Subjective Intentionality and Unconscious Phenomenology

by

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Abstract

The aim of this thesis is twofold. Firstly, I will argue for the Phenomenal Intentionality Thesis from an immediate, 1st person perspective on intentionality or Subjective Intentionality. By Subjective Intentionality I entail an intrinsic source of intentionality; that is, a state, in order to be genuinely intentional, has to be intentional *for me*. Secondly, I intend to provide an answer to the main objection for the Phenomenal Intentionality Thesis, namely that phenomenology requires consciousness, hence intentionality requires consciousness. But there are unconscious intentional states, which would imply that the Phenomenal Intentionality Thesis is false. I will present empirical evidence for genuinely intentional unconscious perceptual states. I argue that these states are Subjectively Intentional and Phenomenally Intentional. If both of this is true, then unconscious states are Genuinely Intentional. And if there is unconscious perceptual phenomenology, then I see no *prima facie* problem in inferring from that to the unconscious phenomenology of a thought.

Keywords: intentionality, phenomenology, consciousness, unconscious, first person perspective.

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Contents

Introduction

Consciousness is a phenomenon so intuitively familiar to us and, at the same time, a phenomenon with so many diverse definitions and interpretations. It remains one of the most mysterious affairs in modern scientific research. It is usually defined as simply awareness, both of the external world and of one self's internal states and events. That awareness is something that we are immediately familiar with. I am immediately aware of the blueness of the sky outside my window as well as the joyful mood that external input triggers within me.

However, there are some mental states that we are not immediately aware of, primarily the unconscious ones. As Freud unveiled more than a century ago, we have certain beliefs, desires, and fears that exist below our awareness point. In addition, contemporary cognitive science and neuroscience showed that a substantial part of our mental lives consists of unconscious information processing that not only are not conscious, but cannot ever become conscious. As Kihlstrom (1987) in his most influential article 'The Cognitive Unconscious' points out '…during perception the viewer may be aware of two objects in the external environment but not of the mental calculations performed to determine that one is closer or larger than the other. Although we have conscious access to the products of these mental processes…we have no conscious access to their operations.' (Kihlstrom, 1987, p. 1447).

In contemporary research on consciousness, philosophical as well as scientific, that immediate, intrinsic aspect of consciousness has been, in my opinion, rather ignored. Naturally, scientific method is necessarily observational, hence from the 3rd person perspective. However, consciousness is not your typical object of scientific inquiry. Consciousness is impossible to define objectively, without the subjective, 1st person grasp of the concepts that are regularly associated with it. Two of those concepts are intentionality and phenomenology.

The aim of this thesis is dual and, correspondingly, the thesis is divided in two parts. My primary intention is to argue for the Phenomenal Intentionality Thesis which can be best defined as 'the intentionality a mental state exhibits purely in virtue of its phenomenal character' (Kriegel, 2013, p. 2). This means that, in my opinion, the phenomenal or the what-it-is-like character of a mental state is what constitutes its intentional content. As Pitt compellingly points out: 'Phenomenality is the mark of the mental' (Pitt, forthcoming). In this part, I will provide arguments for the Phenomenal Intentionality Thesis from the aspect of Subjective, 1st person point of view of mental states.

Yet, it seems that fitting the unconscious into this hypothesis is utterly inconceivable. Most would argue that the only access we have to the unconscious is from the 3rd person perspective. After all isn't 'unconscious phenomenology' a contradiction? I argue it is not; hence my second intention is to defend the PI thesis against a crucial objection: if intentionality is phenomenal, how can there be genuinely intentional unconscious mental states? I will analyse the unconscious from this immediate, subjective aspect and provide an analysis of our unconscious states solely in phenomenal terms. The intention is to show that an unconscious perceptual state can be genuinely phenomenally intentional. If this is the case, then it entails, in my opinion, that phenomenology and consciousness are two distinct features of our mental lives and one does not necessitate the other. And if there is unconscious perceptual phenomenology, I see no *prima facie* problem for unconscious phenomenal thought.

I intend to demonstrate the truth of Phenomenal Intentionality Thesis by introducing, in the first chapter, the notion of Genuine Intentionality. Although the term itself has been in use for quite some time in various definitions, I argue that the only Genuine Intentionality is that of the intrinsic, underived sort. Any derived forms of intentionality or ascriptions of intentionality are simply not genuinely intentional. The subject of ascriptions does not enjoy

the intentional state subjectively, since for a state to be Subjectively Intentional I have to have immediate viewpoint on it. I argue that for a state to be Genuinely Intentional it has to be Subjectively Intentional.

In the second chapter I argue that the only Genuine Intentionality is Phenomenal Intentionality. Since it was shown in the first chapter that Genuine Intentionality is Subjectively Intentional, meaning it is intentional for me, I believe that the intentional content of the state is phenomenally constituted: subjective states are essentially phenomenal. Thus, I argue that Subjective Intentionality is Phenomenally Intentional. Hence, Genuine Intentionality is essentially Phenomenal Intentionality. In this chapter I will narrow Phenomenal Intentionality to Cognitive Phenomenology of thought in particular. I will provide a short overview of the arguments for Cognitive Phenomenology and, afterwards, provide my own argument from the subjective, 1st person viewpoint.

In the third chapter I turn my focus on unconscious thought in particular by presenting the empirical data for genuinely intentional unconscious perceptual states. I will argue, in chapters three and four, based on interpretations of the empirical data, that unconscious states can be, firstly, Subjectively Intentional, meaning that they are intentional for me, and secondly, Phenomenally Intentional, meaning that they can have intentional character which is constituted by phenomenology. If both of this is true, then unconscious states are Genuinely Intentional, since the entailment made in the first part of the thesis holds that for a mental state to be Genuinely Intentional it has to be Subjectively and Phenomenally Intentional. And if it is conceivable or even more, scientifically evident, that there is unconscious perceptual phenomenology, then I see no problem in inferring from that to the unconscious phenomenology of a thought.

Part I: Intentionality

1. Intentionality

Multiple explanations are suggested in contemporary philosophy in order to give a satisfactory account of what intentionality consists of, however they all come down to a fundamental proposition that intentionality is, primarily, being directed at, being about or being of something. All things considered, this is a rather broad description of intentionality. On these grounds even books, photographs, puddles of water that reflect the scenery or our Facebook statuses are intentional; after all they are about something.

However, what I am interested in particular is intentionality of mental states or, more precisely, intentionality as a property of mental states and events that has the essential feature of being directed, being about something. When we examine our mental lives it is intuitively evident that most of our mental states are about something, e.g. a belief that the river Danube runs under the Margaret Bridge, or a mental state which represents the visual experience of a cup of coffee on the table in front of me. Moreover, what I am interested in is the question what constitutes intentionality and can it be attributed to unconscious mental states. For example, my visual experience of the cup of coffee on the table in front of me consists of the perceptual visual input about the cup's properties: its colour, shape as well as the cup's position in the overall visual representation of my experience. But my visual experience also contains perceptual inputs about the cup's spatial relations to the other objects in my visual field, the distance of the cup from my hand etc., which are thoroughly unconscious states.

To begin with, I will first give an account of what I think intentionality consists in. It is important to note that intentionality is a property of mental *states*, not mental *acts* (Searle, 1983); meaning that the subject acting on those states is not necessary for a state to be intentional. In this instance we are rather talking about intention (directedness to act upon

some underlying belief or desire). Therefore, I distinguish a wider notion of intentionality, or what one intends to do, which presupposes some form of action; from a narrower notion that rests on Brentano's definition of intentionality that can be best illustrated by a quotation from Brentano himself:

> 'Every mental phenomenon is characterized by what the Scholastics of the Middle Ages called the intentional (or mental) inexistence of an object, and what we might call, though not wholly unambiguously, reference to a content, direction toward an object (which is not to be understood here as meaning a thing), or immanent objectivity. Every mental phenomenon includes something as object within itself...' (Brentano, 1973, p. 88).

As I read Brentano, intentionality is directedness towards some content in a psychological or mental act. Therefore, while this directedness of *a subject* X towards a state Y is a necessary condition of intentionality[1], this relation merely consists in the directedness *to* the object of intention in some degree, not action *upon* the directedness to the object of intention.

Considering that the objects of my interest are mental states, a question immediately arises: is there a difference between the intentionality of my mental state while reading a book and that of my Facebook status stating 'I'm reading a book'? And, if there is, what constitutes that difference? Well, it is intuitively evident that there is and this intuition constitutes my first line of argument in giving a plausible account of intentionality. The difference between the two consists in the fact that I do not grant that those books, photographs and the like are *genuinely intentional*, unlike mental states and events. I will expand on genuine intentionality, but for now I believe it is sufficient to state what I mean by this term and why I do not grant its ascription to anything outside of the domain of mental life, whether it is perceptual states or cognitive states that embody intentionality.

[1] This subjective line of reasoning will be argued for subsequently. Nevertheless, it is important to note that there are multiple readings of Brentano; however I believe my point in this context is not controversial and can be accepted with plausibility.

1.1. Derived vs. underived intentionality

The majority of contemporary philosophers are consistent in insisting that some sort of difference has to be made between 'derived' and 'underived' forms of intentionality. For example, a logic proof is a formal illustration of an ordered sequence of statements. It represents arguments made of semantic structures, i.e. sentences, as mathematical objects without regard to their meanings. Those sentences are represented in a formal character with various symbols, e.g. P and Q. Proofs are syntactic in nature and involve only rules of inference between the statements. The rules of inference or behaviour of statements in a proof is, also, represented in a formal character, e.g. we symbolize the conditional with→. The main point is that none of these symbols have the meaning of the sentence in them intrinsically[2]. We, as a competent category of users of those symbols, agree that the symbols represent what they represent. If I write P → Q, you immediately know that I mean 'if P then Q' and if you know what P and Q stand for you know that, e.g. 'If the sun is up, it is morning'. The example illustrates that some things, like logic symbols, get their meaning and reference from other things, i.e. us as competent users. The symbols get their intentional character or aboutness in a derived manner. Those cases are events of *derived intentionality*.

