can, Johnston thinks, be explained by the fact that the “sensible profile [...] matches nothing” (2004: 144) that I have been experientially presented with before, i.e. the puzzle of belief-independence is resolved by positing a Sensible Profile which exemplifies some scene that the subject thinks cannot be experientially instantiated by anything worldly.

1. Positive Explanation of Hallucinatory Experience

I have argued (§2.2) that any explanatory adequate disjunctivism must positively explain a 'Bad' (here, *hallucinatory*) experience's remarkable features. Johnston's Sensible Profile theory of hallucination would seem to accomplish just this since he claims that hallucinatory *reflective indiscriminability* springs from the fact that the hallucinatory Sensible Profile directly presents the subject with the same universal qualities and relations that would be experientially instantiated by worldly items in the corresponding 'Good' case. This positive conception of *reflective indiscriminability* can plausibly be employed to secure remaining hallucinatory remarkable features.

Take hallucinatory *scene-immediacy*. Johnston's argument presumably goes: *Reflective indiscriminability* consists in the fact that 'Good' and hallucinatory experiences share reflectively indiscriminable Sensible Profiles; since 'Good' Sensible Profiles are phenomenally scene-immediate, reflectively indiscriminable hallucinatory Sensible Profiles must also be phenomenally scene-immediate. That is, when,

- (1) A subject *s* has a hallucinatory experience E_H , where it is *as if* E_H immediately presents an object, \mathcal{O} , as being *F*.

It is because,

- (2) *S* cannot reflectively discriminate the uninstantiated Sensible Profile that is the direct object of E_H from the instantiated phenomenally scene-immediate Sensible Profile that is the direct object of some metaphysically possible Good experience, E_G .

The thought is that a hallucinatory experience is phenomenally scene-immediate since the subject cannot reflectively discriminate the uninstantiated Sensible Profile that is the direct object of her awareness from the phenomenally scene-immediate Sensible Profile that would be instantiated by the corresponding 'Good' experience. For instance, my mango-hallucination will be phenomenally scene-immediate *iff* I cannot reflectively discriminate those uninstantiated qualities and relations from the phenomenally scene-immediate ones that would be instantiated by the corresponding 'Good' experience *of* a mango (these remarks apply,

mutatis mutandis, to the other hallucinatory remarkable features of *subjective, rational, and behavioural equivalence*).

Positively grounding the indiscriminability property that ‘Good’ and hallucinatory experiences share in the reflective indiscriminability of their Sensible Profiles thus means that Johnston’s, unlike Langsam’s *negative*, conception of hallucinatory *indiscriminability* can robustly secure hallucination’s remaining remarkable features. Neither is there any Fish-y circularity in this thought since the *explanans* (reflectively indiscriminable ‘Good’ and hallucinatory Sensible Profiles) and *explanandum* (a hallucinatory experience’s remaining remarkable features) are distinct properties.

2. Unidisjunctivism

I have argued (§2.3) that any explanatory adequate disjunctivism must have the resources to tell a unified story of dreams, hallucination, and illusion. Johnston’s Sensible Profile theory of hallucination would seem to accomplish just this. Consider his description of the ‘Waterfall’ illusion:

“You see the stationary rungs over there and at the same time you are presented with a complex quality – upward movement of the rungs over there – which if it were instantiated would be instantiated by the same rungs moving upward. But [...] nothing is instantiating this quality; that is why it counts as an illusion.”
(2004: 144)

Johnston’s thought seems to be that the direct object of an illusory experience is a ‘hybrid’ Sensible Profile that is ontologically structured out of both instantiated *and* uninstantiated universal qualities and relations, where its uninstantiated ingredients ground its misleading aspects. Thus the direct object of the ‘Waterfall’ illusion is a hybrid Sensible Profile that is ontologically structured out of the instantiated universal sensible quality and relation *stationary-rungs-over-there* and the uninstantiated universal sensible quality and relation *upward-movement-of-the-rungs-over-there*, where this uninstantiated ingredient grounds the misleading look *as of* stationary rungs simultaneously moving upwards.

Though Johnston does mention dreams, his thought would presumably be that the direct objects of dream experiences are wholly uninstantiated Sensible Profiles that, in order to

preserve the distinction between dreaming and hallucination, are presented to the dreamer's consciousness during sleep. Someone who reports a dream *in which* she was tasked with finding the one non-fake barn in a field of paper mâché barns would thus have been immediately presented with a Sensible Profile during sleep that was ontologically structured out of certain uninstantiated universal sensible qualities and relations such as *rectangular-shapes-around-me* and *green-ish-colours-on-my-right*.

Johnston's unidisjunctivism seems to range 'Bad' experiences along a 'spectrum' according to their number of uninstantiated properties. At the 'Illusory' pole will lie those experiences (e.g. the 'Waterfall' illusion) with hybrid Sensible Profiles; whereas at the 'Hallucination and Dreaming' pole will lie those experiences (e.g. 'veridically' hallucinating lights above one) with Sensible Profiles that are constituted by *only* uninstantiated ingredients. Between the poles will lie a series of experiences that are ranged according to how many of their qualities and relations are experientially instantiated by worldly particulars.¹³⁵ Johnston's story of 'Bad' experience is thus structurally parallel to (I.D)'s except for one crucial difference: namely, I deny that 'Good' and 'Bad' experiences share any basic ingredient which explains their being the type of experiences that they are – a more accurate version of Johnston's 'spectrum' would, to reflect his thought that Sensible Profiles are *also* the direct objects of 'Good' experiences, also have a 'Good' pole at which will lie those experiences with Sensible Profiles that are constituted by *only* instantiated ingredients.

5.3.2 Revisiting the Problem of Explanatory Screening Off

I have argued (§2.1) that any successful naïve realist solution to the *p.m.e* must be some form of *Basic Phenomenal Disjunctivism*. According to Johnston, his story is *just disjunctivist enough* to save naïve realism since ...

“When we see we are aware of instantiations of sensible profiles. When we hallucinate we are aware merely of sensible profiles which are structured qualitative parts of the sensible profiles whose instantiations we see.” (2004: 140)

As a result,

¹³⁵ Though it is likely to be disputed just *where* certain experiences lie, it only matters that such an ordering is possible *in principle*.

“[...] distinctively different acts of awareness [are] involved in hallucinating and seeing, individuated by different objects of awareness.” (2004: 139)

Johnston’s reasoning is simply that since a ‘Good’ experience’s qualities and relations are instantiated by worldly objects, and since a hallucinatory experience’s qualities and relations are not instantiated by worldly objects, reflectively indiscriminable ‘Good’ and hallucinatory experiences cannot involve the same act of awareness. That is, reflectively indiscriminable ‘Good’ and hallucinatory experiences have a common experiential *ingredient* (viz., a Sensible Profile) but cannot involve the same mental *act* of seeing since only the former’s Sensible Profile is intrinsically world-involving and world-acquainting, i.e. naïve realist.

Unfortunately, Johnston’s quasi-disjunctivism runs headlong into the *Problem of Explanatory Screening Off* since he claims that neurophysical activity is minimally sufficient for a hallucinatory experience. He writes:

“The *constitutional basis* for the act of awareness involved in hallucination is the *state of the hallucinator’s visual system*” (2004: 139, my emphasis) “One’s brain could just go into a state that constitutes one’s hallucinating.” (2004: 167)

For instance, Johnston describes a case in which a mischievous surgeon could cause me to veridically hallucinate spotlights on in a ceiling (2004: 122). In this scenario, it is said that I am directly aware of uninstantiated qualities and relations such as a *white-ish-glow_{Q1}-above-me_{R1}* where Q1 and R1 constitutively depend upon certain physical processes and events that are occurring within my brain. This commits him to,

- (1) *Local Supervenience of Hallucination Thesis**: For any hallucinatory experience E_H had by a subject S , there is some type of neurophysical state, \underline{N} , in S , such that \underline{N} is minimally sufficient for the occurrence of E_H , and the instantiation of E_H ’s uninstantiated Sensible Profile. (Instance of the *Local Supervenience of Hallucination Thesis*)

In a familiar move, the *Local Supervenience of Hallucination Thesis** can be conjoined with,

- (2) *Converse Modal Claim**: For any two subjects S_1 and S_2 (where S_1 is having a hallucinatory experience E_H and S_2 a Good experience E_G): It is

metaphysically possible that the neurophysical state, \underline{N} , that is minimally sufficient for the occurrence of E_H , and the instantiation of E_H 's uninstantiated Sensible Profile, can occur in S_2 . (*Instance of Converse Modal Claim*)

For instance, if a certain type of neurophysical state is realized within me that is minimally sufficient for the occurrence of my veridical hallucination *as of* spotlights on in a ceiling (where this consists in direct awareness of an uninstantiated Sensible Profile), then it is metaphysically possible that that same state is realized within another subject when she is having a 'Good' experience *of* spotlights on in a ceiling.

Conjoining the *Local Supervenience of Hallucination Thesis** and the *Converse Modal Claim** spells trouble for Johnston's story: For *if* a certain type of neurophysical state is minimally sufficient for my awareness of an uninstantiated Sensible Profile, and *if* that same state occurs within another subject who is having a 'Good' experience, then we must be having phenomenally type-identical experiences, viz., of uninstantiated Sensible Profiles. In other words, the *Local Supervenience of Hallucination Thesis** and the *Converse Modal Claim** are conjoined to resurrect,

- (3) *Spreading**: For any two experiencing subjects S_1 and S_2 (where S_1 is having a hallucinatory experience E_H and S_2 a 'Good' experience E_G): Necessarily, if S_1 and S_2 are in the same type of neurophysical state, \underline{N} (where \underline{N} is minimally sufficient for the occurrence of E_H , and the instantiation of its uninstantiated Sensible Profile), E_H and E_G are of phenomenal type F , where F is an uninstantiated Sensible Profile. (*Instance of Spreading*, metaphysical implication of (1) & (2))

A 'Good' experience's naïve properties are now rendered epiphenomenal: For *if* my awareness of an uninstantiated Sensible Profile is sufficient to explain why my hallucinatory experience *as of* spotlights on in a ceiling has *that* phenomenal character; then, *if* another subject's 'Good' experience *of* spotlights on in a ceiling has that uninstantiated Sensible Profile, then that too must be sufficient to explain why it has *that* phenomenal character. Hence,

- (4) *Principle of Explanatory Screening Off*: For any two experiencing subjects S_1 and S_2 , where S_1 is having a hallucinatory experience E_H and S_2 is having a 'Good' experience E_G : If E_H and E_G are phenomenally typed by an uninstantiated

Sensible Profile SP , then SP screens off any of E_G 's naïve properties $P_{N1}, P_{N2} \dots P_{NN}$ from constitutively explaining its phenomenal character. (Metaphysical implication of (3))

Johnston might now reject the unrestricted form of the *Local Supervenience of Hallucination Thesis** on the grounds that the uninstantiated Sensible Profiles of *at least* some hallucinatory experiences are metaphysically individuated by their secondary objects or manners of presentation, i.e. what the subject experiences the uninstantiated property complex *as*. Of such cases, Johnston says:

“[...] X's hallucinating @ amounts to there being some uninstantiated profile of which X is visually aware and X's awareness of this profile being caused in the right way by a perception of @ or by a thought to the effect that @ is such and so. [...] Thus, in so far as we think of hallucinations as individuated by their secondary objects, hallucinations will not narrowly supervene, even on the total brain state of the subject.” (2004: 169)

As I read him, Johnston's *de re* externalism about those hallucinatory experiences (i.e. experiences that are essentially *of* mind-independent things) which are metaphysically individuated by their manners of presentation is a natural consequence of the claim that such experiences cannot be an original source of *de re* thought (§5.2). Though Johnston's remarks are brief, his argument seems to be this: First, it is claimed that a complex of uninstantiated qualities and relations can only strike a subject, s , as being *of* some particular object, \underline{o} , if she has had *at least* one antecedent 'Good' experience of \underline{o} ; it is then reasoned that if the uninstantiated property complex that determines the phenomenal character of s 's hallucinatory experience, E_H , is metaphysically individuated by its secondary object (viz., \underline{o}), then, since s 's antecedent 'Good' experience of \underline{o} presupposes that \underline{o} has a mind-independent existence¹³⁶, s 's neurophysical state cannot be minimally sufficient for the occurrence of E_H , together with its uninstantiated Sensible Profile.

¹³⁶ Suppose that an uninstantiated property complex strikes me as being of Hermes, the winged messenger, who has no mind-independent existence: in this case, I take it that Johnston would say that I must have had either *at least* one antecedent 'Good' experience of (i) a *depiction* of Hermes, or, (ii) a man and something with wings, where imaginatively combining the two objects that have been seen separately allows me to hallucinate Hermes (§5.2).