On the contrary, *original or underived intentional* states and events get their meaning and reference *via* the object itself. They have the intentional content intrinsically. All of the illustrations above; i.e. books, logic proofs, Facebook statuses etc., are intentional in a derived manner. Hence, all of these cases are cases of 'ascriptions of intentionality', as they get their intentional character from bearers of original intentional states who ascribe this intentional

[2] One could question, as well, whether the sentences themselves have meaning intrinsically, but let us not complicate things further.

character to them. However, I argue that the only *Genuine Intentionality* (GI) is that of the intrinsic, underived source. Any form of derived intentionality is simply not GI[3].

I argue that there is no derived intentionality whatsoever, only the intrinsic, underived kind, and that we should simply stop our deliberations in this dualist manner when discussing intentionality. Having that in mind, I believe there is an important condition for genuinely ascribing intentionality to an agent. I argue that for an intentional state to be mine in a genuine sense I have to have an immediate, 1st person perspective on it. Any kind of intentionality that depends upon assertions from a 3rd person perspective is simply not genuine intentionality. These types of events either fall under derived intentionality thesis[4] or are events of external ascription of intentionality in a behaviouristic manner[5]. In order to argue for this genuine intentionality thesis, let me first make my case stronger by considering some proposals for derived intentionality more closely while questioning their efficacy.

Dennett's Intentional Systems Theory (IST) (Dennett, 1971) denies original intentionality altogether while asserting that everything is intentional in virtue of a subject assigning an intentional character to a state or event. An objection was put forward against him as well as against all the cases of formerly labelled dualism of derived/underived intentionality; namely that deriving intentionality necessarily ends up in infinite regress (Dennett, 1987). Dennett's solution is that we cannot negate the regress but simply stop it by dividing the 'intentional

[3] Searle (1984), for example, is a proponent of intrinsic intentionality; however he holds that both kinds, intrinsic and derived, are modes of ascriptions of intentionality when asserted to a particular subject. Simply the 'status of the ascription is different' (Searle, 1984, p.3). Intrinsic intentionality means that 'the states and events (that) really exist in the minds/brains of agents' (p.4) and the ascriptions of intentionality are 'literal'. Literal, on his proposal, entails the existence of some phenomena that satisfies the intentional state. Derived intentionality can be ascribed in 'literal sense', e.g. the semantic meaning of a sentence of a language, however they can also be ascribed in a 'metaphorical sense', e.g. ascribing meaning to the representation of time in my wrist watch. Metaphorical ascriptions, opposite to literal, are not genuinely intentional, even though they 'may depend on some intrinsic intentionality' (p.4). However, I do not believe there is derived intentionality. Any kinds of ascriptions are simply perspective dependent, hence are grounded in intrinsic intentionality. Dennett (1998), on the other hand, denies intentionality altogether. The 'intentional stance' of a subject is merely a behaviouristic predictor. Regardless of my disagreement with Dennett, I do respect the fact of not taking the middle road. Either there is intentionality and it is wholly intrinsic or there isn't.

[4] See Kriegel, 2011; Searle, 1991; Smithies, 2012; Strawson, 2008

[5] See Dennett, 1991; 1998.

system' into its constitutive subsystems that are slightly less intelligent, hence intentional, and continuously repeat the process until we reach the level of individual neurons.

The end result is a 'finite regress' that denies that such a property as original intentionality actually exists, while, at the same time, has as an additional fitting consequence naturalization of intentionality. All intentionality is, in this process, derived; hence, there is no mystery involved in giving a naturalistic definition of an intrinsic property, since nothing has intentionality intrinsically. Every intentional state gets its intentional character by ascription in a behaviouristic predicting sense; the way the system has intentional states is grounded in the way the observer views it as being such-and-such.

Nevertheless, I do not think this proposal presents a solution to the problem; we still do not have an ontological explanation of what exactly intentionality consists in. Note those individual neurons, where the subdivision of the system ends, lack intentionality; even though they do give rise to it at upper levels (Dennett, 1987). Yet, how is it possible that neurons give rise to intentionality if there is no property of intentionality in individual neurons? Either intentionality is a physical property on neural level or it is some sort of an emergent mental property at the higher levels. However, a single neuron or a cluster of neurons do not exhibit intentionality as a property. A neuron is not intentional toward a cup of coffee on the table in front of me. Intentionality cannot be found in the constitutive units of the physical system.

We can't make recourse to dispositions in our attempt to answer this question either, since dispositions cannot be intentional as Strawson (2008) points out. Strawson notes '…a disposition…is just not the kind of thing that can possibly be contentful in the way that it needs to be if it is to be an intentional thing – even if it can be identified as the particular disposition it is only by reference to the proposition (the content)…, which is itself an (abstract) intentional entity.' (Strawson, 2008). Simply stated, dispositions do not have

content and to consider a disposition as contentful is similar to considering 'that if an object has a fragile disposition then it already in some sense involves or contains actual breaking.' (Strawson, 2008). In the context of neurons, that would mean that a single neuron or a cluster of neurons (why that particular complex of neurons?) has a disposition to be intentional towards a cup of coffee in front of me. Or towards the blue sky outside my window or towards the article I am reading currently, or towards the noise outside my door, or towards etc. (the picture is painted).[6]

Kriegel (2011), on the other hand, adopts a somewhat similar proposal to Dennett's. He applies it exclusively to unconscious states, so I will examine it next in order to eliminate ascriptions of intentional character to unconscious states right from the start. The difference from Dennett is that Kriegel maintains, following Loar (2003), the actuality of original intentionality, however it is reserved for conscious phenomenal states from which phenomenally unconscious states derive their intentional character (Kriegel, 2011).

Kriegel follows Dennett's 'interpretivism' which appeals to the so called 'web of intentional concepts' which we employ in order to produce the best possible explanations of behaviours of other 'intentional systems'. The idea is that the 'intentional stance' of the interpreter, comprised of this 'web of intentional concepts', ascribes content based on the subject's behaviour. However, this suggests that every intentional state derives its content from some other intentional state; hence infinite regress, an already familiar outcome of Dennett's theory.

Kriegel, to avoid this outcome, posits a class of 'privileged intentional states', that is, he aims to preserve original intentionality. These 'privileged intentional states', correspondingly,

[6] My aim is not to argue that intentionality is not a physical property, but rather that it cannot be explained functionally. I leave open the source of intentionality within the physical system, hence the possibility of intentionality being a sort of an emergent property or some other kind.

are conscious intentional states that are phenomenally constituted[7]. What gives an unconscious intentional state the content it has is conscious intentionality, that is, the unconscious state is consciously interpreted in some manner, so without conscious cognitive intentionality there would be no unconscious intentionality. In other words, infinite regress ends in conscious intentional acts of interpretation which have their content underivatively or 'for any unconscious intentional state, there is some possible ideal interpreter who, under some conditions, produces an intentional interpretation of that state, and moreover does so consciously.' (Kriegel, 2011, p.84).

However, as Pitt (forthcoming) points out, the problem is that a state can have many, if not an infinite number of interpretations, meaning just 'as many intentional contents'. Similarly and somewhat interconnected, this proposal, in my opinion, invokes the notion of an ideal interpreter and indeterminacy: there is no stable interpretation and no limit to the variety of contents that the interpreter can yield. Kriegel addresses this point, though he states that 'this kind of content indeterminacy should be extremely infrequent, and to that extent harmless' (Kriegel, 2011, p. 88). Kriegel expects that in 'standard cases' there is only one best interpretation, and the ideal interpreter should recognize it. However, I want to lay emphasis on the fact that there still is room for margin of error, while in the case of original intentionality; one cannot be erroneous as how something appears is how something is[8].

Pitt (forthcoming) points out, in addition, the fact that the interpretation does not, in any manner whatsoever, change 'the intrinsic nature of the interpreted state.' Kriegel does not, by any means, disguise this fact as he states that, when examining unconscious states, a state x

[7] Hereinafter I argue that the intentional content is the phenomenal content, however I will come to terms with this claim in the next chapter. For now it is simply sufficient to introduce it, although my conclusion is rather different from the one that Kriegel defends.

[8] This point is due to Pitt's talk 'Phenomenal Sorties and Unconscious Qualia' at Hungarian Academy of Science, though on a somewhat different issue. However, note that this does not imply that one is erroneous or possess 'infallible knowledge about what one's first-order intentional states are' (Horgan & Tienson, 2002, p. 528). As Horgan & Tienson point out further 'Beliefs about one's own intentional states are second-order intentional states...' and '...such beliefs are sometimes mistaken.' (2002, p. 528).

has content C because the interpreter *assigns* to the state x the content C (Kriegel, 2011). However, the 3rd person perspective on an intentional state does not reveal anything of its nature. For example, a neuroscientist examining the neural activity underlying the mental state I am presently tokening, my desire to drink coffee, does not reveal anything of the nature of the intentional state I am in. Similarly, interpretations of intentional states, regardless whether they are of derived or of underived nature, do not reveal anything of the state in question, hence these interpretations do not answer the question of the nature of intentionality.

Any framework of ascription of intentional states, whether it is in Searle's or Kriegel's terms, is, I hold, equally extrinsic as Dennett's proposal; it presupposes interpretation, meaning that the derived intentional state gets its intentionality externally in the form of ascriptions from the intrinsic intentional state of a genuinely intentional agent. The only genuine intentionality is that of the intrinsic kind and any form of derivation is simply not adequate to capture the intentional character of the state.

Hence, my first conclusion is that:

(GI): *The only Genuine Intentionality is that of the underived, intrinsic kind.*

1.2. Subjective Intentionality

Strawson (2008), distinguishes intentionality from aboutness, unlike most contemporary philosophers; on the contrary, they use the latter concept as a descriptive, theoretical definition of the former one. He maintains that 'having intentionality entails having aboutness' however not *vice versa;* 'having aboutness does not entail having intentionality' and I tend to agree[9]. This makes aboutness a necessary but far from sufficient condition for a state to be regarded as intentional.

Certainly, books have aboutness, as they are about something; however what they lack, in my opinion, is the part, and a rather important part, of aboutness in a subjective manner. Consider a book about St. Stephen Basilica in Budapest. The book is not intentional towards the Basilica, it is passive and does not apprehend the Basilica subjectively as an object of its intention (the Basilica is not an object of intention *for* the book), nor can develop the possibility to apprehend the content about the Basilica attentively or introspectively be aware of the Basilica, unlike mental states and events[10]. The subject of the book is the Basilica; however the book is not observationally, especially not introspectively in the 1st person, aware of its content. Its intentionality is actualized in 'ascription' of it from a third person perspective on the grounds of its aboutness from us as agents, who are able to grasp and

[9] Strawson makes this distinction in order to eliminate the so-called UNA^{NE} or 'underived aboutness in a non-experiential entity'. He ties intentionality closely to conscious experience, stating that only a conscious mental state with phenomenal character is intentional. On his account only conscious beings are intentional; similarly an unconscious state can be intentional only in relation to a conscious state (Strawson, 1994). While I agree with the phenomenal proposition and the fact that only conscious beings are intentional, I disagree with his characterization of the unconscious, but both of these points will be dealt with in due course.

[10] This implies a significant consequence that mental occurrences which are purely passive, e.g. neural state underlying a reflex bodily movement, are not intentional, which I maintain. However, note that it is not necessary that an agent acts on the states. It is simply sufficient that an agent subjectively, in whatsoever degree, experiences them. Similarly, unconscious mental states could be considered intentional if an agent, again regardless of the degree, responds to the content of the states in question, implying that the agent has subjective involvement in the content of the state. However, the ramifications of this proposition for the status of unconscious thoughts will be worked out subsequently.

entertain objects and events in the world in the 1st person perspective, meaning able of genuine intentionality.

I propose that we take into consideration the (un)necessity of aboutness for intentionality. In order to simplify terms further, I adopt the feature of Subjective Intentionality (SI), where by subjective I imply that the subject can immediately, from the 1st person perspective experience the object in some degree. By 3rd person perspective I mean that the subject does not have an immediate involvement in the object of intention nor the intentional state, but rather the intentional state is ascribed to the subject based on behaviouristic interpretations. However, only the SI kind is the source of intentionality, as SI, on this proposed account, implies the necessity, of either a stronger form of experience of the object of intention through awareness or a weaker form of experience of the object of intention, not necessarily through awareness[11], and books, photographs and similar do not fall under this category. A book or a photograph derives its intentionality from a subject that aims the camera or writes the book, a subject that has intentionality in an intrinsic form or simply, in my terms, SI (Strawson, 2008). Hence, the books fly out the window.

To return to Strawson's (2008) line of thought, some of these objects, i.e. a puddle that reflects the Basilica, necessarily involve an observer who experiences the effect 'as giving rise to a representation.' This is not to say that the image of the Basilica is not in the puddle, but rather that, even though the puddle carries information about the Basilica, there is no intrinsic representational character in the puddle itself. There is no SI in the puddle but only 3rd person perspective intentionality which is ascribed to it on the basis of an observer seeing the puddle from a particular angle (among other conditions that need to be in place as well), since as Strawson points out 'there are infinitely many ways of looking at the puddle that do not render the image of the (Basilica)' (Strawson, 2008, p.286). These cases do not involve

[11] This point will be further addressed in the second part of the thesis.

SI; hence they are not genuinely intentionality. My wrist watch shows time in standard measurement of hours, minutes and seconds. However, that measurement is not internally meaningful to my wrist watch; its meaning is ascribed to it by means of social standards by the community of users, similar to the example of the logic proof in chapter 1.1. Therefore, books and photographs, while being representations on their own, regardless of whether or not a conscious observer presently perceives them, are still not subjectively directed towards their object of intention. They do not have any introspective awareness or experiential apprehension of the object, thus are cases of derived intentionality, not genuine intentionality.

An underived, intrinsic kind of intentionality presupposes introspective, 1st person phenomenology either of the occurring tokening experience or introspective, 1st person phenomenology in the change of the overall experiential mode without the phenomenology of the tokening occurring experience. By this I do not imply, following Dretske, that a state has to be an object of higher-order state[12] in order for it to be intentional or even conscious. The subject can have the knowledge or awareness of a certain mental state without knowing that he is aware of it or, to put it differently, one can be aware of the content of the state without being aware of it (Dretske, 1993). Hence, a subject can have conscious phenomenology of a state without being conscious that he is experiencing it. In other words, I distinguish phenomenology and consciousness as well, a point that comes up in the second part of this thesis.

[12] A higher-order theory of mind posits a kind of a higher-order representation of the occurring state, meaning that, for example, a thought 'Today is sunny' is a subject to some functional reductionist explanation of its content. Conveyed to unconscious thought, the proposal would be that the phenomenally (un)conscious state is a first-order state that has its intentional content in the conscious second-order state that represents the content to the subject in the 1st person perspective. There are states that can function in this manner, in my opinion; e.g. certain beliefs. However, I see no necessity to put the higher-order theory as a prerequisite in order for a state to be genuinely intentional.

What does this proposal come down to? What is the necessary condition for a state to be genuinely intentional under this thesis? Simply, that *I* experience it. My second conclusion is the first premise of the argument as follows:

(SI): *The only genuine intentionality (GI) is subjectively constituted (SI).*

2. Phenomenal Intentionality

I concluded the previous chapter with a notion of SI: what is necessary for a state to be GI is that *I* experience it. However, the same can be read as what is necessary for a state to be GI is that I *experience* it. In other words, intentional mental states are experiential or phenomenally constituted. This is precisely what Phenomenal Intentionality thesis (PI) is. In this chapter I am going to argue for the idea that the fundamental kind of intentionality is phenomenal and all other intentional kinds are based on it.

The PI thesis underwent a boost in popularity in the late 90s after a long period of opposite trends in contemporary philosophy (Mendelovici & Bourget, 2014). Essentially, following Kriegel's terminology (2011, 2013), we can distinguish two competing research programs[13]: the 'Naturalist Externalist Research Program (NERP)' that seeks to naturalize intentionality in a kind of tracking relation (mostly causal or teleological) between the internal mental states and external states of affairs in the world; and 'Phenomenal Intentionality Research Program (PIRP)', a proposal that the phenomenal or experiential is what constitutes intentional content and that sort of intentionality cannot be reduced to tracking relations to external objects.

The main disagreement is in the question of the source of intentionality[14]. While 'PIRP' tracks the source of intentionality within the phenomenal character of the state, 'NERP', on the other hand, characterizes intentionality entirely in terms of relations external to the state

[13] Kriegel (2011) argues that the programs need not be regarded as competing, but rather as complementary. According to him, there are means by which we can construct a unified theory of intentionality that is founded in both of these frameworks while still keeping them separated. The proposal is either a theory that there is primarily phenomenal intentionality and other kinds of intentionality are grounded in it, or a theory that incorporates elements of both theories. However, as the only intentionality that I consider genuine is the phenomenal kind, the complementary account, according to my proposal, could only be reduction of other kinds to phenomenal intentionality. According to Kriegel's suggestion, in this sense, derived intentionality cannot have a claim on the term intentionality. We should simply hold the tracking relations to external objects as a distinct, although interdependent project in research of intentionality. Thus, naturalizing intentionality can only be done by naturalizing phenomenal intentionality or 'NPIRP' as Kriegel calls it (Kriegel, 2013).

[14] See Kriegel 2013 for an extensive and comprehensive overview of the central claims of both of the programs and major differences between them.

itself (Kriegel, 2013; Mendelovici & Bourget, 2014). This question of source was partially answered in the previous chapter. I characterized the underived, intrinsic kind of intentionality as the only genuine kind. In addition, I argued for the 1st person perspective or SI on the basis that it is necessary that I experience the state. Nonetheless, I will now discuss the experiential or phenomenal proposition of the proposed account.

To begin with, I characterize phenomenal by Nagel's what-it-is-likeness (Nagel, 1974); there is something it is like to smell a red rose, thus there is a what-it-is-like character in the sensory perceptual experience; and there is something it is like to entertain a proposition 'Roses are red', thus there is a what-it-is-like character of my cognitive experience. And it is precisely that what-it-is-like character of experience, the what-it-is-like for *me* to be in a particular mental state, which constitutes the phenomenal content of my intentional state (Block, 2002).

Although I find this suggestion quite intuitive and uncontroversial, the reality is that most philosophers do not. Let me illustrate with an example what features exactly embody the phenomenal character of an experience and, by doing so, make the intuition clearer. Suppose I hallucinate an alien peeking through my window. Naturally, there is no alien outside my window so the states of affairs which the hallucination represents do not obtain, hence the truth-value of my thought or utterance "An alien is peeking through my window" is false. However, does my hallucination still realize some cognitive-experiential content? The hallucination seems quite real to *me*. The object of my intention is making funny faces (and his face is blue, mind you), knocking on the window glass, shouting in an unfamiliar and strange language, and all of this is making me feel uneasy and scared. In addition, it makes me want to get away from the window. Therefore, I have an experiential and behavioural involvement in the occurring event. However, the event is not real; it is all in my head. Does that external fact affect my mental state? I believe it does not.

That being the case, thinking of intentionality simply in NERP-ish terms is not sufficient to account for the full mental event, as the phenomenal is part of it. Nor is it sufficient to account for the content of the mental state, as the object of my experience need not exist, as in the case of the alien. Correspondingly, the object of my mental state can be Phosphorus or the morning star, however not Hesperus or the evening star, even though Phosphorus is Hesperus. The phenomenal character of my experience is not the same while I entertain a thought about Phosphorus and while I entertain a thought about Hesperus, even though the object of reference is the same. In other words, intentional mental states are constituted precisely in the phenomenal character or the occurring what-it-is-like experience. There is an identity relation between phenomenal and intentional contents; the phenomenal is what comprises the intentional[15]. Let me, first and foremost, argue for this philosophical blasphemy.