To illustrate. Suppose that an uninstantiated property complex strikes me as being of Scrabble, the terrier, and that my hallucinatory experience is metaphysically individuated in terms of this secondary object. For my hallucination to occur, there must be some “external causal connection to [Scrabble, the terrier] that is positively relevant” (Johnston 2004: 167) to my hallucinating a complex of uninstantiated qualities and relations *as* Scrabble, the terrier; and the relevant causal connection is, of course, some antecedent ‘Good’ experience(s) that I have had of her – at least I take it that this is what Johnston means when he speaks of my “awareness of this profile being caused in the right way.” But this antecedent ‘Good’ experience conceptually entails that Scrabble has a mind-independent existence; hence my hallucinatory experience’s phenomenal character does not narrowly supervene upon my neurophysical state, but rather, widely supervenes upon a worldly particular, viz., Scrabble, the terrier.

Though Johnston does not explicitly explain how construing hallucinatory experience in this way resists the *Argument from Explanatory Screening Off*, we can envisage the following scenario. Consider two intrinsic physical duplicates, S_1 and S_2 , where S_1 is having a hallucinatory experience (E_H) *as of* a particular object, \underline{o} , and S_2 is having a ‘Good’ experience (E_G) *of* \underline{o} . Construing E_H ’s uninstantiated Sensible Profile as being metaphysically individuated by \underline{o} allows Johnston to reason thus: since E_H can only occur relative to a non-causal background condition (i.e. S_1 ’s antecedent ‘Good’ experience of \underline{o}), and since that condition is not necessary for the occurrence of E_G (E_G ’s occurrence can hardly require that S_2 has had an antecedent ‘Good’ experience of \underline{o} since we are then surfing an infinite regress: E_G , rather, can provide S_2 with original *de re* knowledge of \underline{o}), the uninstantiated Sensible Profile that determines E_H ’s phenomenal character cannot ‘spread’ itself over to E_G , and hence, screen off its naïve properties from playing their distinctive explanatory role.

I find Johnston’s partial rejection of the *Local Supervenience of Hallucination Thesis** unpersuasive for two reasons. First, I am not convinced that the uninstantiated Sensible Profile of *any* hallucinatory experience can in fact be metaphysically individuated in terms of its secondary object given Johnston’s insistence that the only genuine items with which the subject is directly acquainted are its qualities and relations *simpliciter*. For the,

“[...] appeal to [secondary objects] is just a *façon de parler*. [...] When we talk of secondary [objects of hallucination] [...] we are to be understood as talking of *how certain genuine items, namely the primary objects*, strike the relevant subjects. There is no need to further suppose that there are further genuine, but somehow non-

existent, items whose identity [...] is a construal-dependent matter.” (2004: 143, my emphasis)

Consider again my hallucination *as of* Scrabble, the terrier: *if* the only genuine items of which I am directly aware are uninstantiated qualities and relations such as a *ginger-ish*_{Q1}-*shape-of-a-certain-sort*_{Q2}-*in-front-of-me*_{R1}, then, since there is “no obstacle” (Johnston 2004: 168) to supposing that this uninstantiated property complex narrowly supervenes upon my neurophysical state, Johnston must still explain why my intrinsic physical duplicate who is having the corresponding ‘Good’ experience is not likewise directly aware of the same uninstantiated property complex, which then screens off her experience’s naïve properties from constitutively explaining its phenomenal character.

Second, even if Johnston could find some intelligible way to metaphysically individuate the uninstantiated Sensible Profiles of some hallucinatory experiences in terms of their secondary objects, it still remains the case that the uninstantiated Sensible Profiles of remaining hallucinatory experiences are metaphysically individuated in terms of their primary objects which are said to narrowly supervene upon the subject’s internal constitution (2004: 168). This is precisely Johnston’s point when he talks of a subject’s “brain [that] could just go into a [hallucinatory] state”: indeed, such a subject might hallucinate “*nothing more* than a dagger-like array of visible qualities” (2004: 133, my emphasis), which would be an uninstantiated property complex that does not strike her as being of *any* particular object, i.e. a hallucinatory experience that lacks a secondary object altogether.¹³⁷ Once such cases are granted, the *Problem of Explanatory Screening Off* plays out as before: if the subject’s hallucinatory experience of uninstantiated “dagger-like” qualities narrowly supervenes upon her neurophysical state, then the realization of that same state within another subject who is having the corresponding ‘Good’ experience is likewise minimally sufficient for her experiential awareness of the same uninstantiated property complex, which then screens off her experience’s naïve properties from constitutively explaining its phenomenal character.

At this stage, Johnston might bluntly insist that those hallucinatory experiences which are metaphysically individuated in terms of their primary objects narrowly supervene upon the

¹³⁷ If, as the empirical evidence suggests, concept-less creatures can hallucinate, then their hallucinations would always lack secondary objects; hence the cane toad that veridically hallucinates bright lights and scurries away would simply be having a physiological response to a light that does not strike it *as* being of any particular thing (Johnston 2004: 125).

subject's neurophysical state whilst independently rejecting *Spreading** on the grounds that it cannot convincingly explain a series of experiences involving gradual change (2004: 152-3). Johnston invites us to imagine lying in bed at dawn as the room gradually goes from darkness to daylight: he says that for any two times t_n and t_{n+1} that occur very close together (for simplicity, say 5:30 am and 5:31 am), the brightness at t_n is reflectively indiscriminable from the brightness at t_{n+1} (you cannot, owing to the physiological limitations of your visual system, experientially detect any change in the level of brightness between 5:30 am and 5:31 am). Assuming that the room is gradually becoming brighter, that you woke in the dark and watched the smooth transition to daylight, we must conclude that the brightness in the room at t_n was different from the brightness in the room at t_{n+1} ; hence your inability to reflectively discriminate between the brightness at t_n and t_{n+1} does not entail that the direct objects of awareness are the same.

I find myself perplexed by what this argument is supposed to accomplish. True, your inability to reflectively discriminate between the different brightness levels at t_n and t_{n+1} does not show that the direct *objects* of awareness are the same; but that is quite consistent with those objects being of the same basic phenomenal *type*. Suppose that I awake in the dark and immediately begin having a continuous series of veridical hallucinations *as of* a gradually increasing brightness in the room, where my first hallucinatory experience *as of* darkness and my last hallucinatory experience *as of* daylight are, though each successive hallucinatory experience in the series is not, reflectively discriminable from one another. According to Johnston, I am directly aware of a series of not quite noticeably different but metaphysically distinct uninstantiated Sensible Profiles. Now if each hallucinatory experience, together with its uninstantiated Sensible Profile, narrowly supervenes upon a slightly different neurophysical state as Johnston allows, then I cannot see why the realization of those same states in you when you wake in the dark and watch the smooth transition to daylight are not likewise minimally sufficient for your experiential awareness of the same series of not quite noticeably different but metaphysically distinct uninstantiated Sensible Profiles. In which case, the phenomenal character of each successive 'Good' experience in the series cannot be constitutively explained by its naïve properties.

My objection to Johnston then, is just this: once it is granted that the phenomenal characters of hallucinatory experiences are typed by uninstantiated property complexes, and once it is granted that such complexes (*at least* those that are metaphysically individuated in terms of their primary objects) narrowly supervene upon the subject's neurophysical state, it then

becomes very difficult to successfully deny that the phenomenal characters of ‘Good’ experiences are likewise typed by uninstantiated property complexes, which then renders their naïve properties explanatorily inert. For this reason, Johnston’s *Sensible Profile* theory of hallucination is put out of play.

5.4 Conclusion

In this chapter, I have argued that the objective phenomenal characters of hallucinations are typed by perception-like imaginings that convincingly simulate the objective phenomenal characters of metaphysically possible ‘Good’ experiences, where this claim can block the *p.m.e qua* hallucination and explain hallucinatory remarkable features. I then developed (I.D) by showing how it can explain why hallucination cannot be a source of original *de re* thought but can be a source of original *de re* knowledge of quality. I then rejected Johnston’s rival *Sensible Profile* theory of hallucination on the grounds that it is ultimately felled by the *Problem of Explanatory Screening Off*. As (I.D) adequately explains the remarkable and interesting features of hallucinatory experience whilst successfully resisting the *Problem of Explanatory Screening Off*, it remains the preferred theory of hallucination.

6

Imaginative Disjunctivism and Illusion

In this chapter, I explain and defend the claim that the objective phenomenal characters of illusory experiences are naïve realist, whilst an aspect of their subjective phenomenal characters (that which constitutes the experience's illusory aspect) is *p*-imagined. I begin by distinguishing between three varieties of illusion: namely, (i) *cognitive* illusions (§6.1) which admit of a joint subject-independent physical and subject-dependent *cognitive* explanation (e.g. as when we see a certain shaped tree *as* a person), (ii) *optical* illusions (§6.1.1) which admit of a joint subject-independent physical and subject-dependent *perceptual* explanation (e.g. as when the Müller-Lyer lines' end-hashes somehow mislead our visual system into seeing them *as* unequal in length), and, (iii) *physical* illusions (§6.1.2) which admit of a *purely* subject-independent physical explanation (e.g. as when light refracted through a wedge prism causes objects viewed through it to look displaced).¹³⁸ I argue that experiences which exemplify (i) and (ii) are disjunctive 'hybrids' that are *neither* completely 'Bad' (since their objective phenomenal character are intrinsically constituted by naïve properties) *nor* completely 'Good' (since their subjective phenomenal characters have *at least* one *p*-imagined apparent naïve property that is no part of their objective phenomenal characters), whereas experiences which exemplify (iii) are 'Good' (since there is no mismatch between their objective and subjective phenomenal characters).

I then (§6.2) sketch Brewer's rival (2008; 2011) *object view* (o.v) of illusion according to illusory experiences occur when the candidate worldly object (which is said to constitutively explain the experience's phenomenal character) visually resembles a paradigm empirical kind that it does not objectively exemplify. I reject (o.v) on two counts: first, I argue that it fails to offer a unified theory of illusion (§6.2.1); and second, I argue that (o.v) can only explain an illusory experience's remarkable phenomenal feature of *scene-immediacy* on pain of abandoning its naïve realist treatment of illusion. As (I.D) offers a unified account of illusion that keeps faith with its naïve realist commitments, it remains the preferred theory of illusion.

¹³⁸ That some illusions may not fall neatly into a given sub-class is not problematic since we surely *grasp* the distinctions between each sub-class even when we may be unsure to which one a particular illusion belongs – (I.D) requires only this to do its explanatory work.

6.1 Cognitive Illusion

Cognitive illusions are said to occur when “we see something—for example, a coil of rope or a horse—but take it to be something it is not, such as a snake or a cow” (Fish 2009: 149). The basic idea is that cognitive illusions occur when a candidate worldly object is arranged in such a way that it produces some kind of anomalous cognitive effect in the subject. A cognitive illusion thus admits of a dual explanation consisting of some set of subject-independent physical factors (i.e. the world must be a certain way for the illusion to occur) and some set of subject-dependent cognitive factors (i.e. the subject’s cognitive equipment must also be a certain way for the illusion to occur).

Cases belonging to this class are usually *unpredictable* and *non-intersubjective*.¹³⁹ They are usually unpredictable since subjects do not usually have the same cognitive responses to the same object at different times and in different situations, e.g. I might see a bundle of clothes on a chair *as* my dog during the night and realize that she slept elsewhere when I simply see a bundle of clothes in the morning. They are not usually intersubjective since cognitive responses to the same object often differ between subjects, e.g. a cloud that I see *as* saucer-shaped might be seen by the fervent U.F.O enthusiast *as* an alien spacecraft.

Cognitive illusions are said to threaten naïve realism since they involve situations in which a subject perceives a worldly object, \underline{o}_w , as being *F* when there is nothing that is *F* for her to be directly acquainted with. In Fish’s example, Hellie and friends will simply point out that the subject cannot be visually aware of a snake since there is no snake in her immediate environment to instantiate the experience’s ‘snake-ish’ phenomenal character¹⁴⁰; it is then tempting to conclude that some non-naïve ingredient must be doing this instantiatory work – an ingredient that will, since they think that reflectively indiscriminable experiences are phenomenally type-identical mental states, type the corresponding ‘Good’ experience of seeing a snake. I am thus tasked with explaining why subjects occasionally think that they see something which is not objectively there without positing something non-naïve that then constitutively explains the corresponding ‘Good’ experience’s phenomenal character.

¹³⁹ There may be contrived cases, e.g. perhaps we can predict, to a degree greater than chance, that the U.F.O enthusiast will see a saucer-shaped cloud *as* a spacecraft; and if she is with fellow enthusiasts, it may be that many see a saucer-shaped cloud *as* a spacecraft, and refuse to believe that it is just a cloud.

¹⁴⁰ My opponent treats a cognitive illusion’s subjective phenomenal character *as* its objective phenomenal character, so I will simply speak of *phenomenal character* until I introduce my story.

I begin this task by sketching Fish's story of cognitive illusion since, or so I will argue, its core defect highlights my story's plausibility. Fish claims that a cognitive illusion occurs when,

"The layout of the tract of the environment that subjects are open to [...] leads them to deploy inappropriate conceptual-recognitional capacities and thereby form erroneous beliefs and judgements about their experiences of that particular. [...] Such beliefs can explain the occurrence of the illusion in a way consistent with naïve realism—the "illusion" is just a ghost generated by the subject's belief or judgement that they are seeing something." (2009: 179)

Fish's thought is that aspects of the subject's immediate environment – specifically, those perceptible properties of the worldly object that is presented and the conditions under which it is viewed – causally interact with certain aspects of her psychological state in such a way that she is cognitively primed or disposed to deploy incorrect concepts to describe what she *thinks* or *believes* she has seen. Thus someone who sees a rope *as* a snake simply *sees* the rope (for there is nothing else to see); but it is some degree of similarity between its perceptible properties and those of (subject-relative) paradigmatic snakes that, perhaps in conjunction with her snake phobia, induce her to deploy the incorrect concept *snake* to describe what she thinks is objectively there (compare: someone without a snake phobia might simply deploy the correct concept *rope* to describe what she thinks she sees).

This is our first proper sighting of a 'Two Level' theory of illusion. At the first level, worldly objects are non-misleadingly presented to subjects; hence Fish's claim that "the snakeish aspect of the illusion is *not a feature of the experience itself*" (2009: 171, my emphasis). Then at the second level, subjects form false beliefs about those worldly objects that are non-misleadingly presented at the first; hence Fish's claim that "if there is no false belief, then there is no illusion" (2009: 172). *To illustrate:*

Fish's Two Level Theory of Cognitive Illusion

Cognitive Illusion	Misleading
Level 1 (Phenomenal character): worldly object-	No

property couples are experientially presented to subjects.	
<i>Level 2</i> (Cognitive response to level 1): subjects form false beliefs about experientially presented worldly object-property couples.	Yes

It might now be obvious how Fish's story saves naïve realism. In cognitive illusion, worldly object-property couples can intrinsically constitute the experience's phenomenal character since how they are in those experiences, at the first level, is how they objectively are. Any mismatch between the experience's phenomenal character and its subjective phenomenal appearance occurs only at the second level which, Fish thinks, consists in the subject's false beliefs about what is non-misleadingly presented at the first: Error belongs only to those false beliefs that subjects are cognitively induced to form about their intrinsically naïve realist experiences.

Fish is thus claiming that,

Standard Illusion Thesis: For all subjects s : If s has an experience e in which worldly objects $\mathcal{O}_{W1}, \mathcal{O}_{W2} \dots \mathcal{O}_{WN}$ phenomenally appear to be F , but $\mathcal{O}_{W1}, \mathcal{O}_{W2} \dots \mathcal{O}_{WN}$ are objectively G , then s has an illusory experience.

does not entail,

Base: For all subjects s : If s has a misleading experience E_M , then E_M 's phenomenal character is not typed by any naïve properties $P_{N1}, P_{N2} \dots P_{NN}$.

Since a cognitive illusion consists in the subject's false beliefs about the worldly object that is non-misleadingly presented. Blocking *Base* thus blocks the transition from *Reflective Indiscriminability* to *Spreading* since there is now nothing non-naïve within the nature of the experience itself that can type the corresponding 'Good' case.

Though I think that Fish's description of cognitive illusion is essentially correct (the illusion does indeed cease once the subject abandons her false belief about what is seen), I am not convinced that it assuages the worry that the *experience* is intrinsically non-naïve realist since the

subject's belief *that a snake is over there* surely springs *from* a subjective look *as of* a snake (granted, such looks are usually fleeting since most subjects quickly realize their error, but it is still a look which requires explanation); a subjective look that the Naïve Realist obviously wants to deny constitutes the experience's essential nature at the first level. Now if a subjective look *as of* a snake is what rationally occasions the subject's belief *that a snake is over there*, then I do not see how that belief can sensibly be invoked to explain it (causes explain effects; effects do not explain causes – or here, subjective looks causally motivate beliefs; beliefs do not explain subjective looks); so we are still left without a substantive explanation of the subjective look *as of* a snake itself. Absent any such explanation, it is understandable why Hellie and friends reason that the 'snake-ish' look just *is* the first-level experience, which cannot be (since no snake is there) naïve realist.

Fish might reply that I have misunderstood since a subjective look *as of* a snake *consists in*, rather than *causes*, the subject's false belief – “having exploited [a] conceptual-recognitional capacity [for snakes] in error, the subject *takes himself* to have seen” (2009: 169) a snake. But I do not see how a subjective look *as of* a snake can be alchemized from epistemic facts about the subject's belief (e.g. its truth-value, its being rationally responsive to evidence) when beliefs are qualitatively very different from subjective looks (e.g. Robinson 1994: 165) – the epistemic properties of beliefs are simply the wrong shape to convincingly explain phenomenal appearances.¹⁴¹ I am not denying that this might be accomplished: But Fish's insistence that a 'snake-ish' look can be alchemized from epistemic facts about the subject's belief is not illuminating without some positive explanation of how that alchemization is supposed to occur.

I think that Fish's story is missing one step: specifically, I claim that certain of a worldly object's perceptible properties interact with the subject's psychological state in such a way that she is cognitively primed to imagine that something is seen, where this *p*-imagining *then* produces a false belief.¹⁴² But because what is *p*-imagined is no part of the experience's

¹⁴¹ Other objections to the *belief theory* of illusion are (i) it cannot explain the puzzle of belief-independence (e.g. those familiar with the Müller-Lyer lines do not believe their persisting *unequal-in-length* look), and (ii) it entails that some illusions have contradictory contents – as Crane points out, someone susceptible to the 'Waterfall Illusion' would simultaneously believe that a stationary object is “both moving and not moving at the same time” (1988: 145).

¹⁴² The reader might ask: Why not *i*-beliefs? Answer: There is no requirement that *p*-imaginings only produce *i*-beliefs or real beliefs. We must consider each case and see if it is reasonable to ascribe real beliefs to subjects – this ascription is plausible here since subjects usually revise their beliefs in response to evidence (e.g. Fish's subject is

objective phenomenal character, cognitive illusions pose no serious threat to naïve realism. To see how this works, it is instructive to consider an analogy with Walton's description of an ordinary case:

“While walking in the woods, Heather comes across a stump shaped strikingly like a bear, or so it seems to her anyway, and she imagines a bear blocking her path. Her imagining is prompted by the stump; but for it she would not have done so. The twittering of sparrows induces a person to imagine the sounds of a cocktail party [...] *These are cases in which things in our environment prompt our imagination.*” (1990: 21, my emphasis)

In keeping with a cognitive illusion's unpredictability and non-intersubjectivity, what we are prompted to *p*-imagine ...

“[...] is partly a matter of chance, depending on what shapes or other characteristics [worldly objects] happen to have.” (1990: 22-23)

And because,

“[...] there *is* something—something real and solid and kickable—which can be called the imaginary bear.” (1990: 26)

A cognitive illusion's objective phenomenal character will be relationally typed by the worldly object-property couple itself in just the way that naïve realism requires.

To elaborate. I am suggesting that just as Heather is prompted to imagine “a bear blocking her path” when she sees a stump of a certain shape and colour, so someone might be prompted to imagine seeing a snake when she sees a rope of a certain shape and colour.¹⁴³ The rope can be understood as what Walton (1990: 22) calls a *natural prompter* (i.e. something that prompts an imagining by being perceived) since it causally interacts with some aspect of the subject's psychological state (e.g. her snake phobia) in such a way that she imagines seeing a snake. “The nature and layout of the environment” and “facets of the subject's mental makeup” (Fish 2009:

likely to believe, should she investigate the scene, that she simply sees a rope).

¹⁴³ I do not intend this analogy to be taken too literally since Heather clearly does not think that she *really* sees a bear – my aim is only to show that there is a plausible mechanism by which *p*-imaginings can enter the story.

167) do not conjoin to *just* produce false beliefs about the object that is seen, but rather, conjoin to produce a *p*-imagining, where this *p*-imagining then produces a false belief.

I am claiming that when,

- (1) A subject *s* sees a worldly object, \underline{o}_w , as *F* (where \underline{o}_w is objectively *G*).

It is because,

- (2) *S* stands in a direct *sui generis* acquaintance relation *r* to, \underline{o}_w , where certain of \underline{o}_w 's perceptible properties prompt her to imagine seeing it as *F*.

Fish's subject can alchemize a subjective 'snake-ish' look from her *p*-imagining since that imagining simulates a 'Good' experience *of* seeing a snake; and imagining seeing a snake can then rationally occasion her false belief *that a snake is over there* (as well as certain behaviours, e.g. fleeing).

My story neatly explains a cognitive illusion's unpredictability and non-intersubjectivity. Take unpredictability: since natural prompters are not *designed* to prompt particular imaginings, and since imagination-driven mental states are typically unpredictable, it is unsurprising that cognitive illusions are unpredictable, e.g. a rope is not designed to prompt any particular imagining (unless perhaps, it is deliberately arranged in a certain way) – it is just that its being coiled and striped interacts with some “evanescent disturbance” (Fish 2009: 176) in the subject's mental state so that she happens to imagine seeing a snake. Take non-intersubjectivity: since natural prompters are not designed to prompt different subjects to imagine seeing the same thing, and since different subjects are very likely to have different “mental makeups”, it is unsurprising that cognitive illusions are non-intersubjective, e.g. since a rope is not designed to prompt different subjects to imagine seeing a snake, and since different subjects are likely to have different responses to the same object, it would be surprising if different subjects all took themselves to see a snake.

My story differs from Fish's since it is a 'Three Level' theory of cognitive illusion. At the first level, worldly objects are indeed non-misleadingly presented to subjects; at the second level, subjects are cognitively primed to form *p*-imaginings about those worldly objects that are non-misleadingly presented at the first; then at the third, those *p*-imaginings rationally occasion

false beliefs. To illustrate:

Imaginative Disjunctivism's Three-Level Theory of Cognitive Illusion

Cognitive Illusion	Misleading
<i>Level 1</i> (Objective phenomenal character): worldly object-property couples are presented to subjects.	No
<i>Level 2</i> (Subjective phenomenal character): subjects form <i>p</i> -imaginings about experientially presented worldly-object property couples.	Yes
<i>Level 3</i> : (Cognitive response to level 2): <i>p</i> -imaginings rationally occasion false beliefs.	Yes

This clearly sustains naïve realism since someone subject to a cognitive illusion will have an experience whose objective phenomenal character is relationally typed by naïve properties. Any mismatch between the experience's objective phenomenal character and its subjective phenomenal character occurs only at the second level when she forms a *p*-imagining about what is non-misleadingly presented to her at the first, where what is *p*-imagined does not affect the nature of the experience's objective phenomenal character (compare: when I invited you to visualize a banana (§4.1.2), your *perceptual experience* did not suddenly become intrinsically non-naïve realist; likewise, when a rope's perceptible properties cognitively prime you to imagine seeing a snake, you do not suddenly become indirectly aware of the rope). A cognitive illusion is thus a 'hybrid' experience that is *neither* 'Bad' (since its objective phenomenal character is intrinsically constituted by naïve properties) *nor* 'Good' (since its subjective phenomenal character has *at least* one *p*-imagined apparent naïve property that is no part of its objective phenomenal character, e.g. *being-a-case-of-visual-awareness-of-a-snake*).

Some clarificatory remarks about the difference between a cognitive illusion and the corresponding 'Good' experience are in order. Suppose that two normally sighted subjects – an adult (s_1) with a snake phobia and a pre-linguistic infant (s_2) who has not yet acquired a conceptual-recognitional capacity for either ropes or snakes – are experientially presented

with a rope, where s_1 flees since she thinks that she has seen a snake and s_2 simply sees a rope (though of course she does not see it *as* such). In this scenario, the rope looks different to s_1 not because she is directly aware of any different objects or qualities from s_2 (their first-level experiences, like those of the scientist's and child's when looking at a cathode ray tube, have many of the same naïve properties), but because only she is cognitively prompted to imagine seeing the common object that is seen *as* a snake, where this *p*-imagining then rationally occasions her false belief *that a snake is over there*: s_1 's seeing the rope *as* a snake thus consists in her *p*-imagining and not in any fundamental change in the type of phenomenal properties of which she is directly aware, viz., naïve.

6.1.1 Optical Illusion

Optical illusions are said to occur when “relevant features of the perceived scene function so as to trick or mislead our perceptual mechanisms” (Fish 2009: 173) in some way. The basic idea is that optical illusions occur when a candidate worldly object is arranged in such a way that it produces some kind of anomalous perceptual effect in the subject. An optical illusion thus admits of a dual explanation consisting of some set of subject subject-independent physical factors (i.e. the world must be a certain way for the illusion to occur) and some set of subject-dependent perceptual factors (i.e. the subject's perceptual equipment must also be a certain way for the illusion to occur).