[15] Weaker claims can be made. However I believe there is no genuinely intentional content if there is no phenomenal content, not accompanying it, but constituting it. To put it differently, we do not distinguish the intentional content without the phenomenal character.

2.1. Cognitive phenomenology

The PI thesis holds equally for sensory perceptual phenomenology and cognitive conceptual phenomenology. Although sensory phenomenology sometimes can be, and usually is, the subject of conceptual activity,[16] I find it necessary to distinguish these two, as my primary object of interest is the unconscious thought[17]. Thus, following Siewert, I define "sensory features" as "those features whose possession is found in the activity of various standardly recognized perceptual modalities (vision, hearing, etc.) along with bodily feelings of pain and pleasure, cold and warmth, and kindred sensations, together with whatever analogs of these there might be in imagery (visualization, hearing words or music 'in one's head', etc.)." (Siewert, 2011, p.237). Secondly, I define cognitive conceptual phenomenology as "such cognitive activity we enjoy that is (or can be) expressed in language, and requires capacities for voluntarily making inferences, classifications, and analogies." (Siewert, 2011, p.237). Cognitive phenomenology is primarily manifested in our conscious deliberations, beliefs, desires or, simply putted, thoughts.

A perceptual experience is necessarily intentional: it is about something. Furthermore, in our introspection, we recognize intuitively that the phenomenology of perceptual experiences is inseparable from its intentional content. If intentional content just is phenomenal content, as I argue, then perceptual states are necessarily phenomenal. Denying the what-it-is-like character of a perceptual state seems deeply counterintuitive; after all, seeing a red rose is quite different experientially from seeing an alien. As Montague puts it:

[16] Indeed, even a stronger claim can be made: that sensory phenomenology and cognitive phenomenology are so intertwined that they cannot be precisely separated in an occurring experience. Although I do not see solid theoretical reasons to accept this claim, the fact is that it remains, at best, very difficult to completely divide the two. Even if one, for example, directs all of his attention to the redness of the rose in front of him, it remains questionable whether he can, by doing so, preclude all conceptual or emotional deliberations on the qualitative experience of seeing the redness of a rose.

[17] This does not imply that I am not interested in unconscious sensory qualia. In the second part of this thesis I argue for unconscious perceptual phenomenology and from that I infer to the existence of unconscious cognitive phenomenology.

> '...the content of a perceptual experience is whatever is given to one in having a particular perceptual experience. It is whatever is given to consciousness, however this is further characterized. Since I take the phenomenological character of the experiences to be part of what is given in the experience, it is part of the content of experience...' (Montague, 2009, p. 5).

Sensory phenomenology is not the only phenomenology that occurs in our stream of consciousness. As Block clarifies:

> 'P(henomenal)-conscious properties are experiential properties. P(henomenal)-conscious states are experiential states; that is, a state is P(henomenal)-conscious just in case it has experiential properties. The totality of the experiential properties of a state are "what it is like" to have it. Moving from synonyms to examples, we have P(henomenal)-conscious states when we see, hear, smell, taste and have pains. P(henomenal)-conscious properties include the experiential properties of sensations, feelings and perceptions, but I would also include thoughts, wants and emotions' (Block, 2002, p. 206-207).

For example, imagine hearing somebody addressing you, saying to you that your appointment begins in 5 minutes and that you should hurry up if you do not want to be late. Is it only the auditory experience of the sequence of sounds that makes the content of your experience of that event? No, the phenomenology involves an understanding experience that the person is addressing you in particular; an understanding experience of the context, that you have an appointment, which appointment is it, that the time of it is such-and-such etc. That understanding experience is precisely what cognitive phenomenology is. There is something it is like to entertain all of these thought consciously. In other words, conscious thoughts have phenomenal character[18]. It is not the accompanying sensory phenomenology that makes a cognitive content phenomenal, but rather the content itself is what has phenomenal character independent of the cognitive imagery or sensory inputs, or of the 'vehicle' that introduces the content (Block, 2002; Dretske, 1995). The intentional content just is the phenomenal content. However, some arguments are due.

[18] Pitt (2004) argues that this phenomenology is proprietary (different from other conscious states), distinctive (every thought type has its own distinct phenomenology that is different from other thought types) and individuated (it constitutes content). This three features of thought imply, in my opinion, that the content is determinate and, even more, determinate through phenomenology.

There are multiple lines of reasoning introduced for PI, however I will review two arguments: Strawson's (1994) 'Understanding Argument'[19] and Siewert's (2011) 'Interpretive Switch Argument'. Then I will offer my own argument from the 1st person perspective that rests on Searle's proposal, although with differences.[20] I do hold more arguments should be introduced, however as space does not permit expanding further, I will attempt to make my case based on these three.

Strawson (2004) introduces the 'Understanding Argument' by an example of a francophone and a non-francophone speaker who are listening to the same stream of words being broadcast on the news. The argument proceeds, by contrasting the experiences of the two listeners, in the manner of a so called 'intuition pump' (Dennett, 1991),. For example, the sentence 'Aujourd'hui est une journée ensoleillée' is a sequence of sounds in French and the auditory perception is the same for person A and person B. However, there is phenomenological difference for them as person A speaks French, while the person B does not. Person A has an 'understanding experience'[21] as Strawson calls it. That 'understanding experience' is experience, in this case an involuntary one, of understanding of propositional content.

Pitt (2004) illustrates a similar point, although more graphic, in the form of multiply center-embedded sentences, e.g.

→ 'The boy the man the girl saw chased fled'

This sentence seems meaningless at first reading; however when one finds out that the meaning is,

[19] Strawson's 'Understanding Argument' is rather an upgraded extension of Moore's intuitions.
[20] Searle mentions the 1st person perspective pervasively throughout his work (Searle, 1983; 1984; 1987; 1991) however he never formulates an actual argument from it.
[21] Pitt (2004) calls the understanding experience of a propositional content 'what is it like to think that P' experience.

→ 'The boy, who was chased by the man that the girl saw, fled'

one's phenomenal experience of the sentence ought to change, as understanding changed.

The point is that there is something it is like to read or hear these sentences with understanding and something it is like to read and hear them without.[22] And the differences in our understanding are introspectively, 'subjectively discernible to us' meaning that 'not only can we judge with warrant, in a distinctively first-person way, how things look, feel, and smell to us, it is also subjectively discernible to us how we're thinking or understanding from one time to the next.' (Siewert, 2011, p. 248).

A similar argument was presented by Siewert (2011): the 'Interpretive Switch' argument. The argument examines the change in understanding from one meaning to another. It is basically, a case of ambiguous words which have different meanings assigned to them. For example, my colleague, in-between classes in the student lounge approaches me and says: "Don't lie.", and I respond: "OK, what do you mean, what did I lie about?" He laughs and clears up the situation: "No, crazy, I meant don't lie on the sofa, give me some room." We both laugh and I scoot over.

Consider one more example, the one from Siewert (2011). Two persons are having a conversation:

A: "I'm so hot."

B: "Well, okay, but you don't have to brag about it."

[22] Note that imagery is not necessarily part of the understanding experience; one does not need to have an accompanying visual image. A good analogy would be to compare a visual experience of a rose that immediately triggers the olfactory experience. Those are two quite different sensory experiences. Similar is with thought: one can think about the river Danube with accompanying visual imagery; however the thought and the visual imagery are two distinct phenomenal features.

Indeed, much humour rests on a sort of interpretive switch that requires some contextual background knowledge. However, note that the difference between meanings is not of sensory, perceptual origin: the sequence of sounds, hence the auditory experience, remains the same. The difference consists in the occurring conceptual understanding of the change of meaning. And I want to draw attention to the change of phenomenology in that understanding, the what-it-is-like aspect of those two understandings. Are they different? Certainly, and it is exactly the switch in phenomenology that triggers the switch of the intentional content, hence the switch of meaning between the utterances. Had it not been for the change of phenomenology, I would not be aware of the switch. In addition, you are introspectively and immediately aware of the change in the switch. You possess intrinsic subjective knowledge of the two discerned meanings of the words and a switch in understanding between them.

This is precisely what my argument rests on. In the first chapter, I argued that the only GI is SI: intentionality necessarily from the 1st person perspective, immediate and introspective. One has to experience the change in intentional character subjectively, and experience either of the object of intention or the change in the overall phenomenal character. And subjective states are necessarily phenomenal. In addition, SI is immediate and introspective; hence the change of the phenomenology is what points to a change of intentional content.

As a result, we are left with the conclusion that only beings which are capable of subjective acquaintance with the object of their intention or the change in their overall phenomenal character of their occurring mental state are genuinely intentional. Does this imply that only conscious beings are genuinely intentionality? I believe it does. Consider the consequences: do animals, robots, our Twin Earth twins and Swamp twins have GI? I believe that animals are GI as, for example, they experience pain, e.g. when your dog eats your slippers, as dogs are prone to do, he gets a stomach ache. However, that pain experience is

available to us only by examining the animal's behaviour, as animals lack the ability of expressing their experiences[23].

Can we grant that a robot, for the purpose of example named HAL, whose only intention is to separate the plastic from the glass bottles for recycling, has the same subjective intentionality as I do? His intentionality comes from his programming, and in that sense, he is no different than a photograph. I direct the camera and I program HAL. Suppose HAL learns to separate the tin cans at some point. Would that make a difference? No, it would not, as I programmed HAL with the learning algorithm. Or, even more to the point, does HAL have the subjective what-is-it-like experience of his programing? If he does, only than can HAL be said to be GI. What about a Swamp twin of mine or a brain-in-vat? The same supposition holds, if there is a specific what-it-is-like experience, a subjective phenomenology that is immediate and introspective, then these are cases of GI beings[24].