Paradigm optical illusions are said to be perceptual experiences in which the candidate worldly object looks different in respect of its objective shape and/or colour owing to some feature(s) of the overall scene perceptually misleading us in some way. Müller-Lyer lines, ‘flipping’ figures such as the ‘Necker Cube’ in which a drawing of a cube looks to ‘flip’ between a 2-D and 3-D orientation, and motion after-effects such as the ‘Waterfall Illusion’ are oft-cited cases. One clear cut example seems to be the Craik-Cornsweet (1966; 1970) picture:

Craik-Cornsweet Picture

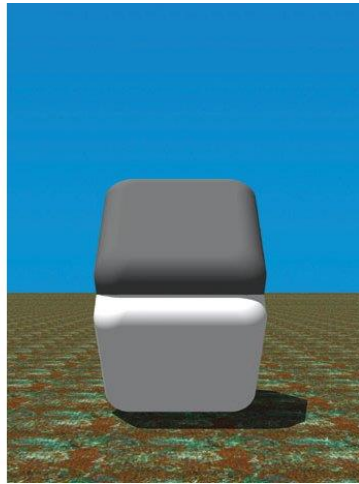


Image reproduced from <http://scienceblogs.com/mixingmemory/2006/07/08/cool-visual-illusions-craikobr/>

If your visual system processes perceptual information about *colour* similar to mine, then the lower square should look much brighter than the upper one – the illusion, of course, is that both squares are objectively the same shade of grey (simply place a finger across the join where the squares meet to confirm). As there really seem to be different colours inhering in the picture at the loci of the squares that do not cease to be seen when we stop believing that they are objectively the same shade of grey, it is most unlikely that we are dealing with a cognitive illusion.

Cases belonging to this class are usually predictable and intersubjective. They are usually predictable since, given certain physical and nomological facts about how the subject's perceptual machinery operates in different conditions, we can usually predict that the candidate worldly object will look different in some respect from how it objectively is, e.g. contingent empirical facts about how the human visual system usually adapts to variations in illumination allow us to predict that, when presented with the Craik-Cornsweet picture, most normally sighted subjects will report that the lower square looks brighter than the upper one. They are usually intersubjective since subjects who have evolved to process perceptual information in very similar ways can be subject to the same illusion at the same time, e.g. subjects who adapt to variations in illumination in very similar ways will see the lower square as looking brighter than the upper one.

Optical illusions are said to threaten naïve realism since they involve situations in which a subject perceives a worldly object, \underline{o}_w , as being *F* when there is no worldly *F-ness* for her to be directly acquainted with (since \underline{o}_w is objectively *G*). Of the Craik-Cornsweet picture, Hellie and friends will simply point out that the subject's experience cannot have the phenomenally

apparent naïve properties *being-a-case-of-visual-awareness-of-a-shade-of-light-white_{PN1}-and-a-shade-of-dark-grey_{PN2}* since there is nothing that has *those* particular shades in her immediate environment which can instantiate those properties within her experience's phenomenal character¹⁴⁴; it is then tempting to conclude that some non-naïve ingredient must be doing this instantiatory work – an ingredient that will, since they think that reflectively indiscriminable experiences are phenomenally type-identical mental states, type the corresponding 'Good' experience *of* seeing two squares that are those particular shades. I am thus tasked with explaining why subjects who see the same scene (e.g. Müller-Lyer lines, rocks near a waterfall) often take themselves to see qualities that are not objectively there (e.g. unequal lengths, upwards motion) without positing something non-naïve realist that then constitutively explains the corresponding 'Good' experience's phenomenal character.

Similar to cognitive illusion, I want to suggest that certain of a worldly object's perceptible properties causally interact with the subject's perceptual-cognitive equipment in such a way that she is perceptually primed to imagine that something is seen. The difference is just that the worldly object is what Walton (1990: 22) calls an *artificial prompter*, i.e. something that is intended or designed to prompt a specific imagining when perceived. Again, it is instructive to consider an analogy with Walton's description of an ordinary case:

"Snowmen, dolls, and toy trucks are *designed by their makers* to induce those who see or use them to imagine men, babies, and trucks of certain sorts. One might carve a stump into an unmistakable bear "likeness" in order to make sure that it will *prompt people to imagine a bear*. (1990: 22, my emphasis)

In line with an optical illusion's predictability and intersubjectivity, what is seen,

"[...] direct[s] the imaginings of others in predetermined ways. [...] A toy truck or a well-executed snowman *induces all who see it to imagine approximately the same things* — a truck or a man of a certain sort." (1990: 22-23, my emphasis)

And because the subject is experientially presented with a worldly object-property couple, an optical illusion's objective phenomenal character will be relationally typed in just the way that naïve realism requires.

¹⁴⁴ Again, I will simply speak of *phenomenal character* until I introduce my story.

To elaborate. I am suggesting that just as someone might be induced to imagine a man when presented with a cleverly made snowman, so the colour and arrangement of the individual squares relative to one another and their surrounds can induce a normally sighted subject to imagine seeing different colours inhering in the picture at the loci of the squares.¹⁴⁵ Each square is an artificial prompter that causally interacts with relevant aspects of the subject's visual system (the way in which it processes, and adapts to, visual information about their colours) and cognitive equipment (the sub-personal way in which it forms a *p*-imagining as prescribed by that visual information) in such a way that she is strongly disposed to imagine seeing different colours inhering in the picture at the loci of the squares (compare: someone whose visual system is malfunctioning in some way might not be induced to imagine seeing different colours).

My story neatly explains an optical illusion's predictability and intersubjectivity. Take predictability: since artificial prompters are *designed* to prompt particular imaginings, it is unsurprising that optical illusions are predictable, e.g. in the Müller-Lyer illusion, the location of the inverted and exverted end-hashes relative to one another are supposed to induce the subject to imagine seeing two lines that look unequal in length. Take non-intersubjectivity: since artificial prompters are designed to induce different subjects with very similar perceptual-cognitive equipment to imagine very similar things, it is unsurprising that optical illusions are intersubjective, e.g. Müller-Lyer lines are supposed to induce normally sighted subjects who live in a predominantly rectilinear environment to imagine seeing two lines of unequal lengths.¹⁴⁶

My story is essentially a 'Two Level' theory of optical illusion. At the first level, worldly

¹⁴⁵ Again, this analogy is not to be taken too literally since someone looking at a cleverly made snowman does not usually take themselves to *really* see a person (that would be a cognitive illusion) – my aim is only to show that there is a plausible mechanism by which *p*-imaginings can enter the story.

¹⁴⁶ One influential sub-personal explanation is the 'Carpentered World' hypothesis (Segall *et al.* 1966) according to which we see depth in the Müller-Lyer lines because our environment contains many straight lines and right angles (e.g. in buildings, furniture etc.); hence explaining why subjects living in predominantly non-rectilinear environments are usually less susceptible to the illusion, e.g. some African foragers require the top line to be around 1% longer than the bottom line before the lines appear equal in length, whereas the difference is around 20% for typical Western subjects (McCauley & Henrich 2006).

objects are non-misleadingly presented to subjects; then at the second level, subjects are perceptually-cognitively induced to form *p*-imaginings about those worldly objects that are non-misleadingly presented at the first (there will be a third level only when those *p*-imaginings rationally occasion false beliefs). *To illustrate:*

Imaginative Disjunctivism's Two-Level Theory of Optical Illusion

Optical Illusion	Misleading
<i>Level 1</i> (objective phenomenal character): worldly object-property couples are presented to subjects.	No
<i>Level 2</i> (subjective phenomenal character): subjects form <i>p</i> -imaginings about experientially presented worldly-object property couples.	Yes

This clearly sustains naïve realism since someone subject to an optical illusion will have an experience whose objective phenomenal character is relationally typed by naïve properties. Any mismatch between the experience's objective phenomenal character and its subjective phenomenal character occurs only at the second level when she forms a *p*-imagining about what is non-misleadingly presented to her at the first, where what is *p*-imagined does not affect the nature of the experience's objective phenomenal character. An optical illusion is thus a 'hybrid' experience that is *neither* 'Bad' (since its objective phenomenal character is intrinsically constituted by naïve properties) *nor* 'Good' (since its subjective phenomenal character has *at least* one *p*-imagined apparent naïve property that is no part of its objective phenomenal character, e.g. *being-a-case-of-visual-awareness-of-a-shade-of-light-white*).

I can foresee three objections. First, it might be objected that I cannot explain doxastically resisted optical illusions: specifically, my objector might reason that since we often doxastically resist optical illusions (e.g. I take it that you no longer believe that the lower square in the Craik-Cornsweet picture is light white even though that look continues to persist), and since successful *p*-imaginings are not doxastically resisted, the illusory aspects of doxastically resisted optical illusions cannot be *p*-imagined. As doxastically resisted optical illusions comprise a large class, we should seek an alternative explanation of the subjective

phenomenal character of *all* optical illusions¹⁴⁷ (e.g. perhaps it will be said that your experience of the Craik-Cornsweet picture is typed by a certain sort of false representational content).

Reply: Although subjects do not doxastically resist successful *p*-imaginings *qua* perceptual experiences, there is no additional requirement that they must also believe their content (§3.2.1.2); that is, a successful *p*-imagining is one that is mistaken for a perceptual experience and not one whose content must always be believed. I am thus suggesting that the subject with normal vision and normal visual-spatial abilities who is presented with the Craik-Cornsweet picture will be strongly disposed to imagine seeing a fairly light shade of white at the location of the lower square and a fairly dark shade of grey at the location of the upper square; and because this *p*-imagining is not directly or mentally subject to the will, a subjective look *as of* two differently coloured squares persists even though it is doxastically resisted.

Second, my objector might reason that since some subjects are not – perhaps owing to a cultural, physiological, or some other reason – susceptible to certain optical illusions (e.g. I am not usually susceptible to ‘flipping’ figures for reasons unknown), and since many of those subjects have well developed visual-spatial skills that underpin the ability to successfully *p*-imagine, it is implausible that the subjective phenomenal characters of optical illusions are *p*-imaginings.¹⁴⁸

Reply: The subject who has the ability to successfully *p*-imagine will not be susceptible to an optical illusion when there is a ‘break’ somewhere in the perceptual-cognitive processing chain, i.e. there will be a failure to process information at either the sub-personal perceptual or higher-order cognitive level (*exactly* where such breaks occur will require further empirical investigation). In such cases, relevant perceptible properties of the candidate worldly object will have *either* (i) failed to causally interact with the subject’s perceptual equipment (e.g. someone with a chromatic processing deficit may not be susceptible to the Craik-Cornsweet illusion), *or*, (ii) causally interacted with the subject’s perceptual equipment but failed to causally interact with her cognitive machinery (e.g. as perhaps occurs in some non-Western subjects who are less susceptible to the Müller-Lyer and in autistic subjects who tend to be less susceptible to optical illusions in general¹⁴⁹ (e.g. Walter *et al.* 2009)). In either of these

¹⁴⁷ Many such explanations will be of phenomenal character *simpliciter*.

¹⁴⁸ Thanks to Keith Allen (York Mind & Reason group, Autumn 2012) for pressing this objection.

¹⁴⁹ Since one of the ‘Triad of Impairments’ (Wing & Gould 1979) that characterise autism is an impoverished

situations, the subject is simply having a ‘Good’ experience (since there is no mismatch between its objective and subjective phenomenal character).

Third, my objector might reason that I have not sufficiently distinguished optical from cognitive illusions: specifically, it might be reasoned that optical and cognitive illusions have different explanans since they have radically different properties, viz., *predictability* vs. *unpredictability*, *intersubjectivity* vs. *non-intersubjectivity*, and *belief-dependence* vs. *belief-independence*. Further *prima facie* support for this objection is that non-linguistic infants and lower animals are usually susceptible to optical but not (since they lack the requisite conceptual-recognitional capacity) cognitive illusion. For instance, susceptibility to the Ames room emerges at around seven months of age (Oross *et al.* 1987) and to illusory motion at around six months of age (Kanazawa *et al.* 2013); then there is evidence that pigeons are susceptible to the standard Müller-Lyer (Nakamura *et al.* 2006) and that fish are susceptible to the Ebbinghaus illusion (Sovrano *et al.* 2015).

Reply: Construing optical and cognitive illusions as differing only in degree and not fundamental kind involves no conceptual incoherence; hence my explanation of each need only differ in its fine-grained details (e.g. the worldly object with which the subject is directly acquainted is a natural prompter in cognitive illusion and an artificial prompter in optical illusion). As I see it, there is a ‘spectrum’ of illusions: at one ‘pole’ lie those unpredictable and non-intersubjective cognitive illusions which occur when the subject believes what she is cognitively primed to *p*-imagine, whereas at the other ‘pole’ lie those predictable and intersubjective optical illusions which occur when the subject doxastically resists what she is perceptually-cognitively primed to *p*-imagine; between the ‘poles’ lie those optical illusions which are not doxastically resisted – subjects who do not know that what is presented is illusory, as well as non-linguistic infants and lower animals will occupy this area of the spectrum. I submit that it is a theoretical advantage of my story that its fine-grained details can be modified to capture the different properties of cognitive and optical illusions whilst still

imagination, my account predicts that autistic subjects will tend to be less susceptible to optical illusion. This prediction is presently supported by Happé’s (1996) study in which twenty five autistic children reported less susceptibility to the Kanisza Triangle (in which an illusory ‘triangle’ is reportedly seen bounded by three pacman figures), the Ebbinghaus Illusion (a size-perception illusion in which a circle reportedly looks larger when surrounded by smaller circles than when surrounded by larger ones), and the Hering illusion (in which vertical lines reportedly look curved when overlapping a radial background). Intriguingly, Chouinard *et al* (2013) recently found that susceptibility to the Müller-Lyer decreased as a function of autistic traits related to communication and the *imagination* but not attention to detail.

being able to offer the same fundamental explanation of their objective and subjective phenomenal characters, i.e. as being intrinsically naïve realist experiences that prompt certain *p*-imaginings.

6.1.2 Physical Illusion

Physical illusions are radically different from cognitive and optical illusions since they are said to occur purely as a result of “how things are in the external world” (Fish 2009: 148). The basic idea is that physical illusions spring from facts about how the world is physically arranged, where that arrangement includes facts about (i) the candidate object’s determinate spatio-temporal location relative to surrounding objects and the perceiver, and, (b) how certain of the candidate object’s properties causally interact with well-established nomological laws. A physical illusion thus admits of a monistic explanation consisting of some set of subject-independent physical factors, i.e. the world, and not the subject’s perceptual and/or cognitive equipment, must be a certain way for the illusion to occur.

Paradigmatic cases are said to be those in which the candidate worldly object looks different in some respect from how it objectively is owing to the physical phenomenon of *refraction*, i.e. how light behaves as it is refracted through different mediums. Two classes of refraction effect in particular seem problematic for the Naïve Realist: namely,

1. The candidate worldly object seen through surfaces with different refractive indexes.

and,

2. The candidate worldly object seen through an inverting lens.¹⁵⁰

My objector’s flagship example that exemplifies (1) is the straight stick that, when submerged in water, is standardly said to look bent (e.g. Ayer 1963: 6; Berkeley 1731: 3-31) – indeed,

¹⁵⁰ Cases in which the candidate worldly object is seen through a corrective lens can be understood as cases that enable the subject with a visual deficit such as myopia to become acquainted with more naïve properties (§1.1.1). In a similar vein, the powerful lenses of telescopes and microscopes enable us to become acquainted with worldly object-property couples that are ordinarily visually inaccessible, e.g. as when a macro-lens visually enables the (brave) photographer to see the bobbly surface of a scorpion.

even naïve realists describe the “bent stick in water” (Fish 2009: 165) and the “stick [which] looks bent” (Brewer 2011, Ch.5: 21). *To illustrate:*

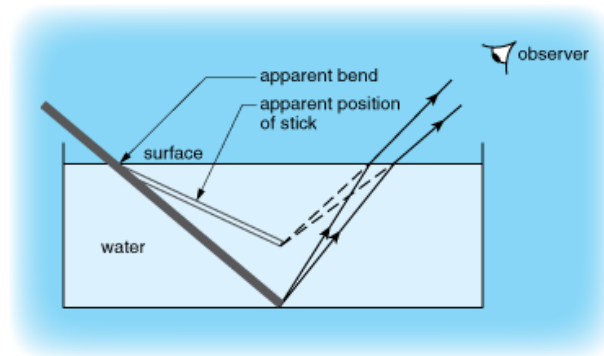


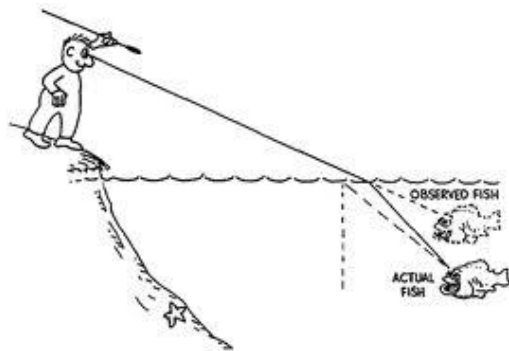
Image reproduced from

http://lrrpublic.cli.det.nsw.edu.au/lrrSecure/Sites/Web/prelimphysics/prelim/lo/refraction_01/graphics/refr_01.gif

We can also include cases in which the stick’s submerged part looks to be non-continuous with its non-submerged part, i.e. cases in which the stick might be said to look *broken*. My own photograph of a pencil part-submerged in water illustrates:



And cases in which the candidate worldly object is entirely submerged and is said to look to occupy a different spatial location. The following image which depicts someone spear-fishing¹⁵¹ illustrates:



¹⁵¹ Thanks to Tom Stoneham for drawing my attention to this example.

Image reproduced from <http://survivingtech.com/2012/05/22/spearing-fish-wilderness-survival/>

A paradigmatic example of (2) is the ‘Reversing Arrow Illusion’ in which an arrow looks to reverse direction when seen through a clear glass of water: in the photograph below, it is standardly said that both arrows are objectively pointing left, and so we misperceive the lower one that is seen through the water in the glass:



Image reproduced from <http://thekidshouldseethis.com/post/79356632627>

These four examples clearly seem to be physical illusions since it is the physical phenomenon of refraction which determines the candidate object’s look independently of any subject-dependent cognitive-perceptual processes.

Physical illusions, like optical illusions, are usually *predictable* and *intersubjective*. They are usually predictable since, given certain empirical and nomological facts about the behaviour of light as it travels through different mediums, we can usually predict that the candidate worldly object will look different in some respect from how it objectively is, e.g. the *law of refraction* allows us to reliably predict that a part-submerged stick will look bent when viewed from certain perspectives. They are usually intersubjective since all episodes of perceiving in the actual world are constrained by the same subject-independent empirical facts and nomological laws, e.g. that the *law of refraction* remains invariant across all determinate spatio-temporal locations in the actual world means that spear-fishers on different continents can see that their would-be lunch looks to occupy a different spatial location than it objectively does (the skilled spear-fisher compensates for this phenomenally apparent spatial displacement).

Physical illusions are said to threaten naïve realism since they involve situations in which a subject perceives a worldly object, \underline{o}_w , as being *F* when there is no worldly *F-ness* for her to be directly acquainted with (since \underline{o}_w is objectively *G*). Of the ‘Reversing Arrow Illusion, Hellie and friends will simply point out that the subject’s experience cannot have the phenomenally apparent naïve property *being-a-case-of-visual-awareness-of-an-arrow-pointing-right* since there is

no arrow that is pointing right within her immediate environment that can instantiate that property within her experience's phenomenal character¹⁵²; it is then tempting to conclude that some non-naïve ingredient must be doing this instantiatory work – an ingredient that will, since they think that reflectively indiscriminable experiences are phenomenally type-identical mental states, type the corresponding 'Good' experience of seeing an arrow pointing right. I am thus tasked with explaining why subjects who see the same scene (e.g. a part-submerged stick in water, a fish underwater) often take themselves to see something that is not objectively there (e.g. a bent stick, a fish at a determinate location) without positing something non-naïve realist that then constitutively explains the corresponding 'Good' experience's phenomenal character.

Treating a physical illusion's subjective phenomenal character as a *p*-imagining does not seem promising since they have a purely subject-independent metaphysical nature, whereas *p*-imaginings have a purely subject-dependent metaphysical nature; hence it seems likely that the nature of their explanans radically differs to the extent that the latter cannot convincingly explain the subjective phenomenal character of the former, e.g. it is hard to see how a subject-dependent *p*-imagining can convincingly explain a part-submerged stick's phenomenally apparent *bent-ness* when that look is sufficiently explained by the subject-independent physical phenomenon of refraction.

I am now ostensibly committed to one of three claims: namely, I can *either* (i) insist, like rival positive disjunctivism's, that something other than a *p*-imagining explains the illusory appearance, *or*, (ii) tell the same non-naïve realist story of 'Good' experience and physical illusion, *or*, (iii) assign physical illusions to the 'Good' disjunct. Clearly, (i) commits me to a problematic multi-disjunctivism, and anyway, invoking something non-naïve that is not a *p*-imagining to explain just one class of illusion is distinctively *ad hoc*; whereas (ii) swiftly puts me of experiential business. In what follows, I defend (iii) by showing how physical illusions are "special case[s] of veridical perception" (Fish 2009: 151), and so, block the transition from *Base qua* physical illusion to *Spreading* in Hellie's *p.m.e.*

Of the first class of refraction effect, I think that the Naïve Realist can make headway by exploiting Arthadeva's thought that, on occasion, experiencing subjects can stand in two visual relations to perceptible properties of the same worldly object¹⁵³, and because of this:

¹⁵² Again, I will simply speak of *phenomenal character* until I introduce my story.

¹⁵³ *Double vision* can be explained similarly: when I press a finger upon my left eye and look at the paperweight on

“We can say that we cannot in these conditions see the shape of *the whole stick*, though we can see the shapes of its two parts, the part above the water and the part below it. [...] we see it in parts; each part is seen separately or through a separate act or kind of seeing.” (1959: 133)

Our thought is that the water visually blocks the subject looking at a part-submerged straight stick from seeing its full spatial extension or the “shape of [its] whole” body; she thus stands in one visual relation to its submerged straight part and a different visual relation to its non-submerged part, where each constituent part is non-misleadingly seen. I am thus suggesting that there are “separate act[s]” of seeing occurring at the same time: a *non-misleading* seeing of the stick’s submerged straight part and a *non-misleading* seeing of its non-submerged straight part, or as I would say, the subject has a ‘Good’ experience that is phenomenally typed by the naïve properties *being-a-case-of-visual-awareness-of-a-submerged-part-of-a-straight-stick* and *being-a-case-of-visual-awareness-of-a-non-submerged-part-of-a-straight-stick*. A part-submerged straight stick fails to look continuously straight (and on that basis, has been said to look *bent* or *broken*) not because the subject is directly aware of something non-naïve (say, a ‘crooked’ sense-datum), but because the refractive properties of the water visually block her from seeing the continuous spatial relation between its submerged and non-submerged part to which she stands in different visual relations (analogy: I suggested that after-images occur when the adaptation of our photoreceptor cells to the colour of one surface visually blocks us from seeing a chromatic component of another surface (§5.2.1); likewise, I am suggesting that the lens action of the water visually blocks us from seeing the stick’s entire shape – in neither case is our experience ‘Bad’).

The spear-fishing case has a similar explanation. Here, the subject sees a spear through the medium of *air* and sees a fish through the different medium of *water*; she thus stands in one visual relation to the spear and a different visual relation to the fish, where each worldly object is non-misleadingly seen. Again, different acts of seeing occur at the same time: a *non-misleading* seeing of the spear that is in the air and a *non-misleading* seeing of the fish that is

my desk, “I immediately perceive it to become double” (Hume 1739/40: Bk 1, Part 4, §2). But I am not directly aware of something mind-dependent since the light emitted from it has struck two different sets of photoreceptors enabling me to see “one thing twice” (Arthadeva 1959: 134): I *non-misleadingly* see the paperweight by means of the light striking the photoreceptor’s in the centre of the retina of my right eye, and I *non-misleadingly* see it again by means of the light striking the photoreceptor’s in the retina of my left eye.

underwater, or as I would say, the subject has a ‘Good’ experience that is phenomenally typed by the naïve properties *being-a-case-of-visual-awareness-of-a-spear-in-the-air* and *being-a-case-of-visual-awareness-of-a-fish-underwater*. A submerged fish fails to look to occupy the spear’s target location not because the subject is directly aware of something non-naïve (say, a ‘fish-y’ representatum), but because the refractive properties of the water visually block her from seeing the true spatial relation between the spear that is in the air and the fish underwater to which she stands in different visual relations.

Perhaps it will be objected that by allowing a subject’s ‘Good’ experience of a part-submerged straight to have a complex metaphysical structure (at a minimum, the supposition that two different acts of seeing are occurring concurrently seems to require that her experience’s objective phenomenal character has two distinct structural parts with different explanations), I must concede that that structure springs from a certain sort of structured non-naïve realist content, e.g. representational. But then it will be said that something non-naïve constitutively explains her ‘Good’ experience’s objective phenomenal character, and the stage is again set for *Spreading*’s return.

The answer is surely that the complex metaphysical structure of the subject’s ‘Good’ experience of a part-submerged straight stick is intrinsically constituted by a structure that exists in mind-independent reality: specifically, her ‘Good’ experience has two distinct structural parts because the entire stick is seen through two different mediums that have different refractive properties. Our seeing a submerged part of a straight stick through water is one sort of non-misleading seeing and our seeing that same stick’s non-submerged straight part through air is another sort of non-misleading seeing¹⁵⁴ precisely because each medium through which we see its constituent parts refract light in different ways. Our ‘Good’ experience of a part-submerged straight stick is, like all our other ‘Good’ experiences, intrinsically structured out of aspects of the world itself and not some type of mind-dependent content.