What does intentionality consist of? Simply, the experiential. All intentionality is subjective intentionality and all subjective states are essentially phenomenal. In that sense disregarding the phenomenal is disregarding the question why a certain mental state has the specific content it does and not one of a different sort (Horgan & Tienson, 2002). Both intentionality and consciousness are essentially experiential then phenomenology marks the two. Thus, we come to my third conclusion:

(PI) *Genuine intentionality is constitutively determined by phenomenology; it is Phenomenal Intentionality.*

[23] Nagel (1976) argued that something is conscious if there is a specific what-it-is-like to be that subject, i.e. there is something what-it-is-like to be a bat for the bat. Since we can never know what is it like to be a bat from the bat's perspective we can never be certain if they have GI. It is a valid point, although I believe we can with high accuracy, even though not infallible, infer to the animal consciousness based on their behaviour which are governed with certain beliefs and desires. However, I will not go further into this, as it is a separate topic.

[24] See Horgan (2011) for a discussion of some of the examples.

Part II: Unconscious Thought

3. Empirical evidence for unconscious phenomenology

The idea of unconscious perception or subliminal perception (SP)[25], which occurs without conscious awareness, is a well-documented phenomenon with considerable empirical backing in contemporary cognitive science and experimental psychology. SP can be best characterized as case of 'people (who) notice and describe the salient features of an object or event, even if they cannot articulate the way in which those features have been integrated to form certain judgments made about it' (Kihlstrom, 1987, p. 1447).

Nevertheless, note that SP is not a sort of 'degraded conscious processing', as unconscious and conscious processes have qualitatively different results (Merikle & Daneman, 1998). If SP was a weaker form of conscious processing, then the results would differ in quantitative measure, not qualitative. For example, in the Jacoby & Whitehouse illusion (1989), which I am going to examine next, the unconsciously perceived stimuli affected the test subjects in a manner that produced opposite results from test subjects that straightforwardly consciously perceived the stimuli. To make this point clearer, I am going to present full-fledged, qualitatively different cases of SP that have further consequences on the subject's behaviour and that affect further conscious processing.

In addition, I propose a theoretical explanation of SP in terms of phenomenology. In other words, I argue that instances of recognition of SP stimuli are based in phenomenology. I disagree with Ramsoy & Overgaard in asserting that SP is a sort of 'residual

[25] I prefer to use the term subliminal over unconscious perception. SP perception is usually defined in connection with the term threshold, which is, again, tied closely to the concept of awareness. Namely, below threshold stimuli are those below awareness point, as the subject cannot report them, hence *subliminal*. Above threshold stimuli are reportable, meaning the subject is aware of them, hence *supraliminal*.

phenomenology'[26]. The term stands for cases in which there is indication that the subject's do have some awareness of the stimuli presented as a consequence of residual brain functions, despite the lesions in the relevant brain area (Ramsoy & Overgaard, 2004). However, there are numerous studies that show opposite results[27]. Note that by unconscious perceptual process I have in mind a mental representation that takes place below the awareness threshold and cannot be reported by the subject, phenomenally or otherwise. If there is reportable awareness of the stimuli, then it is not a genuinely unconscious process. Correspondingly, if there are blindsight (or other SP) cases that do show residual awareness, then they are not actual cases of blindsight.

I am going to analyse the empirical data from a philosophical point of view and I will return to my previous claims of SI and PI, in order to argue that unconscious perceptual phenomenology is SI, hence GI.

[26] The term 'residual phenomenology' was coined by Ramsoy & Overgaard and is mainly connected with their analysis of blindsight cases. They do note (Ramsoy & Overgaard, 2004, fn.2) that the connection is not entirely clear and further research should be conducted.
[27] For example, see Weiskrantz (1996) for cases of blindsight in particular.

3.1. Jacoby & Whitehouse Illusion - Illusion of Memory by Unconscious Perception

The priming research paradigm is prevalent research paradigm in cognitive science experiments. Essentially, priming is an effect of influenced response by an immediately preceding subliminally perceived stimulus. In that sense, priming is a rather interesting research methodology for our case. To begin with this empirical exposition, I am going to present a case of masked priming in a word recognition experiment in order to show that there is SP and it is not residual CP (the subjects are genuinely unaware of the stimuli presented), that the unconsciously perceived stimuli are SI, though below awareness point, and that they can further affect the CP.

Jacoby and Whitehouse (1989) conducted two experiments which both consisted of three phases[28]. The experiments were conducted with two groups of participants: those aware of the context word[29] (presentation of the context word was longer, hence it was CP) and those unaware (presentation of the context word was shorter, hence it was SP) of the context word. In Phase 1 participants saw a list of words which they were instructed to memorize for a recognition test. Phase 2 was the recognition test which consisted of a sequence: visual mask[30], context word, visual mask, and recognition test word. Some context and recognition test words were a match (same word); some non-match (different words) and some were a string of letters (control words). In this phase the subjects were asked to guess whether the recognition test word appeared in Phase 1. Phase 3 was the second, 'straightforward recognition test' whose aim was to examine the subject's memory of match and non-match

[28] The experiments differed in conditions of presentation of the stimuli to the two test groups in order to eliminate any possibility of conscious processing influencing the test results.
[29] Context word is the source of priming in this experiment (even though Jacoby & Whitehouse later argue that the results are not effects of priming, but rather 'familiarity', that discussion is irrelevant for the purpose of this thesis). Its aim is to influence the response in the recognition test.
[30] Visual mask (in this study &&&&&&&) precedes and follows the context word in order to reduce visibility of it.

words from Phase 2. The unaware subjects were informed that a context word was presented in Phase 2, while the aware subjects were simply reminded. Both groups were asked to circle the word, given on a list on a sheet of paper, which appeared as a context word in Phase 2.

Jacoby and Whitehouse found that the unaware group was more likely to judge a recognition test item as "old" in the Phase 2 if it had been preceded by a matching context word, than if it had been preceded by a non-matching context word, unlike the aware group, which showed the opposite results. Aware subjects were less likely to judge the test items as "old" in matching conditions in comparison to the non-matching conditions. They explained this data by suggesting that the unaware group was more likely to ascribe familiarity to the recognition test word if it was preceded by a matching context word, hence was influenced by a SP(erceived) stimuli. Jacoby and Whitehouse argued in their article that "one can be certain that effects observed in a supposedly unaware condition were not actually due to subjects being aware of the presentation of an item without the experimenter's detecting that awareness" (Jacoby & Whitehouse, 1989, p. 126-127).

The subjects in the unaware group reported 'seeing a flash on the computer screen' when the context word was presented, but were unable to report the word flashed. The context word itself was SP. The unaware group which SP(erceived) the context word, unlike the aware group which was conscious of the context word, came to qualitatively different results in the testing phases of the experiment: namely, false recognition of a test word as 'old' is increased in the unaware group when it is preceded by a matching context word, while the aware group showed a decrease in attribution 'old' in these conditions.

Furthermore, SP produced qualitatively different *mental states* than CP. One can deny that these are indeed qualitative states, but not plausibly. They are qualitative unconscious mental states, not just neural correlates or information processing states, since they (i) have

interpretations assigned to them from the subject in SI manner (ii) have apparent further impact and consequences on the subject's behaviour and CP. In other words, since subjects assigned familiarity to CP(erceived) stimuli based on the SP(perceived) stimuli, i.e. interpreted them as familiar, on an unconscious level based on the influence of an unconsciously perceived stimuli, I believe it can be argued that the subjects unconsciously SI perceived the SP stimuli. They interpreted the SP stimuli as *familiar for them* after presentation and created an 'illusion of memory'. These interpretations affected further testing and subject's CP, namely attributing to the test words prior familiarity, meaning that not only conscious processes produce qualitative mental states. In addition, since the subjects perceived the stimuli in a SI manner, I argue that they perceived them in a PI manner, as well, since subjective intentionality is necessarily phenomenal. There is a what-it-is-like experience involved in attribution of familiarity to the stimuli, precisely the what-it-is-like *for me* to be acquainted with that specific word and interpret it as familiar.

3.2. Two Visual Streams Hypothesis

The two visual streams hypothesis was introduced by Milner & Goodale in their influential 1992 paper 'Separate Visual Pathways for Perception and Action'; however the discovery of the distinction between the two cortical pathways, i.e. ventral and dorsal, is due to Ungerleider and Mishkin's (1983). Their research on monkeys showed that the ventral stream is responsible for processing visual features of objects, while the dorsal stream is responsible for processing the spatial visual location of objects.

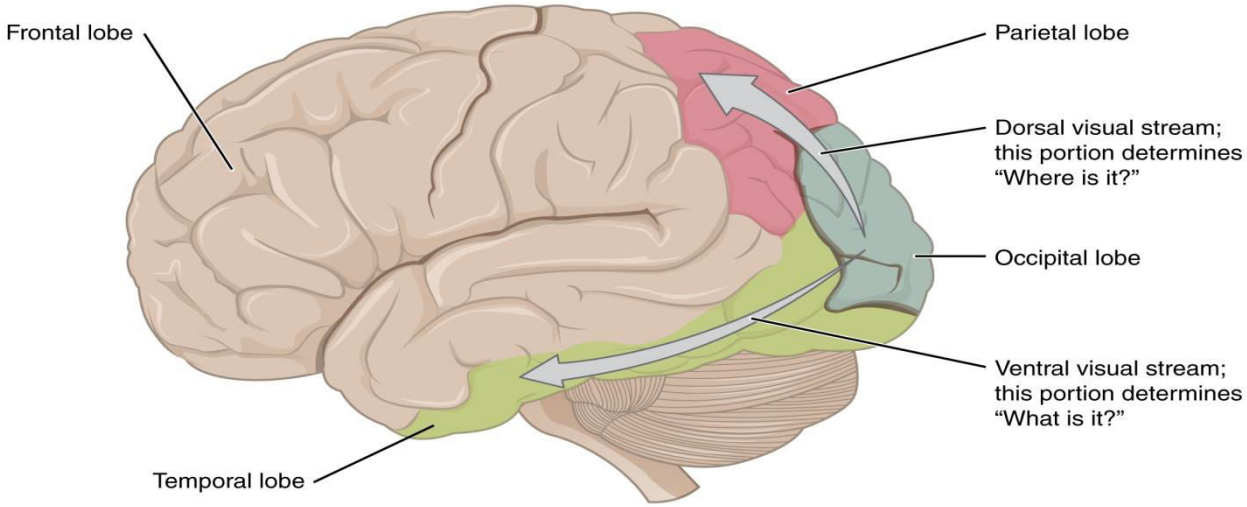

Fig. 1. The major routes of visual input into the dorsal and ventral streams. Taken from www.cnx.org

However, Milner & Goodale's (2008) two visual streams hypothesis proposed a somewhat different but highly endorsed model of the visual system. They distinguished two cortical pathways originating in V1 cortex in 'vision for perception', i.e. ventral stream, and 'vision for action', i.e. dorsal stream (see Fig. 1)[31]. The two streams receive the same information in input processing; however they split in output production or representation.