Now it seems that the Naïve Realist cannot exploit Arthadeva’s explanation of the part-submerged straight stick to explain the second class of refraction effect: For though we stand in a different visual relation to the arrow that is said to look inverted than to an immediately adjacent object that is not seen through the water in the glass, this cannot explain its inverted look (consider how it would still look inverted were it seen through a glass of water in the

¹⁵⁴ It is perhaps natural to forget that the medium of air “is as material as other things” (Arthadeva 1959: 135) until e.g. we are on an aeroplane that encounters turbulence as it moves through different types of air masses.

vacuum of outer space). But I think that the Naïve Realist can still make headway by construing the inverted arrow as a *pure visibilium*, i.e. an object of sight that cannot be perceived by any other sense-modality: these “creature’s [that are] solely of the visual world” (Martin 2010: 188) plausibly include objects such as *holograms*, *shadows*, and the *sky*, and the explanatory parallel that I now want to draw is with that of the *rainbow*.

It is now known that a rainbow is seen when incident light rays are refracted as they enter an aggregate of raindrops, then reflected by their curved mirror-like surfaces, and refracted again as they exit the drops and strike our eyes: raindrops thus function like miniature prisms which refract or break sunlight into various colours, as well as reflecting it to produce the rainbow that is seen.¹⁵⁵ Given these empirical facts, I suggest that a subject who sees a rainbow is simply having a ‘Good’ experience of various naïve colour properties that are instantiated by an aggregate of raindrops: when you, for example, see the green band of a rainbow, you are enjoying a ‘Good’ experience that has the naïve property *being-a-case-of-visual-awareness-of-green* which is instantiated by a collection of raindrops that refract light at a certain angle (the ‘rainbow angle’ for green is 41°). Though the physiological limitations of your visual equipment preclude you from seeing the raindrops (they would be visible through a powerful enough lens), they are still worldly objects that instantiate mind-independent colours all the same – colours which intrinsically constitute the objective and subjective phenomenal character of your ‘Good’ experience.

The explanatory parallel then, is this: if a rainbow is a pure visibilium, the colours of which are instantiated by an aggregate of visually undetectable raindrops, then there is nothing especially puzzling about likewise supposing that the arrow which looks to be pointing right is a pure visibilium, the colour and shape of which is instantiated by an aggregate of visually undetectable water drops in the glass. In this case, each water drop in the aggregate functions like a miniature convex lens (i.e. a lens that converges light rays towards each other) which refracts and bend the light rays that are travelling through it in such a way so as to produce the arrow that is seen. Given this empirical fact, I suggest that the subject who thinks that an arrow looks to point right in this situation is simply having a ‘Good’ experience that has the naïve properties *being-a-case-of-visual-awareness-of-a-black_{PN1}-arrow-shape_{PN2}* which is instantiated

¹⁵⁵ Although Descartes is usually credited with discovering that the “way in which the rays of light act on [raindrops]” (1637: second appendix) form the rainbow, Aristotle also recognized that rainbows are formed when light strikes “very small particles continuous with one another” (350 B.C.E: *Meteorology*, Book 3, part 4). Boyer (1959) provides a nice history of the rainbow.

by a group of water drops that refract and bend incident light rays in a certain way. For this reason, talk of misperceiving the arrow *behind* the glass is mistaken since the subject is directly acquainted with type of worldly object that is made visually detectible by that particular set-up (the position of the glass relative to the arrow that is pointing left and the water within it) – an object which intrinsically constitutes the objective and subjective phenomenal character of her ‘Good’ experience.

There might be some intuitive resistance to construing a black arrow *shape* as a pure visibilium given that we ordinarily describe shapes as solid objects that are tactually detectible: not only can I see the three-dimensional spherical shape of the paperweight on my desk, but I could also reach out and touch its smooth surface. But in my story, the arrow is *nothing more* than a light phenomenon: hence it might now be objected that the subject must be hallucinating an arrow pointing right since there is no tactually detectible solid object to be found (if you were to place a hand inside the glass, you would only feel the water). My answer is simply that it is not a necessary condition on a worldly object’s being shaped that it must be a tactually detectible solid object: I see nothing ontologically puzzling about the thought that a worldly object can be visually shaped without also being a tactually detectible solid object (see Martin 2010: 204). And the present thought is that a group of water drops in the glass instantiate a purely visual shape – a shape that intrinsically constitutes the objective and subjective phenomenal character of the subject’s ‘Good’ experience.

The story on offer is just a ‘one-level’ theory of physical illusion. *To illustrate:*

Physical Illusion	Misleading
<i>Level 1</i> (objective and subjective phenomenal character): worldly object-property couples are presented to subjects.	No

This clearly sustains naïve realism since someone experiencing a physical illusion is simply having a ‘Good’ experience, the objective and subjective phenomenal character of which is relationally typed by the same naïve properties. The curious case of the part-submerged straight stick, the fish that is said to look to occupy a different location, and objects that are said to misleadingly look inverted when viewed through a glass of water can all be explained without positing something non-naïve within the nature of the experience itself that can phenomenally type the corresponding ‘Good’ case (trivially, since physical illusions are

grouped under the ‘Good’ disjunct).

6.1.3 Summary

I have now argued that, of the three varieties of illusion, only the *cognitive* and *optical* varieties are illusory in the sense that their subjective phenomenal characters have *at least* one phenomenally apparent naïve property that is metaphysically built from a *p*-imagining; although their objective phenomenal characters are metaphysically built from naïve properties, it is this partial mismatch between their objective and subjective phenomenal characters which prevent cognitive and optical illusions from falling under the umbrella of the ‘Good’ disjunct. Talk of *physical* illusion is innocuous once we understand how such cases can be ‘Good’ through and through. (I.D) cannot yet rest easy since there is one influential structurally similar rival, viz., Brewer’s *object view of illusion*.

6.2 Brewer’s Object View of Illusion

Brewer’s (2004; 2008; 2011) *Object View* (o.v) of illusion asserts that the direct objects of illusory experience are *worldly objects themselves* which mislead the subject’s judgement *in virtue* of bearing *visually relevant similarities* to paradigm empirical kinds that they do not objectively exemplify. He writes:

“[...] the core subjective character of perceptual experience [is] given simply by citing the *physical object which is its mind-independent direct object*. (2008: 6-7) [...] in a case of visual illusion in which a mind-independent physical object, \underline{o} , looks \underline{E} , although \underline{o} is not actually \underline{E} , \underline{o} is the direct object of visual perception from a spatiotemporal point of view and in circumstances of perception relative to which \underline{o} has *visually relevant similarities* to paradigm exemplars of \underline{E} although it is not itself actually an instance of \underline{E} .” (2011, Ch.5: 20, my emphasis)

Three premises can be distinguished in Brewer’s remarks. The first premise is Brewer’s positive claim that a ‘Good’ experience’s phenomenal character¹⁵⁶ can be sufficiently characterized “simply by citing the physical object which [is its] mind-independent direct

¹⁵⁶ As Brewer treats a ‘Good’ and illusory experience’s subjective phenomenal character *as* its objective phenomenal character, I will simply speak of *phenomenal character* until I consider his distinction between ‘Thick’ and ‘Thin’ looks in §6.2.2.

object.”¹⁵⁷ Clearly, this is not simply the ‘vulgar’ intuition that ‘Good’ experience *seems* to be world-involving and world-acquainting, but rather, the stronger claim that it *is* world-involving and world-acquainting. Hence,

(1) For all subjects s : If s has a Good experience E_G , then;

(a) s stands in an object-dependent direct acquaintance relation r to worldly objects $\underline{o}_{W1}, \underline{o}_{W2} \dots \underline{o}_{WN}$; and,

(b) $\underline{o}_{W1}, \underline{o}_{W2} \dots \underline{o}_{WN}$ intrinsically constitute E_G ’s phenomenal character.

This is ambiguous between *naïve realism* and *phenomenal relationalism* (§1.1.1). Here, Brewer claims that a ‘Good’ experience’s phenomenal character is characterized simply by describing those worldly objects which relationally individuate it (naïve realism); but elsewhere, he claims that such phenomenal characters are characterized in terms of “a relation of conscious acquaintance between a subject and certain mind-independent physical objects” (2011, Ch.5: 8), which seems to suggest that they essentially consist in purely mental relations of awareness to worldly objects (phenomenal relationalism). As Brewer’s story is not significantly affected by either reading, I leave this question open.

Brewer’s second premise is that those worldly objects with which a subject is directly acquainted with look a particular way to her *in virtue* of bearing “visually relevant similarities” to certain paradigm empirical kinds, i.e. such similarities metaphysically ground subjective looks. Being *visual*, such similarities are not, Brewer (2011, Ch.5:7) notes, to be understood as relations that hold between *non-visual* object-properties (i.e. those properties of objects such as *Molybdenum*’s *atomic number* that cannot constitute visual phenomenal characters at all): instead, Brewer (2011, Ch.5: 17) claims that worldly objects and their paradigm empirical kinds look relevantly similar *only if* both share a sufficient number of common properties amongst those involved in the ways that the subject visually processes their perceptible properties. Hence,

(2) A worldly object, \underline{o}_W , is visually relevantly similar to a paradigm empirical

¹⁵⁷ This is Brewer’s attempt to “rehabilitate the early modern [empiricist] insight” (2011, Ch.5: 2) that ‘Good’ experience essentially consists in an object-dependent direct acquaintance relation (e.g. Locke 1690; Berkeley 1975) whilst also defending an *empirical realism* which insists that the direct objects of such experience are simply the worldly objects of commonsense.

kind k only if \underline{Q}_w and k share a sufficient number of common properties P_1, P_2
 $\dots P_n$ amongst those involved in the ways that the subject's visual system
 processes visual information from \underline{Q} and k .

It is puzzling that, given Brewer's (2008: 7; 2011, Ch.5:6) insistence that premise (2) constitutes a third relatum of the direct acquaintance which holds between subject and worldly object, he acknowledges that "a far more developed account of visually relevant similarities" (2008: 12) is required.¹⁵⁸ Still, I venture some remarks.

One example that Brewer (2011, Ch.5: 9) employs to illustrate premise (2) is that of looking at a coin head-on. In daylight it should look relevantly similar to *your*¹⁵⁹ paradigm of, say, silver colour. But when the *illumination* changes it will look relevantly similar to certain of your other colour paradigms, e.g. when the room goes dark it will look relevantly similar to your paradigm of black colour. And when viewed head-on in daylight, that same coin should look relevantly similar to your paradigm of circular shape, but when your *perspective* changes as when you view it edge-on, relevantly similar to your paradigm of elliptical shape. Moreover, the ways in which your visual system processes colour and shape information from both the coin and its paradigm kinds should be neurophysically type-identical, e.g. a part of what it is for the coin to be visually relevantly similar to your paradigm of silver colour is that your visual system should process this shape information *just as if* you were looking at your paradigm of silver colour. So, *illumination*, *perspective*, and *visual processing* seem to be those common properties which Brewer thinks are sufficient for determining that an object is visually relevantly similar to some paradigm empirical kind.

¹⁵⁸ Brewer (2011, Ch.5: 39) is sensitive to *this* dilemma. Either (o.v) explicitly defines its key concepts *visually relevant similarities* and *paradigm empirical kinds* or it does not; if so, then counterexamples can be marshalled; but if not, then (o.v) is insufficiently robust. On either option, (o.v) is implausible. Brewer responds that neither option is exhaustive since a "detailed combination of theoretical-definitional pointers" (ibid) has been provided to illustrate (o.v)'s key concepts which, whilst not fully explicit, are nevertheless sufficiently robust enough to go beyond our commonsense understanding. Given this, we can see my objections (§6.2.1, §6.2.2) as arguing that Brewer's "pointers" do not immunize (o.v) to counterexamples, and *for this reason*, is insufficiently robust, i.e. Brewer's failure to defuse the dilemma's first horn means that he cannot adequately defuse its second.

¹⁵⁹ Brewer (2011, Ch.5: 51) introduces his subject-relative clause in order to explain variations in colour vision. Suppose that two subjects, s_1 and s_2 , are looking at the same coin head-on in daylight and that s_2 is achromatopic. Then even though the coin is reflecting highly similar light, it will presumably look relevantly similar to s_1 's paradigm of silver colour and s_2 's paradigm of, say, grey-ishness.

Brewer's third premise is that "paradigm exemplars" explanatorily ground those visually relevant similarities *in virtue* of which a worldly object, \underline{o} , looks F to a subject s , i.e. paradigm empirical kinds explanatorily ground visually relevant similarities which then metaphysically ground subjective looks. According to Brewer (2008: 8; 2011, Ch.5: 18), a paradigm empirical kind is simply an instance of that kind, and it is through the subject's experiences of its instances and grasp of the kind concept under which it falls that she comes to understand it, e.g. it is through my swimming in, and drinking, a certain kind of stuff in conjunction with my linguistic training in the kind concept $\langle \text{water} \rangle$ that determines my paradigm of the empirical kind *water*. Hence,

- (3) A paradigm empirical kind k explanatorily grounds those visually relevant similarities which metaphysically ground a worldly object, \underline{o}_w 's, phenomenal appearance *iff* a subject s (i) has experienced n instances of k and (ii) grasps the kind-concept c which refers to k .

Unlike premise (2)'s undeveloped account of visually relevant similarities, it is not so puzzling that Brewer "commit[s] [himself] without defence to a controversial account of concept possession" (2011, Ch.5:2) since, whatever concepts *are* (e.g. Kenny's (2010) cognitive-discriminative abilities; Zalta's (2001) Fregean senses; or something else again) it matters here only that the subject understands what she is *doing* when she deploys concepts to refer to those objects around her (analogy: that I do not fully grasp the physics which explain the nature of gravity when throwing a ball for my dog is unimportant since I need only understand what I am doing, viz., playing a game with my dog).

Premises (1)-(3) now conjoin to explain,

Standard Illusion Thesis: For all subjects s : If s has an experience e in which worldly objects $\underline{o}_{w1}, \underline{o}_{w2} \dots \underline{o}_{wN}$ phenomenally appear to be F , but $\underline{o}_{w1}, \underline{o}_{w2} \dots \underline{o}_{wN}$ are objectively G , then s has an illusory experience.

Brewer's contention is that those worldly objects with which the subject is directly acquainted with can look other than how they objectively are when they bear visually relevant similarities to paradigm empirical kinds that they do not objectively exemplify. Hence,

- (4) The Object View of Illusion: A subject s has an illusory experience E_i *iff* she,

- (i) stands in an object-dependent direct acquaintance relation r to a worldly object, \underline{o}_w , where \underline{o}_w intrinsically constitutes E_1 's phenomenal character;
and,
- (ii) \underline{o}_w is visually relevantly similar to s 's conception¹⁶⁰ of some paradigm empirical kind k , where \underline{o}_w does not objectively exemplify k . (Conjunction of (1), (2) & (3))

Consider the part-submerged straight stick. Brewer's contention is that the subject is directly acquainted with the straight stick itself which intrinsically constitutes her experience's phenomenal character (instance of premise (1)); then the stick's submerged part refracts light and causes a neural response in her that is relevantly similar to the refracted light and neural response that would be caused in her *if* she were looking at her paradigm of a bent stick (instance of premise (2)); and what explanatorily grounds these visually relevant similarities is that she has experienced similar looking bent sticks and appropriately grasps the concept <bent stick> that refers to her paradigm of a bent stick (instance of premise (3)). A part-submerged straight stick is thus said to look bent because the straight stick which is the direct object of her experience looks visually relevantly similar to her paradigmatic conception of a bent stick (Brewer (2011, Ch.5: 15, 42) applies these remarks *mutatis mutandis* to other, less disputed, cases such as Müller-Lyer lines and the Necker Cube).¹⁶¹

Like (I.D)'s story of doxastically resisted optical illusion, (o.v) is also a 'Two-Level' account. At the first level, worldly objects can intrinsically constitute the experience's phenomenal character since how they are in those experiences is how they objectively are; hence Brewer's remark that "the direct object of perception is the very (straight) stick itself" (2011, Ch.5:20). Error occurs only at the second level when the subject mistakes certain visually relevant

¹⁶⁰ Suppose that s lacks any conception of a paradigm object (say, if s is a pre-linguistic infant or non-linguistic animal): in this scenario, Brewer claims that the candidate worldly object looks visually relevantly similar to *our* conception of a paradigm object, where this "entirely captures [her experience's] phenomenology" (2011, Ch.5: 43). Now I am rather baffled as to how *my* conception of, say, a paradigmatic duck explains the subjective phenomenology of s 's experience when she is presented with the 'Duck-Rabbit' (*my* conception seems irrelevant). Nevertheless, I set this worry aside since it does not feature in my objections to (o.v).

¹⁶¹ An intuitive worry is that, since *similarity* is a symmetrical relation, Brewer is committed to the strange claim that an *unsubmerged bent stick looks straight*. Brewer (2011, Ch.5:22) rightly, I think, responds that although similarity *simpliciter* is symmetric, an unsubmerged bent stick, *because it is bent*, fails to meet the relevant condition of similarity to a paradigm straight stick.

similarities for qualitative identities as when she incorrectly judges that a part-submerged straight stick is visually relevantly similar to her paradigm of a bent one.

Brewer is thus claiming that,

Standard Illusion Thesis: For all subjects s : If s has an experience e in which worldly objects $o_{w1}, o_{w2} \dots o_{wN}$ phenomenally appear to be F , but $o_{w1}, o_{w2} \dots o_{wN}$ are objectively G , then s has an illusory experience.

does not entail,

Base: For all subjects s : If s has a misleading experience E_M , then E_M 's phenomenal character is not typed by any naïve properties $P_{N1}, P_{N2} \dots P_{NN}$.

Since illusions consist solely in the subject's cognitive response to what is non-misleadingly presented. Blocking *Base* thus renders the transition from *Reflective Indiscriminability* to *Spreading* “dialectically unnecessary” (Brewer 2011, Ch.5: 24) since there is now nothing non-naïve within the nature of the experience itself that can phenomenally type the corresponding ‘Good’ case (trivially, since Brewer groups illusory experiences under the ‘Good’ disjunct).

6.2.1 The Argument from a Unified Theory of Illusion

My *Argument from a Unified Theory of Illusion* begins from the claim that (o.v) has narrower explanatory scope than (I.D) *qua* theory of illusion since there is *at least* one illusory experience¹⁶² in which no paradigm worldly object (empirical kind) objectively exists¹⁶³ to ground those visually relevant similarities *in virtue* of which the candidate worldly object, o_w , is said to misleadingly look F . I am thus claiming that the following principle is true of *at least* one illusory experience:

(P) A subject s can have an illusory experience E_i *as of* a candidate worldly

¹⁶² Strictly speaking, I should perhaps say ‘Good’ given that Brewer assigns illusions to the ‘Good’ disjunct: however, I will use the term *illusory experience* throughout the remainder of this chapter since Brewer does not deny that there are misleading looks to be explained (at the second level).

¹⁶³ Pautz (2010: 287-8) presses this point from a different angle, viz., that (o.v) cannot explain a range of ‘Good’ experiences (as standardly conceived).

object, \underline{o}_w , phenomenally appearing F (when it is objectively G), where \underline{o}_w 's phenomenally apparent F -ness cannot be metaphysically grounded in \underline{o}_w 's false visual resemblance to a numerically distinct paradigm worldly object, \underline{o}_w , that is objectively F .

I think that one clear cut case which exemplifies (P) is the 'Waterfall Illusion' in which, for example, a nearby stationary rock subjectively looks to simultaneously move upwards after staring at a waterfall for several seconds. According to Brewer's visually relevant similarities account, this misleading look *as of* a stationary rock that simultaneously moves upwards occurs because a paradigm worldly object that is both stationary and moving upwards would have relevantly similar effects on the subject's visual system as the rock that she sees. But there is no such paradigm object in the actual world that Brewer can point to which grounds the stationary rock's misleading look (physicist's would surely be drastically revising the theory of gravity were such an object to be conclusively discovered). The 'Waterfall Illusion' thus exemplifies an illusory experience in which the candidate worldly object's misleading look is not determined by its falsely visually resembling some paradigm worldly object.

My story, unsurprisingly, is that the subject with normal vision and normal visual-spatial abilities who looks at a nearby stationary rock after staring at a waterfall for several seconds will be strongly disposed to imagine seeing a rock that is both stationary and moving upwards. The downwards flowing water and the rock are artificial prompters that causally interact with relevant aspects of the subject's visual system (such as the way in which those neurons that code for motion in area V5 adapt to the downwards motion of the water (see e.g. Hautzel *et al.* 2001)) and cognitive equipment (the sub-personal way in which it forms a p -imagining as prescribed by that visual information) in such a way that she is strongly disposed to imagine seeing a rock that is both stationary and moving upwards – indeed, there is nothing conceptually unintelligible in this suggestion since it simply exemplifies an instance of the prosaic claim that we can imagine events that are physically impossible in the actual world (e.g. I can imagine teleporting myself, by a mental act of will, to Fake Barn County).

Perhaps Brewer will deny my assumption that the rock must be visually relevantly similar to a paradigm worldly object that is both stationary and moving upwards. He might say that a subject has an illusory experience *as of* a rock that is both stationary and moving upwards *iff* it has (a) visually relevant similarities to a paradigmatic moving object, and, (b) visually relevant similarities to a paradigmatic stationary object. Now Brewer defines visually relevant

similarities as “identities in such things as, the way in which light is reflected and transmitted from the objects in question, and the way in which stimuli are handled by the visual system” (2011, Ch.5: 17). Hence condition (a) will be met *iff* the rock reflects light and causes a neural response in the subject that is relevantly similar to the reflected light and neural response that would be caused in her *if* she were looking at a paradigmatic moving object. But this condition cannot be met: First, the light that is reflected from the rock cannot be relevantly similar to the light that is reflected from a moving object since it is still; and second, the rock also causes a neural response that codes for stillness as well as motion, whereas a moving object causes a neural response that codes only for motion.

Alternatively, Brewer might say that paradigm objects need only be conceptually possible in order to secure (o.v)’s visually relevant similarity relation. He considers a white wall that is illuminated with red light in a possible world in which nothing is objectively red, and says that ...

“[...] although there are no actual exemplars of red, the redly illuminated wall nevertheless has visually relevant similarities with possible but non-actual exemplars of red: the paradigm exemplars, our *imagination* of which plays a central role in our understanding of the predicate ‘is red.’” (2011, Ch.5: 54, my emphasis)

His thought is that in a possible world in which no paradigm red object objectively exists, we can still appeal to the subject’s imaginary conception of *red* to secure (o.v)’s visually relevant similarity relation, and so, explain the white wall’s red look. That is, a white wall that is illuminated with red light in a possible world in which no paradigm red object objectively exists nevertheless subjectively looks red *in virtue* of being visually relevantly similar to the subject’s imagined conception of paradigmatic red. Likewise, Brewer would deny that the ‘Waterfall Illusion’ constitutes a genuine counterexample to (o.v) since we can appeal to the subject’s imaginary conception of a rock that is both stationary and moving upwards to secure the necessary visually relevant similarity relation, and so, the misleading look. (P) is thus replaced with:

(P*) A subject *s* can have an illusory experience E_i *as of* a candidate worldly object, \underline{o}_w , phenomenally appearing *F* when it is objectively *G* (where \underline{o}_w is not visually relevantly similar to any numerically distinct paradigm worldly

object, \underline{o}_w , that is objectively F in the actual world) since \underline{o}_w falsely visually resembles s 's imagined conception of a paradigm object, \underline{o} , that is F .
(Negation of (P))

Notice now that a multi-disjunctive conception of illusory experience is on offer: some misleading looks spring from the candidate worldly object falsely visually resembling some paradigm object in the actual world, whereas those illusory looks that cannot be explained in this way are said to spring from the candidate worldly object falsely visually resembling the subject's imagined conception of some paradigmatic object, i.e. different illusory experiences are now assigned mutually exclusive 'Good' disjuncts. *Ceteris paribus*, we should look for a theory (and (I.D) is one) that need not posit two independent theories in order to explain different illusory experiences.

Brewer might now deny that his explanation of the 'Waterfall Illusion' differs in any fundamental way from that of, say, the Müller-Lyer which is said to falsely visually resemble a paradigm of two *actual* unequal lines positioned at different depths (2008: 15). This would be a mistake: For it is not that we can safely assume the necessary visually relevant similarity relation and then modify the nature of the relatum depending upon the particular illusory experience that requires explanation; rather, it is that that relation is said to be secured by fundamentally different relata, viz., a paradigm object in the actual world *or* the subject's imagined conception of some paradigm object. Talk of a candidate worldly object falsely visually resembling something cannot even begin until Brewer has specified the essential nature of that something; and when the essential nature of that something radically changes depending upon the particular illusory experience requiring explanation, an explanatorily inelegant multi-disjunctive conception of illusory experience is the result.

My *Argument from a Unified Theory of Illusion* then, has two distinct forms. The first form is that Brewer's visually relevant similarities account has narrower explanatory scope than (I.D) since there is *at least* one illusory experience that cannot be explained in terms of the candidate worldly object falsely visually resembling some paradigm object in the actual world. The second form is that Brewer's attempt to explain problematic cases by appeal to imagined paradigmatic objects runs into an explanatorily inelegant multi-disjunctivism. Either way, Brewer's visually relevant similarities account does not satisfactorily meet the *unificatory constraint* (§2.3) on a theory of illusory experience, and so, has limited explanatory appeal.