The ventral stream is in control of the overall perceptual representation in the visual field as well as object recognition, hence, in normal subjects, conscious visual phenomenology of the objects in the visual field. Perceptual representation is closely tied to intentionality and

[31] Milner & Goodale credit Weiskrantz's work on blindsight as an inspiration, which I will be analysing next.

phenomenology. There is a what-it-is-like experience associated with the representation of an object in ventral stream. We can attend to the object consciously from different perspectives and rationalize its appearance to us. There is something it is like *for me* to see a rabbit or to see a duck in the rabbit-duck illusion.

On the other hand, the dorsal stream is in control of our visual management of sensory-motor activities by calculating the location of the object with respect to the cognizer, as well as the 'absolute shape' of the object necessary for grasping activity. It is a sort of a coordinate system for visual inputs.

In their 2008 paper Milner & Goodale defined 'vision for perception' as 'conscious experience of seeing' that 'can be translated into a subjective report' (p.775). However, they extend the concept 'to include unconscious or preconscious perception…which refers to mental representations that potentially could reach conscious awareness' (p. 775). This suggests that there is no necessity that an object has to be consciously perceived in the ventral stream. Contrary to ventral stream, the dorsal stream processes are genuinely unconscious. As Brogaard (2010) emphasizes, their mode of operation is mechanical and effortless with respect to the cognizer and no amount of enhancement, e.g. attention, can be effective in making those processes conscious. I am unable to access from the 1st person perspective the calculations of the distance of my hand to the cup of coffee in front of me.

This systemic division of output production motivated Milner & Goodale to a conclusion that the dorsal stream does not influence perception, but rather that perception and action are separated processes in the visual system. They endorse the model of division in mental representations. Simply, 'we have two perceptual representations' (Nanay, 2014, p. 43). This hypothesis has been defended mostly by research on patients with lesions in one of the streams. It was shown that if one system malfunctions the other continues to function

properly regardless. For example, in patients with *optic ataxia*, i.e. malfunction of the dorsal stream resulting in a patient's inability to manipulate objects although he is able to recognize them, and *visual agnosia*, i.e. malfunction of the ventral stream resulting in a patient's ability to manipulate objects without being able to recognize them; it was shown that the malfunction of one stream does not affect the function of the other. This demonstrates that our visual system indeed consists of two distinct streams with distinct representations of a single token object. It also demonstrates, according to Milner & Goodale (2008), that '…the link between perception and action is an indirect and flexible one…' (p. 775). The ventral stream typically chooses the appropriate action, while the dorsal stream executes it independently (Milner & Goodale, 2008).

There is much debate in current research about whether activity in the dorsal stream can be genuinely regarded as unconscious vision[32]. For example, Brogaard (2011a) emphasizes that to be aware of the action is not to be aware of the underlying processing of the dorsal stream. The issue is not whether one can verbalize the dorsal stream representation, it is genuinely unconscious and that is not being disputed here. What is being disputed here is the degree of subject's involvement in the occurring action.

Things are not that simple as Milner & Goodale propose. There is evidence that the dorsal stream representation[33] cannot be precisely separated from the ventral stream. Vision for action affects vision for perception. The dissociation of the two streams in such a rigid manner is too simplified and does not capture the complexity of our visual representations. The information from the dorsal stream affects 'visual awareness and form discrimination', more precisely 'size, shape and colour constancy' (Brogaard, 2011a, p. 453). And in this sense, it affects the overall representational character of the experience.

[32] For an overview see Brogaard 2011a; 2011b.
[33] See Gallese (2007).

How does the dorsal stream affect perception? The dorsal stream is 'ego-centric' and in that sense further affects the properties represented in ventral stream on a relational bases, e.g. the page of the article in front of me is rectangular *to me*. The properties of objects from the ventral stream are represented through action based relational representations of the dorsal stream. That is SI and if it is SI it is PI. The representation of the dorsal stream is, in this sense, phenomenal as it represents visual inputs from a subjective perspective and, by doing so, significantly affects the content of one's object of intention. If the person subjectively, although without immediate awareness, represents the object and that action results in qualitatively different consequences that affect the subject's behaviour significantly from that 1st person perspective, we can speak of a genuinely unconscious perceptual state with phenomenal properties. As Brogaard (2011a) notices: 'But if viewpoint dependent features are among the features computed by the dorsal stream, and these features do sometimes play a role in the content of conscious experiences, then the dorsal stream plausibly has a direct impact on conscious perception.' (p. 454). Similarly, Gallese points out that (2007) 'the sensory-motor system (of the dorsal stream), is…responsible for the phenomenal awareness of the body's relations with the world' (p. 7).

3.3. Blindsight

In Weiskrantz's blindsight experiments (1986; 1996) subjects with lesions in their primary visual striate cortex (V1) have reported that they experience 'blind spots' or 'scotoma' in their visual field. Yet, experiments have shown that they are able to make visual discriminations, namely orientation and direction of movement and wavelengths of colour, in those blind fields. They have visual capacity of these stimuli, although without perceptual awareness. Subjects are able to verbally report the colour stimulus in their blind field with high accuracy, even though they always emphasize that they are "just guessing". Similarly, they can track the motion of a moving target in their blind field with their hands (Weiskrantz, 1996).

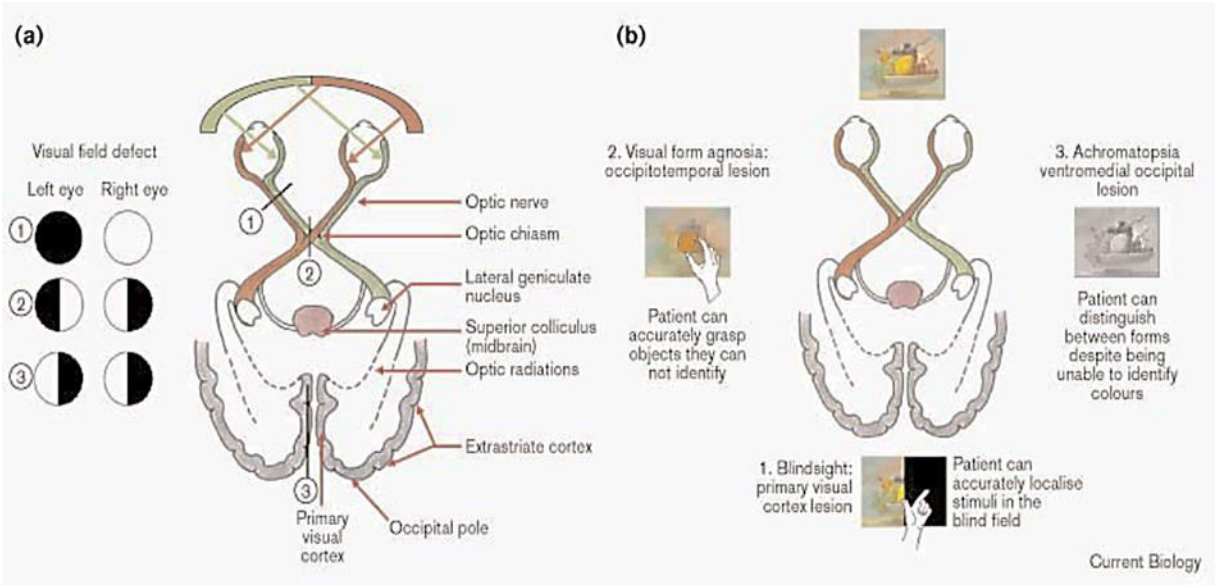

Fig. 2. Comparison of lesions and effect in blindsight cases (1), patients with *visual agnosia* (2) and *achromatopsia* (3). Taken from Danckert & Goodale, 2000.

As Weiskrantz (1996) notes 'Blindsight is, therefore, example of 'implicit processing' – residual functioning in the absence of explicit knowledge…' (p. 215). This means that some functional areas of the brain[34] aid the subjects in their performance of the task, i.e. object

[34] There is much debate over which neural areas in particular underlie the blindsight phenomena. See Weiskrantz (1996) and Danckert & Goodale (2000).

recognition in the blind field, without conscious awareness of the task[35]. The subjects do not see the stimuli in their blind field, that is, they do not experience it consciously, although they are quite capable of responding to it. For this reason, widely accepted conclusion is that blindsight is an example of unconscious visual processing.

However, Overgaard et al. (2008) argue that blindsight should not be characterized as unconscious vision, but rather 'degraded conscious vision'. They changed the method of measure of awareness in the experiment from 'binary report' ("Did you or did you not see the stimulus?") to a Perceptual Awareness Scale (PAS) ranging from "not seen", "weak glimpse", "almost clear image" to "clear image". Contrary to the binary method, the PAS scale aimed to capture the clarity of the stimuli represented to the test subject: patient G.R. The study showed a correlation between reported clarity of stimuli and the accuracy of G.R.'s predictions. When PAS was applied on testing G.R.'s normal visual field the researchers found a correlation between clarity of stimulus with accuracy of prediction. When PAS was applied to G.R.'s blind field the opposite was found: accuracy of prediction correlated with clarity of the stimuli. And from that relationship between accuracy and awareness the researchers concluded that it is evident that blindsight is merely a 'degraded conscious vision' or the difference is quantitative not qualitative (Brogaard, 2011a).