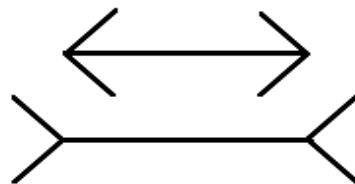
6.2.2 A Dilemma for (O.V)'s Account of Illusion

I now want to raise a dilemma for (o.v)'s account of illusion that springs from Brewer's distinction between two ways that he thinks an object, \underline{o} , can look to have a certain property. He writes:

"[...] \underline{o} looks \underline{F} iff \underline{o} is the direct object of a visual experience from a point of view and in circumstances relative to which \underline{o} has visually relevant similarities with paradigm exemplars of \underline{F} . I will say in such cases that \underline{o} thinly looks \underline{F} . \underline{o} thickly looks \underline{F} iff \underline{o} thinly looks \underline{F} and the subject recognizes it as an \underline{F} , or registers its visually relevant similarities with paradigm exemplars of \underline{F} in an active application of that very concept." (2011, Ch.5: 43-44)

I am now looking at a paperweight on my desk: it is said to thinly look spherical *iff* it is visually relevant similar to paradigm spherical things; and it thickly looks spherical *iff*, additionally, I conceptually recognize it as instantiating the property *spherical-ness*. I think that this distinction generates the following dilemma when it comes to explaining illusory *scene-immediacy*¹⁶⁴ (i.e. why \underline{o} looks \underline{F} to a subject s when it is objectively \underline{G}): *either* the purely physical nature of visually relevant similarities means that they are too weak to secure \underline{o} 's thinly looking \underline{F} *or* the subject's conceptual categorization of \underline{o} as looking visually relevantly similar to paradigm \underline{F} 's undermines (o.v)'s naïve realist treatment of illusory experience. Either way, (o.v)'s theory of illusion is inadequate.

As a way into this dilemma, consider again the Müller-Lyer:



It looks to me (and I suspect you) that the lower line is longer in length than the upper; a subjective look that Brewer obviously wants to deny constitutively explains our experience's

¹⁶⁴ I choose *scene-immediacy* since we cannot sensibly speak of Müller-Lyer lines being *reflectively indiscriminable* from the corresponding 'Good' experience unless the look *as of* two unequal lines is explained.

phenomenal character – as evidenced by his claim that our experience of the Müller-Lyer is “fundamentally one of conscious visual acquaintance with that very diagram as its mind-independent physical object”¹⁶⁵ (2011, Ch.5: 47). Of this look, Brewer says:

“The (ML) [...] has relevant similarities with a pair of lines, one longer and more distant than the plane of the diagram, one shorter and less distant; and those lines in themselves are a paradigm of inequality in length. In this sense *the two lines look unequal in length.*” (2011, Ch.5: 15, my emphasis)

His thought is that when,

- (1) A candidate worldly object, \underline{o}_w , looks \underline{E} to a subject s (where \underline{o}_w is not objectively \underline{E}).

It is because,

- (2) \underline{O}_w , falsely visually resembles some numerically distinct paradigm object, \underline{o} , that is objectively \underline{E} .¹⁶⁶

And of the Müller-Lyer, Brewer’s thought is that the lines thinly look unequal in length *in virtue* of their falsely visually resembling a paradigm of two unequal lines positioned at different depths.

Recall (§6.2) that visually relevant similarities are just the physical properties of *illumination*, *perspective*, and *visual processing*. Müller-Lyer lines are thus visually relevantly similar to a paradigm of two unequal lines positioned at different depths *iff* the lines reflect light and cause a neural response in the subject that is relevantly similar to the reflected light and neural response that would be caused in her if she were looking at a paradigm of two unequal lines positioned at different depths; and these visually relevant similarities are then said to secure a thin look *as of* two unequal lines. Except when I look at the Müller-Lyer, I have no conscious phenomenal awareness of any such similarities since they are “simply [psychophysical] processes” (Smith 2010: 393) that partly underpin the occurrence of my experience *as of* two

¹⁶⁵ As evidence for this claim, Brewer notes that subjects can usually accurately point to the end points of each line, which suggests that their property of *equality-in-length* is phenomenally manifest (2006: 10).

¹⁶⁶ Imagined paradigms aside.

lines thinly looking unequal in length. When I see Müller-Lyer lines, I have no more conscious phenomenal awareness of the light¹⁶⁷ striking my eyes and being perceptually processed than I do of my myelin sheaths growing or telomeres shortening; hence I cannot see how purely physical visually relevant similarities can robustly secure their thinly looking unequal in length.

One way that Brewer can resist this worry is to claim that although \underline{o} 's thinly looking \underline{E} is determined by its visually resembling some paradigm (actual or imagined) \underline{E} -thing, it is still \underline{o} *itself* that looks \underline{E} (2011 Ch.5: 41); and applied to Müller-Lyer lines, Brewer's thought is that although their thinly looking unequal in length is determined by their falsely visually resembling a paradigm of two unequal lines positioned at different depths, it is still the lines themselves that thinly look unequal in length. But this cannot help: For we cannot even speak of Müller-Lyer lines thinly looking unequal in length until visually relevant similarities have secured this look; and the whole problem is that their purely physical nature precludes them from securing this thin look in the first place.

This contrasts with (I.D)'s explanation of illusory *scene-immediacy*. I claim that when,

- (1) A candidate worldly object, \underline{o}_w , looks \underline{E} to a subject s (where \underline{o}_w is not objectively \underline{E}).

It is because,

- (2) \underline{O}_w 's phenomenally apparent \underline{E} -ness is metaphysically constituted by a world-presenting scene-immediate p -imagining.

When I am presented with Müller-Lyer lines, a subjective look *as of* two unequal lines is metaphysically constituted by my world-presenting scene-immediate p -imagining itself rather than those physical processes and events that are one necessary condition on its occurrence¹⁶⁸: p -imaginings thus have the right conceptual shape to explain illusory *scene-immediacy*.

¹⁶⁷ Putting glints, gleams, highlights, pure visibilia, and Sorenson's (2008: Ch.9) filtows (i.e. a body of coloured light that is produced by a filter) aside.

¹⁶⁸ The other being the absence of two objectively unequal lines (§3.3.1).

If illusory *scene-immediacy* cannot be found at the level of thin looks, then perhaps it can be found at the level of thick looks, or as Brewer might put it, conceptual phenomenology (2008: 14). He writes:

“[...] possessing the concept of inequality in length as I do, I may notice the visually relevant similarities in question with my paradigms, either because the question of the relative length of its main lines becomes relevant in some way [...] or simply because they jump out at me and capture my attention. *As a result of this conceptual registration, the lines thickly look unequal in length* [...] this is a perfectly *genuinely phenomenological matter*.” (2011, Ch. 5: 47-8, my emphasis)

Brewer’s general thought seems to be that the subject’s conceptually registering certain visually relevant similarities¹⁶⁹ rather than others makes a genuine difference to the overall phenomenology of the experience. Applied to the Müller-Lyer, this means that when I conceptually register the lines as visually resembling my paradigm of inequality in length, the lines thickly look unequal in length; and because my conceptual classification of the diagram as looking visually relevantly similar to my paradigm of inequality in length is a “genuine phenomenological matter”, a subjective look *as of* two unequal lines is secured.

The problem with this move is that, by (o.v)’s own lights, it risks introducing some sort of conceptual content into the phenomenal character of the illusory experience. Consider Brewer’s charge against the Representationalist:

“[Representationalism] trades direct openness to the physical elements of reality themselves, for some intellectual act of classification or categorization. As a result, [representationalism] loses all right to the idea that it is the actual physical objects before her which are subjectively presented in a person’s perception.” (2006: 18)

If it is my conceptual classification of the Müller-Lyer as looking visually relevantly similar to my paradigm of inequality in length that secures their genuinely looking unequal in length, then this is the very “intellectual act of classification” that precludes my experience from being fundamentally one of direct acquaintance with the lines themselves. Grounding a look *as of* two unequal lines in conceptual phenomenology thus screens off the mind-independent object that

¹⁶⁹ Though the previous objection suggests that this conceptual registration is implausible, I want to grant it here in order to see if something can be made of grounding illusory *scene-immediacy* in thick looks.

is the Müller-Lyer diagram from constitutively explaining my experience's phenomenal character.¹⁷⁰

In conclusion, I think that (o.v)'s account of illusory *scene-immediacy* faces this dilemma: illusory *scene-immediacy* cannot be located at the level of thin looks since purely physical visually relevant similarities cannot look any way at all; and it cannot be located at the level of thick looks since that precludes the candidate worldly object itself from constitutively explaining the experience's phenomenal character. So, (o.v) *either* has no explanation of illusory scene-immediacy *or* it must abandon its naïve realist treatment of illusory experience. I submit that this dilemma, in conjunction with (o.v)'s failure to meet the unificatory constraint, is enough to put it out of business.

6.3 Conclusion

In this chapter, I have argued that cognitive and optical illusions are disjunctive hybrids that are *neither* 'Bad' (since unlike dreams and hallucinations, their objective phenomenal characters are metaphysically built from naïve properties) *nor* 'Good' (since their subjective phenomenal characters have at least one phenomenally apparent naïve property that is *p*-imagined); whereas physical illusions are 'Good' experiences through and through. I then rejected Brewer's object view of illusion on the grounds that it has narrower explanatory scope than (I.D), and can only explain illusory *scene-immediacy* at the cost of sacrificing its naïve realist account of illusion. As (I.D) offers a unified theory of illusion that is compatible with naïve realism, it remains in play.

¹⁷⁰ I think that there is a case for extending this objection to (o.v)'s account of 'Good' experience; however, considerations of space mean I must be content with objecting to its story of illusion.

7

Conclusion

In conclusion, it is highly plausible that any successful naïve realist solution to the *p.m.e* must be some kind of *positive phenomenal disjunctivism* that has the conceptual and empirical resources to offer the same fundamental explanation of dreams, hallucinations, and illusions; and I have argued that *Imaginative Disjunctivism* can meet this explanatory demand.

To recap. Chapter 1 developed Hume’s ‘vulgar’ naïve realism and pitched this “common understanding we have of perceptual contact with the world” (Martin, 2006:2) against Hellie’s *Problem of Misleading Experience*. Chapter 2 then sketched three theoretically desirable constraints on any successful naïve realist solution: namely, (i) a *metaphysical* constraint that commits the Naïve Realist to *Basic Phenomenal Disjunctivism*, (ii) an *explanatory* constraint that commits the Naïve Realist to positively explaining a ‘Bad’ experience’s remarkable features, and, (iii) a *unificatory* constraint that commits the Naïve Realist to telling the same fundamental story of dream, hallucinatory, and illusory experiences. Building on these constraints, I introduced *Imaginative Disjunctivism* in Chapter 3: I argued that there is no conceptual or empirical incoherence in the supposition that subjects are sometimes radically mistaken about the true phenomenal character or nature of their experiences; and I further argued that (I.D) is not to be toppled by either the *Argument from Local Supervenience* or the *Argument from Explanatory Screening Off* since ‘Good’ and ‘Bad’ experiences have jointly different necessary and sufficient conditions for their occurrence.

Chapter 4 first put (I.D) to work by explaining dreams: I sketched a number of conceptual and empirical considerations that collectively told against the *received view*; and although the *dream fabrication view* initially seemed promising, it was unable to convincingly explain the phenomenology of lucid dreams, and so, could not offer a theoretically attractive unified theory of dreaming. Chapter 5 extended (I.D) to explaining hallucination: I argued that it met Johnston’s demand to explain why hallucination cannot be a source of original *de re* thought but can – in a suitably qualified sense – be a source of original *de re* knowledge of quality; and I further argued that Johnston’s attempt to marry conjunctivism and disjunctivism was ultimately felled by the *Problem of Explanatory Screening Off*. Chapter 6 extended (I.D) to explaining illusion: I explained how *cognitive* and *optical* illusions could be understood as ‘hybrid’ experiences that are neither ‘Good’ nor ‘Bad’, and how *physical* illusions could be

understood as being 'Good' through and through. Finally, I argued that Brewer's *object view* of illusion could not offer a theoretically attractive unified theory of illusion, and could only explain illusory *scene-immediacy* on pain of abandoning its naïve realist conception of illusion.

According to the story told herein, a 'Good' experience's (objective and subjective) phenomenal character is relationally individuated by the perceptible properties of those worldly objects with which the subject is immediately and irreducibly acquainted. But when we are misled, this is because we are having perception-like imaginings that convincingly simulate genuine perceptual phenomenology. Whether or not (I.D.)'s story of 'Bad' experience is in fact true, I simply don't know. But its ability to offer a conceptually and empirically consistent account of 'Bad' experience means that the 'vulgar' conception of perceptual experience with which we began is not easily put out of business by the existence of dreams, hallucinations, or illusions.

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