However, Brogaard (2011a) questions the method on the grounds that it does not report anything about what the subjects are actually aware of. Subjects simply report that they have either a "clear image" or a "vague feeling", but they do not report anything about the properties of the stimuli presented to them. One cannot be positive whether subjects actually perceive an 'image or a thought'. This is an important observation because the information about the guess of "feeling something" is subsequently transmitted to working memory,

[35] Note that it is residual functioning, hence once can argue residual phenomenology in accordance to Overgaard's hypothesis.

which stores *occurrent* information. And 'occurrent information is presented with a representational phenomenal character. There is something it is like to have a thought to the effect that "something is there" (Brogaard, 2011a, p. 459). Brogaard argues that the conscious phenomenology of blindsight (awareness that 'something is there') arises not from the visual process itself, as the phenomenology of the stimuli is clearly unconscious, but rather from cognitive phenomenology. The perceptual phenomenology in blindsight is genuinely unconscious (the phenomenology of the colour experience); the phenomenology of the experience itself is not, as there is phenomenology of thought involved. I take these results as a plausible response to Overgaard's hypothesis that awareness or phenomenology correlates with residual functioning of the intact brain areas. It is not the case that phenomenology of the stimuli itself causes *awareness* that "something is there", but rather the accompanying cognitive phenomenology. As Brogaard concludes: 'I hypothesize that blindsight,…,is best understood as a kind of genuinely visually-phenomenally unconscious process' (Brogaard, 2011a, p. 459). Weiskranzt (1996) also notes that cases where some degree of conscious awareness is evident are not cases of blindsight *per se*. Blindsight patients do not have impairment in responsiveness, '…but rather in the ability to experience those events consciously.' (Dankert & Goodale, 2000, p. R64).

There is evidence that in blindsight cases the dorsal stream, due to lesions in the ventral (see fig. 2.), takes over the processing of the stimuli[36] (Danckert & Goodale, 2000; Brogaard, 2011a). Visual information in blindsigh is transmitted to the areas of brain that control action. That would explain why most studies show that the subjects also apprehend the distinction between various stimuli; that is they present to them differently. That would also explain why blindsight patients discriminate colour and movement stimuli, since it was shown in ch. 3.2. that the dorsal stream processes 'size, shape and colour constancy' and sensory-motor

[36] The path of the stimulus is not direct as the V1 area is damaged. In addition, since there is no unified blindsight case, there is no unified path. However, the anatomy is irrelevant for the purpose of our discussion.

information. And that would also give us grounds for arguing that there is indeed subjective, phenomenal SP involved in stimuli discrimination. When the subjects do not report awareness, but nevertheless point accurately to the stimuli in their blindfield the only logical explanation, following the empirical data, is that they SP(erceive) the stimuli through their intact visual pathways, i.e. the dorsal stream. Unconscious visual phenomenology aids the subject's action, that is, their responsiveness to the stimuli presented.

3.4. Achromatopsia

Patients with achromatopsia cannot distinguish colour consciously; they see only in black and white and shades of grey. However, they do, surprisingly, consciously distinguish chromatic contours. Patients use chromatic contours to distinguish the visible configuration and forms of objects and even the object's motion. Studies have shown that '…patients with achromatopsia can differentiate contours that are defined solely by differences in colour, despite having no conscious appreciation of the colours themselves.' (Danckert & Goodale, 2000, p. R65). This has lead researchers to conclude that the patients use information about colours at the unconscious level (Danckert & Goodale, 2000).

Heywood et al. (1998) conducted a study which showed that achromats 'cannot chromatically order, or discriminate, hue. Nevertheless, their chromatic contrast sensitivity can be indistinguishable from that of normal observers.' (Heywood et al., 1998, p. 145). They are able to detect motion of 'chromatic gratings' or grids with specific colour combinations designed to test the colour awareness, solely by chromatic contrasts. What is even more surprising is that this ability of achromats, to detect motion from chromatic differences, is identical to those of individuals with normal colour vision. The researchers also found that wavelength processing in achromats is not in any way diminished. The wavelengths information contributes to visual processing, even though colour *per se* is not perceived.

The achromats SP(erceive) colour wavelength, hence use colour information below the awareness threshold and apply that information to their further processing of the objects presented in their visual field. Meaning that they are capable of distinguishing things on the bases of their colour after all (otherwise they would not discern shape nor motion), even though they do not have colour phenomenology, just as normal individuals.

Pitt (forthcoming) further suggests that the difference between achromats and individuals with normal visual system consists in the phenomenology; for the achromats seeing a red and a black object is the same phenomenologically, while for an individual with normal vision the difference is substantial and it consists precisely in phenomenology. While I agree that the difference is in the phenomenology, I do not believe that this implies that achromats do not experience any phenomenology, since it is evident from the studies that it is not the same for them to see a red and a black object, although not in terms of colour as such. Phenomenology simply is how things appear to us, how they appear *to me*. Pitt further suggests that the difference consists in 'phenomenological capacity', and I would add that it does not consist in phenomenological kind[37]. It is the same phenomenal kind, i.e. colour experience, however the degree of phenomenology involved in the experience of the stimulus is different, that is, in the case of achromats the phenomenology of colour experience is diminished.

[37] Pitt also suggests that the difference between blindsight and individuals with normal vision consists in 'capacity for consciousness'. He makes these distinctions in order to 'suggest that the capacity for consciousness and capacity for phenomenology are distinct' (Pitt, forthcoming). I agree with this point, as I believe I am supporting it with this empirical data.

3.5. Olfactory phenomenology during sleep

Although sleep is not defined as an entirely unconscious state, but rather as relative (un)conscious state, one can certainly agree that one of the main characteristics of sleep is unawareness of one's surrounding and reduced level of voluntary action and conscious awareness. Bodily functions are suppressed and sensitivity to external stimuli is severely diminished.

However, studies have shown that subjects react to olfactory stimuli during sleep (Badia at al., 1990; Rasch et al., 2007). Rasch et al. (2007) showed that odour stimuli when contextualized with particular memories enhanced declarative memory consolidation during slow-wave sleep (SWS)[38] stage, but not REM. These findings are not surprising considering that the consolidation of declarative memory is commonly active during the SWS stage.

However, what is surprising is the fact that the subject's detected the olfactory stimuli during sleep and when the stimulus was contextualized with the particular memory that enhanced the consolidation of the memory. Subjects were not aware of the odours in the morning nor did the odours in any way affect the overall sleep structure. Apart from irresistibly reminding one of Proust's madeleine cookies, this study shows that olfactory sensations, experienced below awareness point, can have further impact on the subject's memory performance. These are indeed information processing tasks; however I am not arguing that the subjects had an experience of memory consolidation, but rather the odours themselves. The odours are qualitative unconscious mental states; since, as in 1.1., they (i) have interpretations assigned to them from the subject in SI manner, i.e. correlation of a particular smell to a particular task even if the correlation is contextualized, (ii) have apparent further effect.

[38] One of fazes of non REM sleep referred to as deep sleep. Unlike in REM sleep there is no dreaming involved.

In a different study, Badia et al. (1990) reported that different odours have different effects on subjects during sleep. More precisely, these effects occur on the psychophysiological bases (different EEG measures), autonomic responsiveness bases (different heart rate during sleep, however not respiration rate) and change in muscle tone of the chin (different EMG activity). The researchers even suggested that the olfactory effects during sleep should be tested on subjective bases, since in the conscious waking state different odours trigger different responses, e.g. pleasant/unpleasant. The proposal is based on the fact that some odours 'reported as "relaxing" enhance sleep quality while those reported as "alerting" degrade sleep quality' (Badia et. al., 1990, p.87). This is clearly subjective phenomenology, as the smell of the rose can be pleasant for me (although unpleasant for you). In that sense, it is obvious that different olfactory stimuli constitute different phenomenal responses. And different phenomenal responses induce different mental states and behavioural effects.

4. Unconscious Phenomenology

Searle (1991) claimed that the mind can be divided into the 'computational mind' and the 'phenomenal mind'. The aim of this thesis is to show that distinctions in this simplistic manner cannot remain plausible in the era of cognitive science. *Phenomenal* does not necessarily mean *conscious*, and the unconscious does not necessarily exclude the phenomenal. While the computational, information processing mental states cannot become conscious and the subject cannot be aware of them, this does not mean that all the unconscious states are of this nature. The difference between controlled and automatic processes does not imply that there are only unattended automatic processes any more than it does that there are only unattended controlled processes in the unconscious (Kihlstom, 1987; Epstein, 1994). Unconscious processes can be genuinely intentional, meaning that one can have a subjective experience of some unconscious state. Strictly speaking, their subjective phenomenology is below our awareness threshold; however, that intentional character is phenomenal in a sense that it cannot be separated from the subjective experience of the object: the state is unconscious *for me*.

However, it is evident that this sort of intentionality is quite different from, on the one hand, unconscious conative mental states, i.e. beliefs, desires, and, on the other, unconscious cognitive mental states, i.e. propositional attitudes. Those states can be both conscious and unconscious. The subject can access these states by either switching attention to them or enhancing it in a different manner, hence transforming the unconscious state to a conscious one. Those states can be intentionally grasped by the cognizer. It is not just the case that the subject can become aware of the objects of those states, but the states themselves. They can become an object of attention.

Considering the empirical data specified let us have a look at this issue from a slightly different perspective. I have argued that cognitive content or thoughts have phenomenal properties. The only genuinely intentional (GI) content is phenomenally constituted (PI). That would mean that there cannot be unconscious intentionality if intentionality is necessarily phenomenal and phenomenology is necessarily conscious. However, this seems rather implausible, as was already noted; research in cognitive science and neuroscience, as well as psychology, suggests the opposite conclusion. Even from the philosophical perspective this seems, at least, questionable.

The term unconscious phenomenology conveys an impression of a contradiction because perception is supposed to have phenomenal character and phenomenology is supposed to be necessarily conscious. However, I demonstrated that not only does unconscious perceptual phenomenology exist, but it is also an empirically verified phenomenon, sometimes even used as an apparatus in experimental design, e.g. studies about olfactory influences on memory. Both of these conclusions, i.e. the existence of conscious phenomenal thought and unconscious perceptual phenomenology point to a single underlying outcome: phenomenology and consciousness are two distinct properties of our mental states[39].

This means that a state can be phenomenal without being conscious. Dretske (1993) and Pitt (forthcoming) argue similarly. However, while Dretske argues that consciousness is not an intrinsic property of mental states, he explores a similar idea as Pitt: a state conscious in itself however not for me. Their line of argument can be best illustrated by using Armstrong's famous example of a driver (Dretske, 1993). The driver, after a long and tiresome drive, realizes at some point that he has been driving for quite some time without being aware of the actions he is performing. It is safe to say that the driver did indeed perceive the road and was,

[39] I would also add intentionality as a third independent property of mental states.

in some sense, conscious of his actions as he would otherwise have crashed. However, he has no recollection of the actions performed or the perceptual stimuli from the road.

Dretske (1993) distinguishes between 'consciousness of things' and 'consciousness of facts', and since he takes consciousness and awareness as synonyms, the same distinction can be made between awareness of things and awareness of facts, by which he aims to distinguish 'particular (spatial) objects and temporal (events) on the one hand from facts involving these things on the other' (Dretske, 1993, p. 264). The purpose of this distinction is to argue that an individual could have a conscious experience, without being conscious of it[40]. In other words, one can be aware of a thing, without being aware of the fact that one is aware it. For example, one can be aware of the smell of the flower in the garden without being aware that it is a rose (one need not know what roses look like). The point is that one can be aware of some physical stimuli without being able to conceptualize it. Recall Armstrong's driver. Dretske's proposal is that the driver has 'transitive creature consciousness of both things (the roads, the stop signs) and facts (that the road curves left, that the stop sign is red, etc.)' (Dretske, 1993, p. 271). However the driver is not aware that he is aware of them. The driver is not introspectively aware of his occurring mental state, meaning that the driver is not aware that he is having the experience. For Dretske, that does not imply that the state itself is not conscious, it can be, but just not for the driver. It is not the awareness of the mental state that makes it conscious, 'what makes an internal state or process conscious is the role it plays in making one (intransitively) conscious – normally, the role it plays in making one (transitively) conscious of some thing or a fact.' (Dretske, 1993, p. 280). Conscious states need not be

[40] In that sense Dretske talks about 'creature consciousness' which can be both 'intrasensitive (of me)' and 'transitive (of you)'. A creature has intrasensitive consciousness if it is a conscious creature. Secondly, a creature has 'state consciousness' if it is conscious of other things. 'State consciousness', although about external things, are always intrasensitive as that is the sense in which 'internal states… are said to be conscious' (Dretske, 1993, p. 269).

conscious in themselves, but they are conscious intransitively as they make us conscious transitively of some fact.

I agree with Dretske that one can be aware of the thing without being aware of the fact, hence a state can be conscious in itself but not for the cognizer. I, similarly, disagree that the state has to be a subject of a higher-order mental state in order to be phenomenally conscious. There are genuinely phenomenal unconscious states that are phenomenal in them but not for the congnizer. Dretske argues, plausibly, that consciousness of a mental does not consist in awareness of it.

Pitt (forthcoming) makes an opposite proposal in a manner of a thought experiment which revolves around an individual named Penelope. The aim of the thought experiment is to consider whether a state be conscious in itself, without me being aware of it. Thus, the thought experiments proceeds along these lines. Penelope is a distinct individual whose thoughts originate in her brain. However, future advancements in technology allow us to somehow interconnect our nervous and cognitive systems. Penelope and I are not consciously aware of each other's occurring thoughts nor does the connection affect the point of origin of the thoughts. They remain divided as our bodies and brains remain divided; her thoughts originate in her brain, my thoughts in mine. However, we are interconnected in such a way that I am 'directly aware' of Penelope's conscious thoughts as they occur, as she is of mine. In other words, I am aware of someone else's internal mental states. And in that sense Pitt asks: Can Penelope's thoughts be mine?

In my opinion, Pitt's proposal is problematic since it does not involve SI or Subjective Intentionality. The state is not conscious for me; I do not have an immediate and introspective awareness in the occurring state or any involvement in it. Naturally, those thoughts can affect my behaviour, but not my further conscious processing, as they remain detached; they are not

integrated in my overall neural network or cognitive life. One can argue that they do affect my cognitive life in an indirect way: what I do, based on Penelope's thoughts, has further consequences on my mental life. However, that is external to my mental life. Me moving my arm based on Penelope's thought and, for example, by doing so spilling coffee, makes me think of paper towels on the table and how I should act, and in that sense, Penelope's thought affects my further cognitive life. But that is same as me walking down the street and thinking how I should act when a speedy bicycle is coming my way.

For example, imagine that future advancements in science make it possible that my friend's well-intended, however not taken, advice can be surgically implanted in my brain without me being aware of it. Is that thought mine? I argue that it is not, regardless of the origin of the thought[41]. The only genuine intentionality is subjectively and phenomenally constituted. And since these states are evidently neither SI nor PI they are not GI. Simply, for a state to be conscious for me is *for me* to be aware of it, for a state to be phenomenal for me is *for me* to have a what-it-is-like experience of it, and for a state to be intentional for me is for it to represent some state of affairs *for me*.

The same holds for unconscious thought. I do not have to be aware of the occurring unconscious thought, however the thought has to have an effect *for me*, appear *to me* or similarly, be intetnional *for me*. I have a certain involvement subjectively and phenomenally either through the object of the thought or through the overall change in my mental life.

[41] An argument can be made from Personal Identity theory as well; however space does not allow investigating this issue further.

Conclusion

My aim in this thesis was to give a plausible account of intentionality in phenomenal terms and answer a rather serious objection to this proposal, i.e. the inexistence of unconscious phenomenally-intentional states. I argued that the what-it-is-like character is what constitutes intentional content and this phenomenally intentional character is what constitutes content of mental states, conscious and unconscious.

I introduced my interpretations of Genuine Intentionality. I argued that the only Genuine Intentionality is intrinsic, underived intentionality. Derived intentionality is not genuinely intentional, as the subject does not enjoy the intentional state subjectively, from the 1st person perspective. Since Genuine Intentionality is Subjectively Intentional, meaning it is intentional *for me*, I argued that the intentional content of the state is phenomenally constituted. Subjective states are necessarily phenomenal; hence intentional states are phenomenally constituted as well. My contribution is, in this context, the argument for the Phenomenal Intentionality Thesis from the subjective, 1st person point of view of mental states.

Since it was suggested that the phenomenal content is what constitutes the intentional content, the consequence of this proposal is that the content of an intentional state is internally referential to an occurring what-it-is-like character and not to the external reference of the object of intention[42]. This inference seems rather puzzling; therefore it would be advisable to examine it further. The issue at hand is what exactly constitutes the content of an intentional state and how this determines reference relations? While I acknowledge these questions as rather important, unfortunately precisely for that reason space did not permit me to investigate them. Therefore, further research will need to address these issues in more detail. Similarly

[42] This is an internalist view or the view that intentional content of a thought is determined by its phenomenal properties which are, by all means, intrinsic. Conversely, externalist views state that the intentional content is determined by its relational properties in accordance to the object of intention, hence the truth value ascription in accordance to the state of affairs in the world. I believe my proposal is strong internalism, meaning that the intentional content is necessarily intrinsic.

and somewhat interconnected, the proposal of Subjective Intentionality raises questions regarding indexical thought and the problem of other minds.

The intention of the second part of the thesis was to show that an unconscious state can be genuinely phenomenally intentional. I presented empirical data that, I believe, plausibly point that unconscious perceptual states can be phenomenal and subjective. And if this is true, then unconscious states can be Genuinely Intentional as well, since the entailment made in the first part of the thesis holds that for a mental state (conscious and unconscious) to be Genuinely Intentional it has to be Subjectively and Phenomenally Intentional. Insomuch it was shown that there is unconscious perceptual phenomenology; I see no *prima facie* problem for unconscious phenomenal thought as well. For example, if it is indeed phenomenally different to think there is an alien peeking through my window from thinking that there is a cat sitting on the window-sill consciously, as it is to see a red rose and a pink tulip, than there should be difference in phenomenal experience of these stimuli when given to me unconsciously.

There is one route left for someone who does not wish to attribute a phenomenal character to unconscious states. Block (2002) distinguished A(ccess)-consciousness from P(henomenal)-consciousness. According to his theory P-consciousness is experiential, the what-it-is-like aspect of a mental state. A-consciousness, on the other hand, is mainly informational; it consists of material available to the cognizer for reasoning and action. According to this distinction, one could say that SP information is A-conscious but not P-conscious. Even though I am not personally convinced in Block's proposed distinction, I regard this proposal as most interesting. Further research should be done to examine it more closely.

By arguing in this empirical manner, my aim was to point to a somewhat novel approach in dealing with unconscious perceptual phenomenology in particular and phenomenal

consciousness in general. I believe further research in a similar, empirical, manner can be introduced for cognitive phenomenology as well. Some intriguing empirical results could not be evaluated in this thesis, however further research in this area is intended.

There is no compelling empirical data that necessitate the inference I made, namely that unconsciously perceived stimuli are phenomenal and subjective; however there is data that points to this direction. If it was demonstrated that it is a valid assumption then, I believe, it is a theoretical proposal worth further exploration in philosophical as well as scientific framework.

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